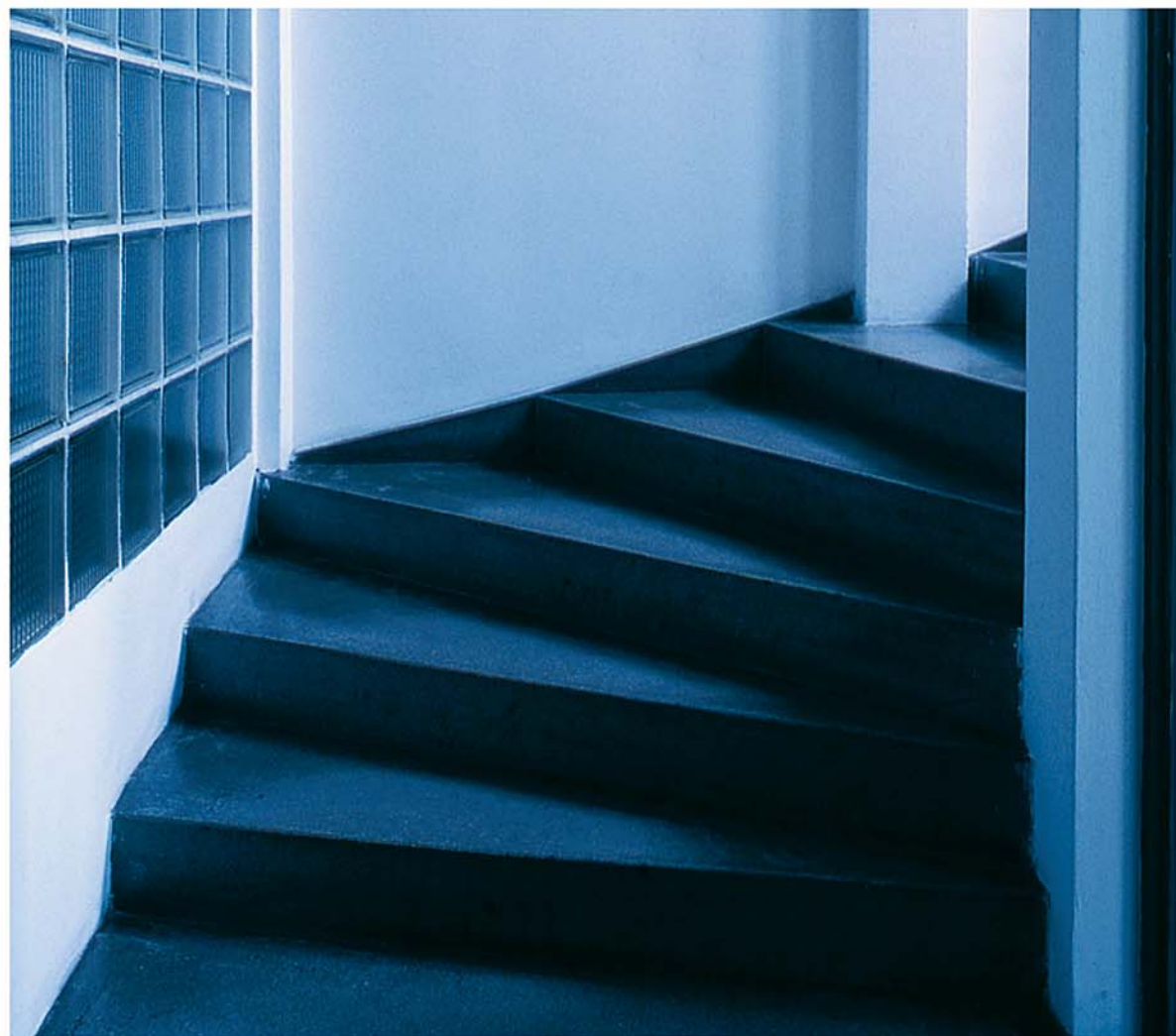


# The Routledge Companion to Twentieth Century Philosophy



Edited by Dermot Moran

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THE  
ROUTLEDGE COMPANION  
TO TWENTIETH CENTURY  
PHILOSOPHY

*Edited by*  
*Dermot Moran*

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In Memory of my Mother Nora (O'Sullivan) Moran

(† 27 November 2006)

*Ar dheis Dé go raibh a h-anam dhúilis*

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# PREFACE AND ACKNOWLEDGMENTS

Editing and compiling this historical and critical review of twentieth-century philosophy has been extremely challenging, but ultimately it has been a rewarding task. The project was conceived in 2002 with the aim of drawing together experts in the various subject areas who could comment both authoritatively and critically on the current condition of their respective disciplines and on the nature of the problems still present today. Clearly, any account of the current status and problems of a philosophical subdiscipline needs also to be supplemented by some kind of historical survey of the development of philosophy over the course of the century. The chapters in this volume therefore do attempt to combine an historical sketch with a critical assessment.

On the other hand, although philosophy can never be completely disengaged and isolated from other scientific, cultural, and indeed social and political developments, the chapters in this volume focus primarily on the intrinsic philosophical issues, and external social and political developments are in general left to one side. One might say, then, that the chapters here offer an *internalist* vision of the development of twentieth-century philosophy.

Each chapter aims to provide a comprehensive introduction and overview, sketch the main stages in the development of the particular subject through the century and offer some reflective assessment of its current state. To assist the reader in working through the diverse contributions in this volume, I have grouped the twenty-two chapters under five more general headings: Major Themes and Movements; Logic, Language, Knowledge, and Metaphysics; Philosophy of Mind, Psychology, and Science; Phenomenology, Hermeneutics, Existentialism, and Critical Theory; and Politics, Ethics, and Aesthetics. Of course, more subject areas could have been added, but the book had to remain of finite size!

It is worth emphasizing at the outset that this collection of essays focuses exclusively on the development of philosophy in the West (which means primarily Europe, America, Australasia) during the twentieth century. As I shall attempt to explain in my Introduction, twentieth-century philosophy emerges first of all in Europe in the first half of the century and then subsequently continues, in a very powerful form, in the USA (and to a lesser extent in Canada and Australia) during the latter half of the century. Philosophical activity in South America, for instance, is primarily an extension of European or American philosophy of the same period. While there has been enormous growth in knowledge of, and interest in, non-western philosophies (primarily Chinese, Indian, African, Islamic) through the twentieth century, it is arguably the case that it is the scholarly methodology of western academic philosophy that has actually framed the debate, made the decisive contributions in terms of

editions and so on, and, indeed, set the academic standards for the manner in which non-western philosophies have been investigated and evaluated. Indeed, although issues of multiculturalism, pluralism, identity and difference, cultural relativism, and so on, are now a lively part of the current philosophical scene, especially in social and political philosophy, these debates are primarily conducted in the technical languages and styles of argumentation of western academic philosophy. Whether this will continue in the twenty-first century is an open question, as diverse forms of human cultural experience and conceptions of the world come to be understood and included in philosophical discussion.

Despite the exclusive focus on western philosophy, the century, nevertheless, offers an extraordinary wide spread of different philosophical voices. On the one hand, the twentieth century is the century of Frege, Russell, Wittgenstein, Kripke, and Quine; on the other hand, it is the century of Husserl, Heidegger, Gadamer, Sartre, and Derrida. In quite another sense, judged by the scale of their transformative effects, it is also the century of Marx, Lenin, and Mao. It is the century of advances in logic and philosophy of science, but also the century in which poetic thinking and openness to mystery are advanced as ways of freeing thought from the domination of technological enframing. Various forms of naturalism, physicalism, and materialism (even of the “eliminative” kind) compete with non-reductive, hermeneutic, and transcendental approaches. New voices emerge also: specifically the voices of women who enter the academy early in the century and have contributed enormously to transforming many traditional debates as well as introducing new themes and forms of discourse. The elimination (due to the Communist Revolutions early in the century) and the subsequent re-emergence of traditional forms of philosophy in the former Communist countries of Eastern Europe is another major transformation of twentieth-century thought. I have tried in my Introduction to identify some of the main continuities and discontinuities in the manner in which philosophy has been pursued in the twentieth century. However, the main discussions concerning the individual movements, themes, and disciplines, are of course to be found in the chapters contained in this volume.

I believe that the chapters in this volume represent informed and vital contributions to their subjects and will offer readers an indispensable guide to twentieth-century philosophy. In general, the chapters collected here present critical overviews of their subject matters written as lucidly as possible, with the non-specialist in mind. Of course, there are many quite technical areas in philosophy (in all its sub-disciplines) and while the contributors have taken great care to clarify their central concepts and terminology, grasping the meaning of the issues involved may require some effort on the part of the reader. Thus, for example, readers may need to familiarize themselves with the basic symbols of formal logic in order to appreciate more fully the discussions in metaphysics, philosophy of logic, and philosophy of language, although the chapters can be understood at a reasonably advanced level without having mastered these symbols. Likewise, the chapters “German philosophy” and “Critical Theory” are written from the standpoint of eminent participants in those fields and will be somewhat challenging to those uninitiated in the style of reasoning of those particular



strands of contemporary European thought. Readers, therefore, are encouraged to move selectively through the volume in order to familiarize themselves with the philosophical concepts and reasoning needed to address in an informed manner the more challenging topics. While the chapters aim to lead beginners to a mature understanding of the topic in question, there are also real philosophical challenges awaiting those more advanced in philosophical argumentation. I myself have learned an enormous amount in the course of reading and editing the chapters in this volume. I want therefore to thank all the contributors who have been extraordinarily generous with their time and impressive in the range and depth of their expertise. I want also to thank the many referees (who must remain anonymous) who were responsible for reading and critiquing each contribution very carefully, and who made excellent constructive suggestions, which, significantly, were, in the main, appreciated by the authors of the chapters.

I would like to thank the Irish Research Council for the Humanities and Social Sciences (IRCHSS) for a Senior Fellowship in the Humanities in 2002–3, and University College Dublin for the President's Fellowship for 2003–4. Thanks to Professor Steven Crowell and my colleagues at the Philosophy Department of Rice University who hosted me as Lynette S. Autry Visiting Professor in the Humanities for the Fall Semester 2003 and again for the Spring Semester 2006. Thanks to Ken Seeskin, Richard Krant, Cristina Lafont, Axel Mueller, Rachel Zuckert, and all my colleagues in the Philosophy Department at Northwestern University for welcoming me to Evanston as Visiting Professor there for the Winter Quarter 2007. Thanks also to my colleagues at UCD, in particular Maria Baghramian, Maeve Cooke, Jim O'Shea, and Rowland Stout. I would also like to give special thanks to my colleague Brian Elliott for his careful translations from the German of the chapters by Karl-Otto Apel and Axel Honneth. I am grateful to my graduate students at Northwestern University for their comments on draft chapters of this book, in particular Max Cherem, who provided helpful editorial assistance.

I would like here to record my thanks to those who have assisted me at Routledge. Special thanks must go to Tony Bruce, Philosophy Editor, for his good counsel, patience, and unflagging enthusiasm for the project. Thanks also to Amanda Lucas, Editorial Assistant at Routledge, for her practical help in the production of this volume. Special thanks must also be given to the copy editor, Mary Dortch, for her painstakingly detailed and patient work in preparing the text for printing.

Finally, I would like to thank my family for their support, especially my wife Loretta and our three children, Katie, Eoin, and Hannah.

Dermot Moran  
University College Dublin, May 2007

# INTRODUCTION: TOWARDS AN ASSESSMENT OF TWENTIETH-CENTURY PHILOSOPHY

*Dermot Moran*

## **The long twentieth century**

What is the legacy of twentieth-century philosophy? Or, to adapt the question originally asked (in relation to Hegel) by the Italian philosopher Benedetto Croce (1866–1952):<sup>1</sup> What is living and what is dead in twentieth-century philosophy? The sheer range and diversity of the philosophical contribution is surely one of the century's most singular characteristics. As the century fades into memory, so many of the great philosophers associated with it have also passed away: Rudolf Carnap (d. 1970), Martin Heidegger (d. 1976), Jean-Paul Sartre (d. 1980), Simone de Beauvoir (d. 1986), A. J. Ayer (d. 1989), Emmanuel Levinas (d. 1995), Gilles Deleuze (d. 1995), Thomas Kuhn (d. 1996), W. V. O. Quine (d. 2000), Elizabeth Anscombe (d. 2001), David Lewis (d. 2001), Hans-Georg Gadamer (d. 2002), John Rawls (d. 2002), Robert Nozick (d. 2002), Donald Davidson (d. 2003), Bernard Williams (d. 2003), and more recently Jacques Derrida (d. 2004), Peter Strawson (d. 2006), Jean Baudrillard (d. 2007) and Richard Rorty (d. 2007). When one thinks of the names that were current at the beginning of that century – Croce, Bradley, McTaggart, Pritchard, Joachim, Collingwood, Whitehead, Duhem, Husserl, Natorp, Dilthey, James, Dewey, Cassirer, Josiah Royce, George Santayana, Roy Wood Sellars, to name but a few<sup>2</sup> – one realizes just what a rich and varied legacy of philosophy the century has produced and how great is the span that separates those who opened the century from those who closed it.

How can we even begin to appreciate the philosophical heritage of that turbulent, terrifying, but enormously productive period? To review such a vast repertoire of philosophy is certainly challenging. Developing a critical assessment of twentieth-century philosophy, then, one that identifies accurately its main accomplishments (avoiding ideological distortion and clannishness) as well as the problems it bequeaths

to current thinking, is a remarkably complex and demanding affair, but nonetheless it stands as an important, even urgent, task, one that calls for judgement and decision.<sup>3</sup>

Given that historians are apt to speak of “long” centuries, certainly the twentieth century must now seem one of the longest. This tumultuous period was characterized by world wars, the rise and fall of Communist, fascist, and totalitarian states, the invention of nuclear weapons and other weapons of mass destruction, genocide, famine, anti-colonial struggles, globalization and technologization on an enormous scale. Rapid scientific and technological advances were coupled with political catastrophes and dramatic events of a scale hitherto unimagined. But we are still too close and the century in many ways – not least in terms of its intellectual legacy – remains an undigested mass for us, we who are still living so completely in its shadow.

Thinking specifically of philosophy, there probably has never been a time when there have been so many professional philosophers at work in universities across the world. Yet what has been their contribution? Perhaps, for most of the century, one could say that the nineteenth-century Karl Marx and his twentieth-century followers, including Lenin and Mao, were the most influential philosophers in terms of the scale of their practical impact stretching over almost half the globe (including the countries of the USSR, China, North Korea, Cuba, as well as in Central and South America). In terms of impact, one can also name the great public intellectuals in the West: Jean-Paul Sartre ( “the philosopher of the twentieth century,”<sup>4</sup> who turned down a Nobel Prize) and Bertrand Russell, united in their opposition to the Vietnam War; or, much earlier, John Dewey who campaigned for progressive education; or the displaced intellectual Hannah Arendt, reporting on the Eichmann trial in Jerusalem;<sup>5</sup> or the roles of Noam Chomsky (a prominent critic of US political engagements), Richard Rorty,<sup>6</sup> Bernard Henri-Lévy<sup>7</sup> or Slavoj Žižek today. There is undoubtedly a public appetite for philosophy in many countries; think of the public interest in the philosophical dissertations on happiness, such as that by Alain de Botton;<sup>8</sup> or perhaps an interest in philosophical *lives*, witness the popularity of Ray Monk’s biography of Wittgenstein.<sup>9</sup> One cannot overestimate the extraordinary influence of A. J. Ayer’s *Language, Truth and Logic*, especially the manner in which it was developed by those who wanted to argue that moral and religious statements were in fact literally meaningless. While, perhaps, Roger Scruton’s defense of fox-hunting<sup>10</sup> in England is not momentous enough to be counted here, certainly Peter Singer’s book *Animal Liberation* sparked enormous public debate about the ethical treatment of animals, for which he argued on utilitarian grounds on the basis of animal sentience.<sup>11</sup> Existentialism was perhaps the first great philosophical movement (since the ancient Greek movements such as Stoicism, Skepticism, or Epicureanism) to have had popular support among the masses and even to become a fashion for a time in the mid-century. There are philosophers who preached engagement and critique (for instance, Sartre, or the Frankfurt School), and those who recommended skeptical distance and irony (Rorty). On the other hand, many of the more exciting technical advances in philosophy have been produced by retiring figures working relatively unseen, absorbed in their research (one thinks of Wittgenstein, Kripke, Husserl, Levinas, or Rawls), who contributed little to public debate.

### Continuities, discontinuities, novelties

Philosophy does seem to have undergone enormous changes in the course of the century, but it also has diversified into many different and competing forms. New disciplines have emerged: from mathematical logic and meta-ethics to philosophy of language, philosophy of mind, and philosophy of psychology; from philosophy of gender and embodiment to environmental philosophy (or “ecosophy” as founded by the Norwegian philosopher Arne Naess).<sup>12</sup> Unfortunately, to date, there have been remarkably few academic studies of twentieth-century philosophy in its inter-connections although there are some studies of specific traditions.<sup>13</sup> Indeed, it is noteworthy that even the ten-volume *Routledge Encyclopedia of Philosophy* contains no entry for “Twentieth-century philosophy,”<sup>14</sup> yet it is clear that the very meaning of philosophy changed in profound ways in that century, ways that are certainly not even documented, never mind fully understood. It is important, then, to document the commonalities and continuities; to identify the transformations, discontinuities, dead-ends and sheer novelties.

In terms of continuity, many aspects of philosophical *practice* in the twentieth century follow on directly from patterns set in the nineteenth century, e.g. the academic *professionalization* and *specialization* of the subject, begun in the nineteenth century, became all-pervasive during the twentieth, such that the independent, non-institutionally funded scholar contributing substantially to a discussion is now almost an extinct species (apart from some dissidents who emerged in the former USSR and elsewhere). Philosophy is now carried out, almost universally, in universities and higher research academies. Yet, a most important – and indeed novel – feature of the ongoing professionalization of philosophy has been the entrance of women into the philosophers’ academy. Rosa Luxemburg emerged in Germany quite early in the century, and, partly because women were the majority of university students during the First World War in Germany, Edmund Husserl became one of the first major philosophers to attract a sizable number of women students and assistants in his Freiburg years. Hedwig Conrad Martius, Edith Stein, and Gerda Walther all studied with him, even if he was not always supportive of these women’s desire to continue to professional careers in philosophy.<sup>15</sup> In fact, women philosophers in Germany were active in removing institutional constraints;<sup>16</sup> e.g. both Hannah Arendt and Edith Stein promoted equality of education between women and men. In England, Elizabeth Anscombe emerged as Wittgenstein’s student at Cambridge in the 1940s, and acted as his editor, translator, and interpreter, before going on to develop her own path as an original and influential philosopher, especially in the area of philosophy of mind and action.<sup>17</sup> Anscombe also opposed the Second World War and was an active critic of the American President, Harry Truman, for his actions in relation to the dropping of atomic bombs on Japanese cities.

Following on from Simone de Beauvoir, a whole generation of women philosophers emerged in France, leading to a particular tradition which includes Julia Kristeva (born in Bulgaria but educated in a French school), Hélène Cixious, Luce Irigaray, Sarah Kofman, and Michèle Le Dœuff (see “Feminism in philosophy,” Chapter 7). In

Britain, prominent women philosophers include: Philippa Foot, Onora O'Neill, Susan Stebbing, Sarah Waterlow Broadie; in the US: Ruth Barcan Marcus, Seyla Benhabib, Judith Butler, Christine Korsgaard, Martha Nussbaum, and Judith Jarvis Thomson; in Australia, Genevieve Lloyd.<sup>18</sup> Women not only entered the academy to work in traditional areas, but often transformed the debate in certain areas, introduced new topics, and made ground-breaking contributions (Ruth Marcus in logic; Judith Jarvis Thomson in the area of the ethics of abortion). Following on from the theme of feminism, new areas have emerged that include issues surrounding the philosophy of gender and lately "queer theory," which has overlapped the boundaries of philosophy and linked it more with disciplines of social criticism.

Thinking of technical breakthroughs, it is easy to point to the development of modern mathematical logic (with Frege, Russell, and Whitehead), modal logic (the logic of necessity and possibility, begun by Aristotle but formalized in the twentieth century by C. I. Lewis, Ruth Barcan Marcus, Saul Kripke, and others), temporal logic (A. N. Prior), the discovery of the incompleteness of formal systems (Gödel), and many more logical innovations. It is less easy to find solutions to perennial philosophical problems or revolutionary new approaches to ethical and political issues that have gained the status of scientific discoveries. As always, the human world is extremely complex and escapes the exact lawfulness found in the natural sciences, and there is no clearly identifiable progress in moral concepts. As the German Critical Theorist Theodor Adorno once put it, "No universal history leads from savagery to humanitarianism, but there is one leading from the slingshot to the atom bomb."<sup>19</sup> In moral philosophy, for instance, the argument continues to rage about whether statements such as: "slavery is and always has been wrong," is an objectively true proposition.

With respect to direct continuities in philosophy across the centuries, it is remarkable how many of the issues that were discussed so vitally at the start of twentieth century, e.g. the nature of consciousness, perception, space and time, the meaning of naturalism, the nature of the *a priori*, the proper methodology of the human sciences, and so on, continue to be vigorously debated at the century's end. The descriptive phenomenology of inner time consciousness is as much an issue now as it was one hundred years ago when Husserl was giving his 1905 lectures on time-consciousness, at a time when Bergson and James were also focusing on the temporal nature of consciousness. Time-consciousness certainly has been a major focus of discussion among European philosophers such as Jacques Derrida;<sup>20</sup> whereas, in the UK and USA, McTaggart's discussions of temporal flux, with his A- and B-series continue to provoke discussion concerning the unreality of time, by A. N. Prior, Richard Swinburne, Hilary Putnam, Sidney Shoemaker, and others.<sup>21</sup> Similarly, William James's interest in the existence and nature of consciousness<sup>22</sup> is surely replicated in the work of David Chalmers and others writing about the "hard problem" of consciousness.<sup>23</sup> It is hard to believe that the metaphysics of internal relations that so preoccupied the British Idealists should again be a matter of discussion among contemporary analytic metaphysics (see "Metaphysics," Chapter 10).

In some cases, the continuities are of a different kind: where a subject seems to appear and disappear only to reappear again some time later. The issue of embodiment

is one such issue which gets a very full discussion by Husserl in his *Ideas II* (written between 1912 and 1918 but not published until 1952), is continued in Merleau-Ponty's *Phenomenology of Perception* (1945) and is again a hot topic among philosophers, including analytic philosophers of mind.<sup>24</sup> Essentialism is also a theme that surfaces and disappears at regular intervals across the century (Husserl, Wittgenstein, Kripke, et al.). Other kinds of continuities are of a more persistent kind. Thus, in "Moral Philosophy" (Chapter 20), Rowland Stout even suggests, somewhat paradoxically, that the great philosophers of twentieth-century moral philosophy continued to be Aristotle, Hume, and Kant! Continuities of this kind are also evident in the manner in which both epistemology and analytic philosophy of religion have managed to continue to talk, in ever more refined ways, about traditional problems such as the nature of knowledge, skepticism, and the meaning of faith. Arguments concerning the existence of God or the compatibility of the divine attributes continue in the work of Anthony Kenny, Richard Swinburne, Alvin Plantinga, Nelson Pike, and others, refining and sharpening debates to be found in Anselm, Aquinas, or Descartes. One could say the same for aesthetics, whose central task, as suggested by Paul Guyer (Chapter 22), has been to respond to Plato's questioning of the arts as a form of lie (*pseudos*).

The rise and rise of *naturalism* is surely one of the most important of the continuities to be acknowledged in philosophy over the course of the twentieth century. As Geert Keil has shown in "Naturalism" (Chapter 6), in 1922 Roy Wood Sellars (1880–1973) could confidently declare: "We are all naturalists now," and at the end of the century that claim would look quite accurate for large swathes of contemporary epistemology, ethics, philosophy of mind and philosophy of science, where naturalisms of varying kinds have flourished (see Geert Keil's nuanced discussion). In keeping with this recognition of the growth of naturalism, Edmund Husserl, in his 1911 essay "Philosophy as a rigorous science," diagnosed it as the greatest threat to the possibility of a genuinely scientific philosophy. Yet despite the popularity of naturalism, there has also been a constant counter-movement, and especially since the 1970s there has been a strong resurgence of transcendental philosophy and persistent arguments advanced that the normative cannot be naturalized (see "Kant in the twentieth century," Chapter 4).<sup>25</sup> Furthermore, following on from early twentieth-century neo-Kantians such as Rickert and Natorp, Husserlian phenomenology also adopted a resolutely post-Kantian transcendental position against naturalism, arguing that objectivity can only ever be objectivity-correlated-with-subjectivity and denying even the meaningfulness of talking about things in themselves independent of the subjective knower. Indeed, the manner in which Kant and Hegel continue to haunt twentieth-century discussions is reflected in this volume by two chapters devoted respectively to Kant and to Hegel (see Chapters 4 and 3). So much for the continuities.

In terms of novelties, some philosophical disciplines certainly seem to be new. In "Philosophy of Language" (Chapter 9), Jason Stanley makes a strong case for philosophy of language as making a unique twentieth-century contribution, although the precise nature of the contribution has to be carefully nuanced. As Jason Stanley contends,

The Twentieth Century was the century of “linguistic philosophy,” not because all or even most philosophical problems have been resolved or dissolved by appeal to language, but because areas of philosophy that involved meaning and content became immeasurably more sophisticated.

Contemporary discussions of meaning, content, and reference, are indeed far more sophisticated than anything to be found in Bolzano, Mill, or even Frege. So there is certainly progress in philosophy in terms of increasing discriminations and disambiguations of complex concepts. Of course, technical refinements are not confined to one tradition. As Nicholas Davey shows in “Twentieth-century hermeneutics” (Chapter 16), the linguistic turn in twentieth-century thought owes as much to Heidegger and Gadamer, in their opposition to the Cartesian “philosophy of consciousness”, as it does to Frege and Wittgenstein, and furthermore, evidence of a linguistic turn in German philosophy can be traced back to the Enlightenment with Hamann and others.<sup>26</sup> In particular, this tradition points up the holistic nature of the linguistic enterprise and the fact that the subject (speaker and hearer) cannot be disengaged from the practice of linguistic communication and miscommunication.

Along with philosophy of language, one could also argue that philosophy of science emerges decisively in twentieth-century philosophy as a distinct discipline. Indeed, there has been an explosion of interest in the logic and philosophy of science from the 1930s onwards, as Stathis Psillos documents in “Philosophy of science” (Chapter 14), and, especially as developed by members of the Vienna Circle and others, who put science at the centre of philosophy’s concerns.<sup>27</sup> But even here there are continuities, especially in the vigorous debate over the nature of the *a priori*, which continues in the work of Reichenbach (and following him Putnam and others) with the puzzling notion of the revisable *a priori*.

### The ongoing legacy of the nineteenth century

It is an obvious truism to assert that to understand the twentieth century one must begin in the nineteenth. Many different traditions in contemporary philosophy have a common origin in nineteenth-century problematics. For instance, in German philosophy during the latter half of the nineteenth century, there were serious efforts to resist the bewitchment of Hegel (who had dominated philosophy in the first half of the nineteenth century). The various schools of neo-Kantianism (Windelband, Cohen, et al.), with their war cry “back to Kant” (*zurück zu Kant*),<sup>28</sup> as well as those inspired by classic British empiricism (and its nineteenth-century representatives, e.g. J. S. Mill), sought to distance themselves from what they considered to be the excessive and ungrounded speculative nature of the Hegelian system.<sup>29</sup> Oddly, in Britain at the turn of the twentieth century, the situation was almost the reverse of that prevailing on the Continent, with neo-Hegelian Idealism in the ascendant with McTaggart at Cambridge; F. H. Bradley (1846–1924), T. H. Greene (1836–82), and Harold Henry Joachim (1868–1938) – all at Oxford, and Bernard Bosanquet (1848–1923), who translated Hegel’s *Aesthetics*, and was for a time President of the Aristotelian Society,



in London. Hegel also continued to have influence in the USA in the late nineteenth century owing to the St Louis Hegelians led by William Torrey Harris (1835–1909) and Henry Conrad Brokmeyer (1828–1906),<sup>30</sup> and was represented by Josiah Royce (1855–1916) at Harvard. Of course, it was against this Hegelian and Bradleyian system that Russell reacted so strongly (albeit that Russell's interest was focused on the logic of relations and defending their reality against Bradley). Similarly, on the European mainland, Kierkegaard too may be seen as leading a defense of the individual and singular against the sweeping universalism of the Hegelian system.

Notwithstanding the onslaught on idealism found in Russell, G. E. Moore,<sup>31</sup> and others, a critique that was foundational for the new analytic movement, idealism in various kinds continued to be found across twentieth-century philosophy. One of Sartre's early teachers at the École Normale Supérieure was Léon Brunschvicg (1869–1944), a neo-Cartesian idealist. In the latter part of the twentieth century (in Germany, partly inspired by Heidegger and Gadamer) there was a huge resurgence of (primarily scholarly) interest in Hegel (e.g. in the Hegel-Archiv in Bochum), but there was also somewhat earlier a strong resurgence of interest in Hegel in France (with Jean Wahl, Jean Hyppolite as well as through the astonishing lectures of Alexandre Kojève<sup>32</sup>), and in the UK and USA with works by J. N. Findlay and Charles Taylor, both movements aiming to restore Hegel's shaken credibility and to show the relevance of his dialectic to current concerns.<sup>33</sup> The rehabilitation of Hegel is now complete (see "Hegelianism in the twentieth century," Chapter 3) in that Hegel has now entered the canon of analytic philosophy, having once been its *bête noire*, in the work of McDowell, Brandom, and others. Whereas Wilfrid Sellars had once claimed that with Wittgenstein's *Philosophical Investigations*, analytic philosophy passed from its Humean to its Kantian phase, Rorty suggested that with Brandom, analytic philosophy has moved on to the Hegelian phase of analytic philosophy.<sup>34</sup> Furthermore, certain central Hegelian concerns run through the work of the Frankfurt School especially in the writings of Marcuse, Adorno, and even Habermas himself, as Axel Honneth has shown in "Critical Theory" (Chapter 18).

Certain philosophical subject areas seem to have developed in direct continuity from the nineteenth century onwards: ethics and epistemology are obvious examples here. Epistemology in the twentieth century, as Matthias Steup argues in Chapter 11, to a large extent remains a response to problems posed by the modern philosophical tradition stemming from Descartes, particularly with regard to the problem of our knowledge of the external world (e.g. Russell's *Our Knowledge of the External World*, 1914) and in defending the possibility of knowledge against skeptical arguments. The main developments of the twentieth century appear to be new problems (Gettier-type problems that challenge the conception of knowledge as justified true belief)<sup>35</sup> and new efforts at articulating non-foundationalist forms of epistemic justification, but much epistemology in the twentieth century is still based on forms of a priori reasoning familiar in traditional philosophy.

Scholarly interest in the history of philosophy and the production of critical editions of the great philosophers' works continues to develop in a steady stream from the nineteenth through the twentieth century. In terms of continuities, the



main philosophical journals that were important at the turn of the twentieth century, e.g. *Mind* (founded 1876), *The Monist* (founded 1888), *Proceedings of the Aristotelian Society* (the Society was founded in 1880; the *Proceedings* began to be published from 1888), *Philosophical Review* (founded 1892), *Kant-Studien* (founded 1896), *Journal of Philosophy* (founded 1904), continue to flourish – and continue to remain significant – for the dissemination of peer-refereed professional philosophy research.

In the nineteenth century, the scholarly history of philosophy began to be practiced entirely for its own sake, independently of the ideological baggage of Hegelianism for instance, or, to give another example, neo-Thomism, whose advocates (e.g. Étienne Gilson, Jacques Maritain, even Frederick Copleston), wanted to revive the realism found in medieval philosophy, while downplaying the nominalist or even Neoplatonic traditions. This history of philosophy is now flourishing as an independent discipline in its own right and there are serious journals devoted to it (e.g. *Journal of the History of Philosophy* and the *British Journal of the History of Philosophy*), as well as to many of the individual figures (Locke, Hume, Kant, Hegel, and so on). The critical edition of Hegel's works is still being produced at the beginning of the twenty-first century, replacing earlier unsatisfactory editions. Similarly, the works of Plato and Aristotle continue to be edited, translated, and commented on; see the work of W. D. Ross (1877–1971), for instance; and new editions are being produced of classical philosophers and early medieval writers who were almost unknown in the nineteenth century. For example, the elegant nineteenth-century translations of Plato's dialogues by Benjamin Jowett (1817–1893),<sup>36</sup> or Aristotle's major works by W. D. Ross,<sup>37</sup> are gradually being replaced with more contemporary translations, but by no means have been made redundant and are still in common circulation among students. Similarly, the twentieth century has seen an extraordinary growth of knowledge of the later antique tradition, especially Plotinus, Proclus, Pseudo-Dionysius, and others, who were first "re-discovered" in the nineteenth century, primarily by students of German Idealism (e.g. F. A. Staudenmaier). The growth in interest in medieval theories of logic, semiotics, and semantics is another indication of a continuation and deepening of nineteenth-century scholarship.

In regard to the history of philosophy, it is important to recognize how recent are many of our historical discoveries; to realize, for example, that more has been learned about all aspects of medieval philosophy in the twentieth century (its figures, texts, sources, and influences) than in the whole period from the seventeenth to the nineteenth centuries. Similarly, thanks to the discovery of the 1844 manuscripts, a new version of Marx emerged in the twentieth century, that was highly influential on the thinking of the Frankfurt School (see "Critical Theory," Chapter 18).

### Philosophy at the dawn of the twentieth century

In intellectual terms, one might consider the dawn of the twentieth century to be marked by a number of important events: there was the death of Friedrich Nietzsche (1844–1900), and the publication of two works that would transform European thought in very different ways: Sigmund Freud's *Traumdeutung* (*Interpretation of Dreams*, 1899),

which inaugurated psychoanalysis, and Edmund Husserl's *Prolegomena zu reinen Logik* (*Prolegomena to Pure Logic*, 1900), which broke decisively with the prevailing *psychologism* in the understanding of logic and mathematics and led to the development of phenomenology. G. E. Moore's essay "The nature of judgment"<sup>38</sup> appeared in 1899 (for Moore on propositions, see also "The birth of analytic philosophy," Chapter 1) and is often seen as the first paper in analytic philosophy, because of its particular view of the nature of propositions as objective complex entities independent of minds and analyzable into component parts (which had a formative influence on Bertrand Russell).<sup>39</sup> The International Congress of Philosophy, held in Paris in 1900, was also an important event, and Russell later recorded that it represented a turning point in his life, because there he met Peano, whose precision impressed the young Englishman, and, as a result, Russell turned to mathematical logic as *the* methodology for his own philosophy.<sup>40</sup> He wrote a paper which he sent to Peano and even claimed: "Intellectually, the month of September 1900 was the highest point of my life,"<sup>41</sup> and this before any of his own major works had been published and while the *Principles of Mathematics* (1903) was being composed.

One might at first be tempted to see that self-proclaimed "posthumous" man, Friedrich Nietzsche, as the principal philosophical voice of the century. His writings seem to resonate with themes that became vital for the century – the nature of truth, the nature of power relations, the problem of the writing of *history*, the fragmentary nature of inheritance and tradition, the threat of relativism, the naturalization of values, the need for radical and creative critique and destruction – philosophizing with a hammer – in order to free up sedimented meanings, the integration of the human with the rest of nature (especially after Darwin), the exercise of hermeneutic suspicion, with "ears behind one's ears" in the interpretation of others, the ironic probing of dreams of mastery, the recognition of the hidden ties between reason and force. Michel Foucault is clearly one of Nietzsche's direct successors, but Bernard Williams, too, for instance, sees Nietzsche's repudiation of traditional conceptions of truth as crucial for defining contemporary thought. Yet, even Richard Rorty himself, a sympathetic reader of Nietzsche, believed that Nietzsche was really integrated into philosophy only through Heidegger, and before that was a figure of mainly literary inspiration, influencing George Bernard Shaw and others.

In similar fashion, initially Sigmund Freud had little impact on academic philosophy, particularly on the European mainland, in the first half of the twentieth century, apart from the work of Horkheimer and Adorno<sup>42</sup> and Herbert Marcuse<sup>43</sup> (see "Critical Theory," Chapter 18). Jean-Paul Sartre, for instance, was seen as having dismissed Freudian analysis in *Being and Nothingness* (1943) with his demolition of the concept of an unconscious that is always unconscious to itself. The French philosopher Paul Ricoeur was important for reinscribing Freud into French philosophy in the latter half of the century.<sup>44</sup> It was not until the 1960s, however, that Freud fully entered the philosophical scene in Europe, with Jacques Lacan, Derrida, Foucault, Deleuze, and Guattari,<sup>45</sup> Kristeva, and others, and even later in the 1970s and 1980s in the UK, with Richard Wollheim, Juliet Mitchell, and others.<sup>46</sup> One reason that delayed the acceptance of psychoanalysis by philosophers was the extremely hostile approach

taken by Karl Popper to the claims of psychoanalysis to be a genuine science (on the grounds of its supposed lack of falsifiability).<sup>47</sup> Indeed, Freud is still left somewhat in the background in academic philosophical discussion; philosophers who are interested in analyzing the emotions, for instance, may advert to his writings, but will quickly go on to develop their independent analyses that pay little more than lip service to the Master.

So, despite their inaugural moments at the turn of the century, perhaps Nietzsche and Freud are not in fact the most representative or archetypal philosophical figures for the twentieth century, certainly if one considers the nature of their respective influences on philosophy. In fact, the pair of names most often advanced (in the work of Richard Rorty among many others) as best representing twentieth-century philosophy are: Heidegger and Wittgenstein, especially after both had made the “linguistic turn” subsequent to their own early publications.<sup>48</sup> The influence of these two philosophers probably outweighs all other philosophers in the twentieth century.

Here, however, I would like to make a case for Edmund Husserl as one of the most influential European philosophers of the twentieth century, who, as Merleau-Ponty put it, casts a long shadow over his times.<sup>49</sup> Almost every European philosopher in the first half of the century had some contact direct or indirect with Husserl (e.g. Heidegger himself, but also Schutz, Levinas, Horkheimer, Adorno, Merleau-Ponty, and Derrida).

### Husserl’s “ground-breaking” work

Phenomenology was inaugurated with Husserl’s ground-breaking *Logische Untersuchungen* (*Logical Investigations*, 1900/1901),<sup>50</sup> the second volume of which, appearing from the publisher Max Niemeyer in two parts in 1901, characterized phenomenology as the project of descriptively clarifying the “experiences of thinking and knowing.” With this work, Husserl believed he had made a start in clarifying problems that were at the heart of contemporary science and philosophy, problems concerning the nature of the experience and determination of meaning in the broadest sense. In the First Edition, he used the term “phenomenology” to mean a kind of descriptive psychology (such as had been practiced by the school of Brentano, Stumpf, and Meinong). For Husserl, phenomenology was to be a way of describing what shows itself *as it shows itself* in its essential forms. It had to avoid speculation and remain true to the evidential situations, which Husserl somewhat misleadingly called “the things themselves” (*die Sachen selbst*) or “the matters themselves.” Husserl’s primary principle – a radical variant of empiricism – is to accept as evident only what shows itself to be so in intuition. Intuition is the keystone of his philosophy. Intuition refers to the primary grasp of the presence of entities.

As Husserl put it in the Foreword to the Second Edition, and as he would subsequently stress, the *Investigations* was his “breakthrough work” (*Werk des Durchbruchs*, LU I 3; Hua XVIII 8). It certainly made his reputation as a philosopher, being praised by the foremost philosophers of his day in Germany, including Paul Natorp,<sup>51</sup> Wilhelm Wundt, who welcomed its anti-psychologism, and Wilhelm Dilthey, who saw it as providing the method to investigate lived experiences in their concreteness. In terms

of its philosophical significance, the import of the *Investigations* is many-faceted. On the one hand, it abjured psychologism and defended a broadly Platonist account of numbers, logical forms, and other ideal entities. They are what they are independently of their being thought or known. On the other hand, Husserl recognized that ideal entities and meanings are only reached by consciousness through a set of determinate acts whose essential natures and interconnections can be specified. There are acts of intending meanings, acts of recognizing, judging, and so on. These acts can be understood as themselves making up a framework of idealities. Husserl's subsequent recognition that these idealities are themselves embedded in the transcendental ego moved his thought in a transcendental direction, renewing his links with the more dominant tradition of neo-Kantianism.

Husserl moved to Göttingen in 1901 and, through the influence of the *Investigations* on a group of philosophers in Germany, a phenomenological "movement" (*Bewegung*) began to emerge in the first decade of the century with Adolf Reinach, Alexander Pfänder, Johannes Daubert, Moritz Geiger, and subsequently, Max Scheler. Through the fascination which the *Logical Investigations* provoked, Husserl effectively revolutionized existing philosophy in Germany, changing the very way philosophy was practiced, shifting the focus from the history of ideas and from epistemology to an attempt to describe what he called "the things themselves" (*die Sachen selbst*). Until Husserl himself came to have a significant influence, German philosophy had been dominated by neo-Kantianism (divided into the so-called "South German" and "Marburg" schools), which accepted the fact of science and whose project was to specify the preconditions of objective scientific knowledge. Furthermore, united in opposition to Hegelian speculative idealism, various forms of positivism were on the rise in Germany, influenced by John Stuart Mill and the older British empiricist tradition, as well as by Comte. Husserl's teacher, Franz Brentano, for instance, was a strong advocate of this positivism and of the unity of exact philosophy and science. Husserl's phenomenology had a profound effect. Issues of knowledge had to be given a much deeper analysis. No longer could the study of the history of philosophy substitute for philosophy.

The next major transformation of phenomenology took place with the publication of Heidegger's *Being and Time* (*Sein und Zeit*) in 1927. Clearly, *Being and Time* had an extraordinary influence on a whole generation, as Hannah Arendt later reported.<sup>52</sup> Heidegger made thinking come alive again! As his student, Hans-Georg Gadamer also wrote with deliberate irony,

Just as might have been the case in fifth-century Athens when the young, under the banners of the new sophistic and Socratic dialectic, vanquished all conventional forms of authority, law, and custom with radical new questions, so too the radicalism of Heidegger's inquiry produced in the German universities an intoxicating effect that left all moderation behind.<sup>53</sup>

As we know, Husserl himself was isolated and humiliated by the rising Nazi movement, a movement in which his successor Heidegger enthusiastically participated.

Any history of twentieth-century philosophy must face that great betrayal of Husserl and of the academy by Heidegger – a betrayal which might be interpreted as being a kind of Nietzschean philosophizing with a hammer. Heidegger hated the ensconced academic practice in the university and saw in Nazism a chance for university renewal and at the same time a vehicle for cultural renewal, or *Erneuerung*, the very term of Husserl's project in the Kaizo lectures of the 1920s.<sup>54</sup> Husserl had claimed that the First World War had exposed the “internal untruthfulness and senselessness” of contemporary culture. In response he sought intellectual renewal through radically self-critical reflection. Heidegger, on the other hand, in his Rectoral Address of 1933, demanded that the university dedicate itself to following the will of the Führer.<sup>55</sup> It would later fall to other German philosophers, notably Jaspers, Habermas, and Adorno, to seek to break Heidegger's spell and to show up his feet of clay. Nevertheless, it is indisputable that Heidegger continues to have enormous influence today, especially in the discussion concerning the meaning of art, poetry, and technology.

### The revolutionary importance of Gottlob Frege

Just as one could advance the thesis that Husserl is more influential than Heidegger, one could also argue that Frege has been more radical and wide-reaching in his influence than Wittgenstein. Gottlob Frege's importance is undeniable, as many of the chapters in the present volume attest. Like Nietzsche, he too is something of a posthumous figure. Regarded primarily as a mathematician, he had little impact among philosophers in the nineteenth century, apart from on Edmund Husserl who discussed him in the first volume of his *Logical Investigations* (1900). Frege was enormously influential not just on Russell and Wittgenstein but subsequently on discussions in the philosophy of language (his context principle is important for the linguistic turn, as Michael Dummett has argued<sup>56</sup>) (see also “The development of analytic philosophy: Wittgenstein and after,” Chapter 2), for philosophy of science (problems raised by the notion of analyticity), philosophy of mind (the meaning of logical, conceptual, and mental “content”), even metaphysics. As Jason Stanley points out, Frege had a particularly modern way of approaching the notion of content (see “The philosophy of language,” Chapter 9). Furthermore, as Stanley argues, Frege's account of quantifiers had a lasting impact on the semantics of natural languages. And Frege's views have an important bearing on metaphysics, although he himself paid scant regard to that subject. As E. J. Lowe writes in “Metaphysics” (Chapter 10), first-order quantificational logic in its modern form, as developed by Frege, Russell, and Whitehead, has embedded within it certain important metaphysical assumptions of an ontological character, specifically, the notions of an *atomic proposition* and *quantification*. Frege operated with a rather restricted ontology of individuals and relations, but he set the stage for subsequent discussions in analytic metaphysics. Of course Frege cannot be said to have had universal influence on all areas of philosophy (he had little interest in epistemology or ethics, for instance) but nonetheless he has to be credited with giving twentieth-century analytic philosophy its particular sharpness and distinct style. Like Heidegger, Frege had a dark side. Frege's political beliefs were somewhat naive, to say

the least. He allied himself with Bruno Bauch's right-wing Deutsche Philosophische Gesellschaft (German Philosophical Society), a group that supported Hitler's rise to power. Furthermore, Frege's diary contains anti-Catholic and anti-Semitic sentiments, including the view that Jews should be expelled from Germany.<sup>57</sup>

### **Two main traditions: analytic and Continental philosophy**

Discussing the relative significance of Husserl or Frege, Heidegger or Wittgenstein, leads naturally to a consideration of a philosophical divide that became prominent from the 1930s onwards. It is generally recognized that one of the most notable features of twentieth-century philosophy is that there developed two dominant intellectual traditions, traditions that in that century began to be named as the "analytic" or "Anglo-American" or "Anglo-Saxon" on the one hand, and "Continental" or "European" on the other. These traditions are widely held to have developed separately, with opposing aspirations and methodologies, and, indeed, to be fundamentally hostile to one another.<sup>58</sup> More careful scrutiny actually shows that these traditions emerge from common sources in nineteenth-century philosophy and address many of the same problematics, albeit with differing emphases and conclusions (both, for instance, are sensitive to language and meaning, aware of the problem of multiple and competing interpretations, sensitive to the challenges of science and technology, and also to the challenges of skepticism and relativism, interested in the nature of intentionality, and so on).<sup>59</sup> Early twentieth-century philosophy in most of its forms was united in its hostility to German Idealism, and its broad suspicion of speculative systems and of ungrounded metaphysics. This suspicion can be found not only among empiricists (such as Mill and Brentano) and positivists (Comte), but also among the German neo-Kantians (who looked to philosophy to provide a kind of logic of science), as well as in Russell and Moore, after they had come to reject the late-flowering British and American neo-Hegelian idealism current in their philosophical youth.

I don't propose here to spend too much time discussing the merits of the labels "analytic" and "Continental," as there is now an enormous literature documenting this divide.<sup>60</sup> In short, Continental philosophers have never been comfortable with the label "Continental," since they see themselves as doing philosophy in the traditional sense – upholding the tradition of historical scholarship, for instance. They see "Continental" as a label imposed on them from without, often from a rather narrow – even Euro-skeptical – British perspective.<sup>61</sup> Philosophers in this tradition have begun to express a preference for describing their tradition as "European philosophy," a title that recognizes the long and unbroken European tradition from the Greeks through to German Idealism, hermeneutics and neo-Kantianism. The problem is that European philosophy includes, alongside Nietzsche, Foucault, Deleuze, and Lacan, such names as LaPlace, Comte, Frege, Carnap, Schlick, Popper, and Wittgenstein. Further it seems to be ceding too much to British Euro-skeptics to exclude such figures as Hume, Mill, Russell, and Ayer from the cast of acceptable "Europeans." On the other hand, the term "European" philosophy also seems unhelpful since it excludes all those in the USA who write about Heidegger, Derrida, and others (e.g. Richard Rorty, John



Sallis, Jack Caputo) in a “Continental” manner. A. P. Martinich and David Sosa are in a similar predicament with regard to the term “analytic” philosophy, which they believe most accurately characterizes the work of Moore and Russell and other British philosophers up to the mid-century.<sup>62</sup> To capture the subsequent development of this philosophy, they suggest the term “Anglo-German philosophy,” to recognize the important contribution that Carnap, Feigl, Reichenbach, and others made after they emigrated to the United States.

The difficulty in handling the labels of these traditions is mirrored in a difficulty in distinguishing their respective methods. Both attempt to be rigorous, scientific, and to be sensitive to language. There have been suggestions that analytic philosophy is more problem-centered whereas Continental philosophy is more focused on *explication de texte*.<sup>63</sup> Often, however, both traditions circle around the same kinds of problematic. For instance, both traditions have had to grapple with *skepticism* and *relativism*. Relativism, the view that truth or rationality is relative to a particular group of people (a view as old as Protagoras) is a particularly strong tendency to be found across a range of twentieth-century thinkers<sup>64</sup> from John Dewey, Thomas Kuhn,<sup>65</sup> and Wittgenstein to Quine<sup>66</sup> and Putnam; from Nietzsche to Michel Foucault, Derrida and Richard Rorty; even Martin Heidegger has been accused of relativism.<sup>67</sup> Early in the century, Wilhelm Dilthey’s philosophy of worldviews appeared to Husserl to be leading inevitably to relativism, whereas late in the century Hilary Putnam’s espousal of conceptual relativity has also been interpreted as a kind of relativism, since “what there is” is considered to be relative to a particular conceptual scheme. Both traditions show radical shifting of ground and abandonment of their supposed “founding” or “foundationalist” methodologies. In the Continental tradition, Husserl’s descriptive phenomenology soon gave rise to Heidegger’s hermeneutical phenomenology and ultimately (partly in reaction to structuralism which itself was reacting to existentialism) to French deconstruction. Deconstruction challenged the notion of fixed, ideal meanings and espoused *différance* and *dissémination*, concepts that suggest the dispersal of significance and the impossibility of final closure in issue of meaning. In analytic philosophy, philosophical confidence in ordinary language was gradually eroded by the problems associated with radical translation (Quine), the recognition of the open plurality of conceptual schemes (Putnam), and the plurality and incommensurability of language-games (later Wittgenstein).

These two most prominent twentieth-century movements, namely, analytic philosophy and phenomenology (I shall leave aside for the time being two other extremely important movements, namely pragmatism and Marxism, which both are in effect reactions against German Idealism), both have their origins in a set of interrelated concerns, namely: the scientific status of logic (and its relation to mathematics); the nature and extent of the new science of psychology, which had been inaugurated in the final quarter of the nineteenth century by Wilhelm Wundt (1832–1920), his English student E. B. Titchener (1867–1927), and Franz Brentano (1838–1917), among others; and the challenge posed by reductive naturalism to the traditional philosophical enterprise. These problematics are interrelated: prominent philosophers in the nineteenth century (e.g. J. S. Mill) had explained logic in terms of psychology

and the internal processes of the human mind (so-called “psychologism”), and twentieth-century philosophy begins with Frege, Russell, Husserl, and Wittgenstein all rejecting this explanation in order to defend the ideality and independence of logical truths. A kind of Platonic realism about logical entities (objects, propositions, states of affairs) and a rejection of psychologism are hallmarks of the beginning of twentieth-century philosophy, whether it be that of Moore or Russell or Frege or Husserl.

Bertrand Russell once characterized the nineteenth century as the age of mathematics. It is interesting that the major developments in mathematics and logic were of central interest to philosophers in the twentieth century also including: Husserl, Frege, Russell, Whitehead, and Wittgenstein. Quine and Putnam were both fascinated by mathematical logic. Russell and Husserl were both deeply influenced by the crisis of foundations in mathematics and by Cantor’s work on infinite numbers. Russell’s early work was in the philosophy of mathematics and his famous paradox was not only known to Husserl but may even have been anticipated by him. In the Husserl Archives at Leuven we have the works of Frege, which the author had sent to Husserl, heavily annotated by Husserl, and Husserl in particular makes comments on Frege’s context principle, which Michael Dummett sees as one of the inaugural moments of analytic philosophy. In his book *Origins of Analytic Philosophy* Dummett locates the linguistic turn in Frege’s 1884 *Die Grundlagen der Arithmetik*, where he articulates the context principle that only in the context of a sentence does a word have meaning.<sup>68</sup> Sentences express thought but the decomposition of thought into its components is achieved through the decomposition of sentences. Dummett sees it as crucial to the rise of analytic philosophy that thoughts were stripped of their subjective mental character, thought was “extruded from the mind” as he puts it. Yet this is precisely true also, as Dummett recognizes, of Husserl. The components of thoughts could be tracked through the composition of language once the “disguised” logic of language had been unmasked.

One way to distinguish the traditions is to look at the role played by logic in the analysis of philosophical concepts. Frege and Husserl – the founders of the analytic and Continental traditions – parted company in their evaluation of the role of mathematical formalization in logic. In 1918, when Russell was sent to jail, he took with him Husserl’s *Logical Investigations* with the intention of reviewing it for *Mind*. But the review was never written. The failure to continue the development of symbolic logic was in part due to a deliberate decision by Husserl, who regarded it as a mere formal calculus of no philosophical importance. Husserl was interested in transcendental logic, reviving the Kantian problem of how it is that logical acts achieve objectivity. This issue of the nature of transcendental logic has only in the late twentieth century reappeared in analytic philosophy, inspired by contemporary forms of neo-Kantianism.

It may very well be that the distinction between analytic and Continental philosophy may in the end not prove to be a very useful tool for explicating the meaning of philosophy in the twentieth century. There is ample evidence that philosophers in the USA were unhappy with the distinction, especially as it appeared to be



used primarily for political purposes to assert the validity of some particular approach to philosophy to the exclusion of all others. The sheer diversity of twentieth-century philosophy and its increasing internationalization need other ways of being described. But it is worth looking a little more in detail at the manner in which analytic philosophy evolved over the century.

### **The evolution of the tradition of analytic philosophy**

Originally, analytic philosophy was presented simply as a method or indeed as *the* method of philosophy. It was primarily understood – by Russell and others – as a method of decompositional analysis. In his “Analytic realism,” for instance, Russell wrote: “the philosophy I espouse is analytic, because it claims that one must discover the simple elements of which complexes are composed, and that complexes presuppose simples, whereas simples do not presuppose complexes.” Morris Weitz, in his *Twentieth-Century Philosophy: The Analytic Tradition*,<sup>69</sup> lists a number of characteristics of analytic philosophy, including: the refutation of idealism (Russell, Moore), the defence of realism and common sense (Moore), logical analysis (Russell, Ryle), logical positivism (Carnap, Ayer), and a more generic kind of conceptual elucidation. Carnap offers a definition of logical analysis in his *Philosophy and Logical Syntax* (1935):

The function of logical analysis is to analyse all knowledge, all assertions of science and of everyday life, in order to make clear the sense of each such assertion and the connections between them. One of the principal tasks of the logical analysis of a given statement is to find out the method of verification for that statement.<sup>70</sup>

Examples of the kind of logical analysis that developed in the tradition actually are of a much broader kind. Consider, for instance, Russell’s theory of descriptions, and, building on that, Ryle’s discussion of systematically misleading expressions.<sup>71</sup> Analytic philosophy was seen as offering a tool-kit for the identification, diagnosis and eventual solution of philosophical problems.

Only gradually was it recognized that analytic philosophy was in fact a historical movement or even a tradition, an idea that gained currency in the last decade of the twentieth century.<sup>72</sup> Certainly, there is a recognition that the nature of the analytic tradition has radically altered over the decades, even if the official ideology, as it were, has resolutely claimed that there has been no change. Indeed, it is now more or less a truism to state that analytic philosophy is a historical tradition which more or less spans the twentieth century itself (certainly from 1905). There is now even talk of “post-analytical philosophy”<sup>73</sup> (see also “The development of analytic philosophy: Wittgenstein and after,” Chapter 2).

Although the older empirical tradition of Hume and Mill is clearly in the background (in the work of Bertrand Russell especially), Gottlob Frege, as we have seen, is usually regarded as the first analytic philosopher insofar as he developed a precise way of talking about logical form (in terms of *function* and *argument*) and

managed to distinguish it from the *grammatical form* of a sentence. As Frege wrote, “Instead of following grammar blindly, the logician ought rather to see his task as that of freeing us from the fetters of language” (quoted in “Philosophical logic,” Chapter 8). This allowed Frege to break free of psychologism (and the “psychological” conception of a judgment as the uniting of subject and predicate). Similarly, his distinction between “sense” (*Sinn*) and “reference” or “meaning” (*Bedeutung*) was seen as assisting the kind of clear analysis that would subsequently be favored by philosophers. As Michael Potter comments:

there is nothing deep, of course, in the distinction between a sign and the thing it signifies, nor in the distinction between both of these and the ideas I attach to a sign when I use it. What goes deeper is the claim that if we are to have a satisfying account of language’s ability to communicate thoughts from speaker to listener we must appeal to yet a fourth element – what Frege calls sense. (in “The birth of analytic philosophy,” Chapter 1)

As early as 1905, Russell’s article “On denoting,”<sup>74</sup> which also enshrined the difference between logical and grammatical form, became a model of its kind and the paradigm of analytic philosophy.<sup>75</sup> The task was to free logic of the enslavement in language. In part this would lead to the pressure to develop ideal languages; it also led to the recognition that many traditional philosophical problems were actually insoluble because their linguistic form was “systematically misleading” as Ryle would put it. Analytic philosophy – beginning with Carnap – now recognized the category of the “pseudo-problem” (*Scheinproblem*).

Bertrand Russell and G. E. Moore must also be given enormous credit for establishing the manner of analytic writing in philosophy that soon became current: writing crisply, identifying a thesis, addressing its merits, entirely independently of its historical context or location in the scheme of a philosopher’s thinking. Thus, for example, idealism could be reduced to a single issue: the nature and possibility of internal relations.<sup>76</sup> Leibniz’s philosophy could be reduced to a set of principles and the question was whether they were consistent with one another.<sup>77</sup> The form of writing became the lucid essay. But the will-to-system is also evident, from early on, in analytic philosophy. Russell himself was by nature a system builder, trying in his books to give clarification to the central scientific and metaphysical concepts of space, time, matter, causation, the nature of relations, classes, and so on. The most notable case of systematization in point here is Wittgenstein’s *Tractatus* (see further in “The birth of analytic philosophy,” Chapter 1). According to this book, the object of philosophy is the “logical clarification of thoughts” (*Tractatus* 4.112) and the *Tractatus* is surely an extraordinary edifice, a purely modernist construction. The *Tractatus* encouraged the early Vienna Circle members who were intent on promoting a “scientific conception of the world” (their phrase). Moritz Schlick, for instance, had studied physics and was struggling to find an appropriate philosophical vehicle to accommodate the insights of Einstein’s Theory of Relativity and the new physics in general. The Vienna Circle was the most hardnosed set of analytic philosophers and, given their influence, and

perhaps a residual institutional memory of their European roots, often Continental philosophers assume there is no other kind of analytic philosophy and dismiss it all as logic-chopping “positivism.” Certainly the members of the Vienna Circle were hardnosed in their rejection of metaphysics and gave epistemic predominance to science and that too in a particularly stringent form. There is science and there is stamp collecting, as Quine would later put it, paraphrasing Ernest Rutherford. The human and cultural sciences were often passed over by the analytic tradition, a move that the Continental tradition regarded as disastrous for the very conception of what science is. Rorty saw this tension between a focus on the hard sciences and a softer focus on the humanities as encapsulating a traditional battle between poetry and philosophy (construed as a kind of superscience).<sup>78</sup>

Side by side with the hard, formalistic, systematic side of analytic philosophy, however, there was also a softer edge first typified by G. E. Moore and soon afterwards by Whitehead. Moore’s “In defence of common sense” lists propositions which he claims he knows (that he has a body, that he once was younger than he is now, and so on), but many of these knowledge claims embody assumptions that belong to the background of what Husserl would call the life-world.<sup>79</sup>

Analytic philosophy as a tradition continued to be practiced even after many of its central theses were rejected. For example, Peter Strawson (1919–2006) was recognizably an analytic philosopher yet he rejected the Russellian analysis of definite descriptions. The central notion of analytic philosophy seems to be the clarification of concepts through the clarification of the linguistic forms in which those concepts appear. As Michael Dummett has written,

What distinguishes analytical philosophy, in its diverse manifestations, from other schools is the belief, first, that a philosophical account of thought can be attained through a philosophical account of language, and secondly, that a comprehensive account can only be so attained.<sup>80</sup>

Central then to Dummett’s characterization of analytical philosophy is the linguistic turn.

What is difficult to understand is how logical analysis and specifically the disambiguation of the logical from the grammatical form of sentences should end being coupled with a strong defense of ordinary language. This is precisely what happened in the emergence of Oxford ordinary language philosophy in the 1950s, with Austin and Ryle and, incidentally subsequently in the USA, with their two American followers, John Searle (1932– ) and Daniel Dennett (1942– ). Dennett, for example, applies Ryle’s analysis of systematically misleading expressions to deny that there exist “sakes” (as in “I did it for John’s sake”) and to determine which if any of our nouns denoting mental items are in fact referential.<sup>81</sup>

It would be wrong to think that analytic philosophers are wedded to a fixed set of presuppositions which they do not critically analyze. Perhaps the next most paradigmatic revisionary article for analytic philosophy is W. V. O. Quine’s 1951 paper, “Two dogmas of empiricism,”<sup>82</sup> which attacked the very basis of the analytic/synthetic

distinction so beloved of neo-Kantians and Carnapians alike. This was a challenge to the very meaning of analysis, and an undermining of the theoretical assumptions that had given rise to analytic philosophy in the first place. Quine is not saying that the distinction between analytic and synthetic truths is badly drawn or vague or useless, rather that it is illusory. It is for Quine “an unempirical dogma of empiricists, a metaphysical article of faith.”

Quine’s article also included an explicit attack on the verificationist principle of meaning which had become, as Quine calls it, a “catchword” of twentieth-century empiricism. Against the “reductionist” claim that meaningful statements can be traced back to a statement about immediate experience, Quine wants to propose that our “statements about the external world face the tribunal of sense experience not individually but only as a corporate body.”<sup>83</sup> What Quine wants to propose in that paper is an “empiricism without dogmas” and one that is holistic in that it sees the web of knowledge as a “man-made fabric which impinges on experience only at the edges”.<sup>84</sup> Every statement is revisable, whether it be a statement about experience or the formulation of a logical law. Moreover, the positing of abstract entities such as classes is on a par with the positing of Homeric gods or physical objects. This positing is a matter of convenience, or as Quine puts it, “swelling ontology to simplify theory.”<sup>85</sup>

The next step in this overhaul of the very meaning of classical empiricism and indeed classical analytic philosophy (as represented by Carnap or Ayer) is the attack on the scheme/content distinction in Davidson’s famous “On the very idea of a conceptual scheme” (1974).<sup>86</sup> Indeed, this step is already prefigured in Quine’s “Two dogmas” article. In that article, Quine already recognizes that some sentences look more like statements about our conceptual schemes (whether we admit classes or not) while others look more like statements about brute fact (“there are brick houses on Elm Street”). Quine wants to deny that there is a difference in kind between these two types of statement. They are on a continuum and the decision which to accept is “pragmatic” according to Quine. Davidson begins his article by recognizing that many philosophers speak of conceptual schemes and contrast them with experience and specifically “the data of sensation.” Even those who think there is only one conceptual scheme still cling to the idea of there being such a “scheme.” But in particular Davidson is interested in the idea (current in modern anthropology and elsewhere – he cites Whorf’s work on the Hopi languages and their untranslatability, as well as Thomas Kuhn’s work in the *Structure of Scientific Revolutions* on revolutions in science leading to different paradigms or “mindsets”) that what makes one conceptual scheme different from another is that one is not translatable into the other. Davidson is explicit that he is seeking to build on Quine’s exposure of two dogmas by himself exposing the third dogma of empiricism – that between scheme and content. As Davidson recognizes, to give up the third dogma is to abandon a principle that is at the very heart of empiricism:

I want to urge that this second dualism of scheme and content, of organizing system and something waiting to be organized, cannot be made intelligible

and defensible. It is itself a dogma of empiricism, the third dogma. The third, and perhaps the last, for if we give it up it is not clear that there is anything distinctive left to call empiricism.<sup>87</sup>

These are paradigmatic moments in analytic philosophy, and there is evidence of a clear sense of tradition. Quine is utilizing but criticizing the approach of Carnap, and Davidson is moving to reject a new dualism that emerges after the analytic/synthetic dualism has been jettisoned. Davidson quotes closely from Quine's article, deliberately invoking phrases like "the tribunal of experience" and it is clear that the conception of a "conceptual scheme" he has in mind comes directly from Quine.

It is interesting that, despite the commitment to naturalism in analytic philosophy, there has been a progressive move *away* from empiricism through the century. Interestingly, as we have seen, both the early Russell and Moore began from the point of view (inherited from German Idealism and its British counterpart) that empiricism had been refuted. Nevertheless, for a long time, analytic philosophy was supposedly linked with empiricism. The essays of Quine and Davidson, then, may be seen as a corrective of the distorting empiricist interpretations of the Vienna School of the central tradition of analytic philosophy. The sheer multiplicity of forms of analytic philosophy in the twentieth century makes it difficult to provide a single account of its history and evolution through the century (but see "The birth of analytic philosophy," Chapter 1, "The development of analytic philosophy," Chapter 2, "Philosophy of language," Chapter 9, and "Philosophy of science," Chapter 14).

### A suspicion of grand narratives

In trying to write the history of twentieth-century philosophy, then, one must be careful not to impose a "grand narrative," and indeed, one must resist being deceived by accepting one of the grand narratives which contemporary philosophers themselves espouse and tell. Analytic philosophers no less than Continental philosophers purport to have a suspicion of these grand narratives (whether they offer, to use Rorty's favorite terms, "upbeat" or "downbeat" stories about the development of philosophy). But while one must be wary of the veracity of grand narratives, one must also be aware of the many grand narratives that have been proposed even during the suspicious twentieth century (from Nietzsche and Freud, to Husserl and Heidegger, and even Rorty who had his own grand narrative of the clash between systematic and "edifying" philosophies).

As we have seen, Freud and Husserl both self-consciously sought to inscribe themselves into history as the founders of radically new disciplines: psychoanalysis and phenomenology respectively. But there were many other inaugural moments during the century, not just programmatic announcements such as the Manifesto of the Vienna Circle,<sup>88</sup> but also, for instance, Derrida's proclamation of the new science of grammatology. In typically ambiguous manner, in his *Of Grammatology*, Derrida announces a new science of grammatology (a call taken up by Julia Kristeva) while at the same time explaining how the metaphysical closure of the epoch would prevent

this science from ever being established as such. In his *Of Grammatology* Derrida proclaims:

By alluding to a science of writing reined in by metaphor, metaphysics and theology, this exergue must not only announce that the science of writing – *grammatology* – shows signs of liberation all over the world . . . I would like to suggest above all that, however fecund and necessary the undertaking might be . . . such a science of writing runs the risk of never being established as such and with that name. . . . For essential reasons: the unity of all that allows itself to be attempted today through the most diverse concepts of science and writing is, in principle, more or less covertly yet always, determined by an historico-metaphysical epoch of which we merely glimpse closure. I do not say the end.<sup>89</sup>

In other words, Derrida wants to participate in the grand gesture of the founding of a new science of writing (“grammatology”) and at the same time to protect himself against the inevitable failure of such vaulted ambition. Manifestos are indeed a recurrent feature of contemporary philosophy, as they have been through the centuries (think of the 1848 *Communist Manifesto* of Marx and Engels).<sup>90</sup>

In terms of inaugural proclamations, Heidegger, too, is a curious case, both a “modern” and a “postmodern” in many ways, in that he wants both to advance and at the same time deconstruct grand narratives. He wants to speak of and diagnose the history of philosophy, indeed the “history of being” in terms of “epochs.” Heidegger and Derrida want to see western philosophy in terms of an occlusion of the meaning of being, or the all-pervasive dominance of an understanding of being in terms of presence. In his narrative of “the history of Being,” Heidegger claims apparently to be able to stand above time and history in order to diagnose essential tendencies (see also “German philosophy,” Chapter 17). Thus he can, somewhat idiosyncratically, characterize Nietzsche as a metaphysician, albeit one who diagnoses nihilism as the contemporary meaning of Being.

There are many examples of the grand gesture in Heidegger: Consider his claims concerning the “end of philosophy.” Heidegger sees the end of philosophy as coming with Nietzsche who “completed” metaphysics and gave “planetary thinking” the form it would have for decades to come. Philosophy has come to an end because a certain form of philosophy has been incorporated into this planetary thinking, Heidegger proclaims:

With Nietzsche’s metaphysics, philosophy is completed. That means: it has gone through the sphere of prefigured possibilities. Completed metaphysics, which is the ground for the planetary manner of thinking, gives the scaffolding for an order of the earth which will supposedly last for a long time. The order no longer needs philosophy because philosophy is already its foundation. But with the end of philosophy, thinking is not also at its end, but in transition to another beginning.<sup>91</sup>

The rhetoric of end is always correlated with the rhetoric of beginning. We have Michel Foucault claiming both that the concept of “man” is a philosophical, or cultural, invention of modernity and also that it will have an “end.” As he writes in *The Order of Things*,

One thing in any case is certain: man is neither the oldest nor the most constant problem that has been posed for human knowledge... As the archaeology of our thought easily shows, man is an invention of recent date. And one perhaps nearing its end.<sup>92</sup>

Analytic philosophy too at various times has proclaimed an end to philosophy as traditionally practiced and there has been considerable discussion about the transformation of philosophy in this tradition also.<sup>93</sup> Philosophy was supposed to be different in character from the history of philosophy. Carnap and Ayer and the Logical Positivists announced the elimination of metaphysics from philosophy.<sup>94</sup> Metaphysical statements have no literal meaning or “sense”; they are not subject to the criteria of truth or falsity, since they are incapable of verification. As Ayer proclaims in *Language, Truth and Logic*,

We may accordingly define a metaphysical sentence as a sentence which purports to express a genuine proposition, but does, in fact, express neither a tautology nor an empirical hypothesis. And as tautologies and empirical hypotheses form the entire class of significant propositions, we are justified in concluding that all metaphysical assertions are nonsensical.<sup>95</sup>

Metaphysicians have been “duped by grammar” and philosophy must be distinguished from metaphysics, for Ayer. Ayer went further and denied that metaphysical statements can be cherished alongside poetic statements as statements of nonsense that still have emotive value. No, while poetry is rarely literal nonsense, metaphysics always is and is of no scientific value. Yet, in his autobiography, *A Part of My Life*, Ayer described his Oxford training in philosophy as primarily being a kind of critical engagement with the history of philosophy, including much traditional metaphysics, and the writing of essays on Aristotle, Leibniz, and others.<sup>96</sup> It is clear in his own work that he too practiced philosophy in a very traditional manner. Indeed he recommended the historical approach as the best way of introducing students to philosophy.

Both the early and the later Wittgenstein may be said to have contributed to the end of philosophy debate. The Wittgenstein of the *Tractatus* is already advocating silence on certain kinds of questions and the later “therapeutic” approach of the *Philosophical Investigations* may also be seen as a way of diffusing philosophical claims such that philosophical worries may be overcome. At the end of the *Tractatus* (1921), Wittgenstein claims (in a manner that would subsequently inspire the Vienna Circle),

The correct method in philosophy would really be the following: to say nothing except what can be said, i.e. propositions of natural science – i.e.



something that has nothing to do with philosophy – and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions.<sup>97</sup>

Later in the *Philosophical Investigations*<sup>98</sup> he will continue to maintain that philosophical problems arise because of misunderstandings of language (see “The development of analytic philosophy: Wittgenstein and after,” Chapter 2) ), but the resolution to the problem is to identify the right language-game to be playing:

The real discovery is the one that makes me capable of stopping doing philosophy when I want to. – The one that gives philosophy peace, so that it is no longer tormented by questions which brings *itself* in question. – ... Problems are solved (difficulties eliminated), not a *single* problem.

There is not a philosophical method, though there are indeed methods, like different therapies. (*Philosophical Investigations*, §133)

Evident in both Wittgenstein and Heidegger is a certain frustration with the manner in which philosophy has been traditionally practiced and an attempt to begin anew. Both the *Tractatus* and *Being and Time* (1927) are modernist documents, as Rorty recognized, in that there is an attempt to break new ground, to use an innovative style, to present a *form* of thinking. Heidegger is explicit about conducting an *Abbau* or *Destruktion* (deconstruction, destruction) which argues that even the history of philosophy, the way the tradition of philosophy itself appears to us, needs to be broken down, unpackaged, and thought again. There is a strong sense in Heidegger of the kind of dilemma that Samuel Beckett’s characters find themselves in: “I can’t go on; I must go on.”

Heidegger’s ambitious destructive attack on the possibility of philosophy was countered, however, by his own student Gadamer’s more conservative interpretation of hermeneutics. As Karl-Otto Apel writes in Chapter 17,

Instead Gadamer endeavors, in his founding of a “hermeneutical philosophy” (which appeared in a time of reconstruction after the German catastrophe), to utilize the structures of Heidegger’s thought, presupposed in his approach, for what is on the whole a culturally conservative task of reintegrating contemporary philosophy into the European tradition. The classical Greek thinkers (Socrates, Plato, and Aristotle), who were, already for Heidegger, the founders of “metaphysics,” thereby play a thoroughly positive role that Gadamer explicitly defends *against* Heidegger’s “destruction.”

Heideggerian revolution gives way to Gadamerian conservation of the tradition.

Of course, once a new tradition is inaugurated, there will always be those who claim it had prior incarnations and who will write the prehistory of that tradition. Thus, the “linguistic turn” in analytic philosophy (initiated by Frege but really developed by Russell and Wittgenstein) is also paralleled in Continental philosophy with the



concern for language and interpretation of Heidegger, Gadamer, and others. There are differences, of course. In analytic philosophy, for instance, the linguistic turn is given specifically scientific garb, whereas the turn to language in eighteenth-century thought is an attempt to achieve universalization of thinking, freeing thinking from the peculiarities of local inscription in language. But even among analytic philosophers, a prehistory to what Austin calls “the way of words” is given, which recognizes specifically analytic philosophy in the work of Socrates, Plato, and Aristotle. Thus we get the emergence of another grand narrative – this time within analytic philosophy – according to which the best philosophy has always been analytic philosophy, whether in Plato’s *Theaetetus* or Aristotle’s analyses of the different senses of the term *ousia* in his *Metaphysics*. Once a new tradition is identified, it is easy for it to find its forbears.

### Philosophical self-reflection

If the nineteenth century saw philosophy becoming thoroughly professionalized and academicized, it also saw, with Hegel, philosophy coming to produce a philosophical reflection on its own genesis. An increasing self-awareness about the nature – and limits – of philosophical practice (grown acute in Wittgenstein and Heidegger) is already evident in philosophy since the time of Immanuel Kant and his conception of *Kritik*. But it was in Hegel’s lectures that, for the first time, the history of philosophy itself became self-consciously philosophical. Hegel saw the need for that side of philosophy which was to be “its time comprehended in thought” (*ihre Zeit in Gedanken gefasst*), as he put it. Incidentally, Richard Rorty interprets this Hegelian idea of philosophy (as the self-comprehension of an era) as freeing philosophy from the need to offer explanation and instead allowing it to take the form of celebration:

I happily join with Charles Taylor in thinking that Hegel’s importance lies chiefly in his historicism, and specifically in his redescription of philosophy as its time held in thought. One happy consequence of this redescription seems to me that it frees philosophers from the need to give explanations. It lets us relax and be frankly and openly celebratory (or in Heidegger’s case, frankly and openly nostalgic).<sup>99</sup>

Indeed, not only Husserl and Heidegger but also Wittgenstein conceived of philosophy as description. Thus we have Wittgenstein say:

Philosophy simply puts everything before us, and neither explains nor deduces anything. – Since everything lies open to view there is nothing to explain. (*Philosophical Investigations*, § 126)

Whether philosophy is able to comprehend the times in which it emerged and of which it is supposedly the rational representation, is an open question, but it is at least true that the effort to comprehend our philosophical time is itself a philosophical (rather than merely a sociological) challenge.

To think about the twentieth-century philosophical legacy, one has to be aware of the many hermeneutical challenges involved. Yet, in one sense, one must be resolutely Hegelian in that one has to see a certain sense in history and not just one damn thing after another. The historical developments of philosophy through the century must themselves have philosophical significance, but the recognition of that significance must not endanger the very understanding of the radical contingency and facticity which underlie human achievement. Hegel himself recognized the tension between concept and contingency, between the rationality which philosophy demands and the chaos of what happens, and claimed that “the only thought which philosophy brings with it is the simple idea of reason – the idea that reason governs the world, and that world history is therefore a rational process.”<sup>100</sup>

But precisely this assumption of reality is what is in question in contemporary philosophy. On the other hand, any scientific enterprise, any enterprise of understanding surely begins from the assumption of rationality, that there is an identifiable order even in apparent chaos. Heidegger, for instance – and Gadamer here follows him – sees it as belonging to the meaning of philosophy to say something essential about “the spirit of the age”<sup>101</sup> (for further discussion of Gadamer see “Twentieth-century hermeneutics,” Chapter 16). Heidegger, Gadamer, Blumenberg, Cassirer, and Arendt all want to characterize the essence of *modernity*, for instance. Foucault wants to diagnose contemporary civilization using the mirror of the history of madness. His employment of the Nietzschean figures of genealogy and diagnosis confirms that he too believes that it is possible to penetrate to the essence of a time or a period. This is a kind of phenomenological essentialism, one which needs much fuller study.

In any event, to write a history of twentieth-century philosophy is not, as Hegel correctly recognizes, merely to assemble a list of all the philosophical works and tendencies. It is also an attempt to seize *the rationale* at work in the processes. For example, Jean-François Lyotard is doing just that in diagnosing what he has termed the “postmodern condition.” He writes: “Our working hypothesis is that the status of knowledge is altered as societies enter what is known as the post-industrial age and cultures enter what is known as the postmodern age.”<sup>102</sup> Lyotard goes on to attempt (while disputing grand narratives) to diagnose the age in terms of a set of key characteristics. In precisely this sense, I believe that the history of philosophy is relevant to philosophy, in contrast to the way in which the history of physics or medicine is not relevant to the current practice of these disciplines. Concepts and problems have histories, and understanding those histories is important to understanding and contextualizing the concepts themselves. As Peter Hylton has written in his elegant *Russell, Idealism and the Emergence of Analytic Philosophy* (1990), “Philosophical problems, and the concepts in which they are formulated, and the assumptions on which they rest, have a history; and this history is surely a legitimate subject of study.”<sup>103</sup> Moreover, Hylton argues it is not just a subject of interest in historical terms but it is of philosophical interest too. That is, it challenges our conceptual frameworks.

## Twentieth-century philosophy and the meaning of Europe

One important hermeneutic scruple that has to be invoked in any writing of the history of twentieth-century philosophy concerns the meaning of the very terms in play in the description and categorization of that thought. As with the strictly philosophical concepts involved so too the supposedly cultural – or even geographical – terms are fraught with ambiguity. For instance, even if, in philosophy, the latter half of the twentieth century became very much the “American” century, no philosophical account of the first half of the century can ignore the vital contribution of Europe.<sup>104</sup> But immediately we have to ask: What do we mean by Europe?

The very notion of “Europe” itself has not remained static in the period in question, but has been the subject of intense analysis from Husserl and Jan Patočka to Jacques Derrida and Jürgen Habermas. Edmund Husserl in his *Crisis of the European Sciences* (1936) sought to overcome the dangerous slide of European culture into irrationalism by tracing the roots of modernity in the mathematicization of nature successfully begun by Galileo.<sup>105</sup> Modern science had literally split the world in two (into objective measurable properties and “subjective-relative” properties) and had separated fact from value to a degree that twentieth-century scientifically informed culture was left without means to analyze the incipient loss of meaning and value that threatened its very existence. Husserl actually proposes self-reflective meditative philosophy (*Besinnung*) as a cure for this malaise. But Husserl’s concept of Europe was not without controversy. Critics point especially to Husserl’s *Vienna Lecture* (1935) where he explicitly excluded nomadic gypsies from the concept of “Europe” as the center of scientific rationality.<sup>106</sup>

Jan Patočka also wrote urgently and incisively on the meaning of Europe and about the “problems of a post-European humanity,” for which he developed the term “post-Europe” (*Nach-Europa*).<sup>107</sup> Like Husserl, he turns to the ancient Greeks, but he draws inspiration from the desire for justice which emerged there and in the idea of the need for “care of the soul.” In one of his last articles, Jacques Derrida also wrote on the nature of Europe, speaking of a “Europe of hope,” which would not be “Eurocentric” but a guardian of irreplaceable values, many of which stem from the Enlightenment:

Caught between US hegemony and the rising power of China and Arab/Muslim theocracy, Europe has a unique responsibility. I am hardly thought of as a Eurocentric intellectual; these past 40 years, I have more often been accused of the opposite. But I do believe, without the slightest sense of European nationalism or much confidence in the European Union as we currently know it, that we must fight for what the word Europe means today. This includes our Enlightenment heritage, and also an awareness and regretful acceptance of the totalitarian, genocidal and colonialist crimes of the past. Europe’s heritage is irreplaceable and vital for the future of the world. We must fight to hold on to it. We should not allow Europe to be reduced to the status of a common market, or a common currency, or a neo-nationalist conglomerate, or a military power.<sup>108</sup>

The German Critical Theorist Jürgen Habermas, too, recognized the importance of the European contribution to world culture when he wrote:

The main religion in Europe, Christianity, obeyed its missionary imperative and expanded all over the world. The global spread of modern science and technology, of Roman law and the Napoleonic Code, of human rights, democracy and the nation-state started from Europe as well.<sup>109</sup>

Habermas sees the critique of Eurocentrism emerging at the heart of Europe's own efforts to face up to its own history of struggles and disasters. He sees the possibility of encounter taking place as concepts of identity transcend the arbitrary boundaries of the old nation states.<sup>110</sup> The meaning of Europe, therefore, continues to demand philosophical discussion and critique.

For the first half of the century, Europe was at the center of western academic philosophy, especially if we include Britain as part of Europe. As in the later half of the nineteenth century, the most active centers of European philosophy continued to be found in Germany, Austria, France, and Britain. Philosophically significant cities included: Berlin (Dilthey, Simmel), Vienna (Wittgenstein), Marburg (Cassirer), Göttingen (Husserl), Freiburg (Rickert, Heidegger), Frankfurt (Adorno), Prague (Patočka), Paris (Bergson, Sartre, Merleau-Ponty), Cambridge (Russell, Moore, Wittgenstein), Oxford (Ryle, Grice, Austin, Dummett) and London (A. J. Ayer). But, especially since 1945, the axis has been moving persistently westward, specifically to the United States. Later, especially from the 1960s on, Australia too emerged with a distinctive kind of analytic philosophy of a materialist and realist variety (one thinks of Armstrong and Smart, among others).

The philosophical Europe in question for the first half of the century is a very small Europe; it does not contain Greece, Portugal, or Spain (apart from Unamuno at Salamanca and Ortega Y Gasset in Madrid; Santayana, for instance, was educated in the USA and wrote in English). If Wittgenstein went to Norway in 1913, it was because of his desire for darkness and to escape from life at Cambridge. He did not go there for its universities and the same is true of his sojourns in rural Ireland during the late 1940s. Europe continued to attract visiting international philosophers until the outbreak of the Second World War. Thus, in 1932 W. V. O. Quine thought it worthwhile to leave Harvard, where he had studied with C. I. Lewis and Whitehead, to visit Vienna, Prague (where he met Carnap), and Warsaw, to learn more about logic. Gilbert Ryle, who himself lectured in Oxford on Austrian philosophers (Bolzano, Brentano, Meinong, and Husserl), could recommended the young A. J. Ayer to study with Moritz Schlick in Vienna.<sup>111</sup> During the nineteenth century there had been significant developments in logic in Austria and Prague (Bolzano) and later in Poland, in the Lvov-Warsaw schools,<sup>112</sup> but by the mid-twentieth century, especially after 1945, western academic philosophy in general had forgotten Poland (Tarski, for example, was in the US) and indeed the whole Eastern bloc, with the possible exception of a small number of thinkers (such as Leszek Kolakowski who later emigrated to the UK), Georg Lukács in Hungary, Jan Patočka in Prague, and the Praxis group of Marxists in

Belgrade (Mihailo Marković) and Zagreb (Gajo Petrović) in the former Yugoslavia, some now discredited owing to their support for Serbian extremist nationalism during the Kosovo disputes.<sup>113</sup> This is not to say that the discoveries of Tarski, for example, were ignored. Indeed, the work of Tarski on truth is essential to understanding the work of Davidson and contemporary philosophy of logic and of language (see “Philosophical logic,” Chapter 8, “Philosophy of language,” Chapter 9). It is rather that Tarski became completely absorbed in the American context, whereas post-1945 Poland together with its philosophers remained locked in a Soviet cul-de-sac.<sup>114</sup>

Another hermeneutic scruple concerns the manner in which thinkers are either inscribed or inscribe themselves into a specific tradition in terms of the language and culture of a particular group. Often a tradition metamorphized when translated into another country. Thus, for instance, Sartre very quickly harnessed Husserlian phenomenology to the native tradition of Cartesianism in France, clearly spurred on by Husserl’s own efforts to communicate with French philosophy in his Paris Lectures of 1929.<sup>115</sup> Similarly, in his essay on Husserl, Emmanuel Levinas links him with the native intuitionist tradition of Henri Bergson.<sup>116</sup> In like manner, Hegel – whom Husserl regarded as ungrounded speculative system-builder and hence the opposite of a true phenomenologist – was grafted onto the phenomenological tradition by Sartre, Merleau-Ponty, and others, who had all heard the lectures of Alexandre Kojève.<sup>117</sup> Sartre self-consciously developed existentialism but in the 1950s he deliberately reinscribed it as a moment within a larger conception of dialectical materialism, in his *Critique of Dialectical Reason* (1960).

Here again, it is important to bear in mind that each country – and certainly each language – has its own conversation going on and its own conception of tradition. Heidegger’s *Being and Time* was not translated into English until 1962<sup>118</sup> and thus discussion of Heidegger in the Anglophone world really did not begin until the 1960s, whereas it had been continuing in Germany since 1927 and in France since the 1930s. Similarly, A. J. Ayer reminds us that although Wittgenstein’s *Tractatus* had been published in 1922 and that he had been teaching at Cambridge since 1929, Wittgenstein’s ideas had hardly penetrated Oxford (which was at that time deeply resistant to the mathematical logical approach being promoted at Cambridge) until introduced by Gilbert Ryle.<sup>119</sup> The Frankfurt School began in Germany; its members were forced to emigrate during the Nazi years and returned to Frankfurt after the war. Analytic philosophy of language, which emerged from the work of Wittgenstein and others, began to re-enter German philosophy only in the late 1950s, as Karl-Otto Apel relates, and it took him some time to understand it in relation to the existing tradition of hermeneutics practiced in Germany at that time by Heidegger, Gadamer, and others.<sup>120</sup>

In the analytic tradition similar insertions and reinscriptions into traditions occur but they are usually not explicitly trumpeted. David Pears, in his book on Russell,<sup>121</sup> argued that Russell was responding to the challenge of skepticism, and both Pears and A. J. Ayer paint Russell as an empiricist philosopher following in the footsteps of Hume. In fact, however, as Peter Hylton has shown, Russell was primarily influenced by the idealisms of Bradley and McTaggart, and was a practicing metaphysician, frequently introducing

abstract metaphysical entities into his explanations as no empiricist would have done. Russell and Moore, influenced by Green and Bradley, both regarded empiricism as false and as having been effectively refuted by idealism.<sup>122</sup> Thus Russell could write in his *History of Western Philosophy*: “David Hume ... developed to its logical conclusion the empirical philosophy of Locke and Berkeley, and by making it self-consistent made it incredible.”<sup>123</sup>

Mistaken inclusions of a philosopher into a particular tradition occur frequently and often with creative consequences. When Ryle advised Ayer to study with Schlick, it was because he thought the Vienna Circle were pursuing Wittgenstein’s program in philosophy. Wittgenstein himself was soon to distance himself from the Circle and show that his philosophical interests were quite different. In *Being and Time*, Heidegger inscribed phenomenology into the older Greek tradition of philosophy, even claiming that the meaning of phenomenology was better understood by Aristotle than by his mentor Husserl! Derrida extracted the deconstructive moment from Husserlian *Abbau* and Heideggerian *Destruktion* and Nietzschean *Zerstörung* to make it into a kind of permanent principle of interpretative change. It is interesting to see that deconstruction will probably be reabsorbed into the longer tradition of hermeneutics.

### **The World Wars: fragmentation and dislocation**

The single most important historical and sociological factor that had an impact on the meaning and practice of academic philosophy was the Second World War. The First World War was catastrophic in its human and political consequences, breaking up the old order and separating Russell and Wittgenstein, it did not threaten the very existence of philosophy as such. In fact, the First World War was seen by Gadamer and others (e.g. Hannah Arendt) as having loosened the grip of neo-Kantianism and other nineteenth-century traditions, and as providing an opportunity for students hungry for meaning and relevance to explore the new more “concrete” philosophies, such as phenomenology (Husserl), *Lebensphilosophie* (Simmel, Dilthey), existentialism (Kierkegaard and Nietzsche), and mysticism (inspired by the publication of Meister Eckhart’s work as well as by the anti-materialist poetry of Stefan George). The First World War had similar important consequences for the nascent analytic philosophical tradition. It woke Bertrand Russell up from his detached mathematical and metaphysical concerns. Russell was horrified by the war fever gripping Britain in 1914 and argued against it, writing a number of articles on the ethics of war which, though they might not measure up to the politically correct standards of our day in that they defend the war of a more advanced civilization on a lesser, nevertheless demand serious reasons for war and were considered so shocking at the time that journals such as the *New Statesman* refused to publish them.<sup>124</sup> In effect, his opposition to the war and to conscription destroyed his academic career and led to his being jailed in 1918. In 1916 Russell was dismissed from Trinity College for publishing a pamphlet defending a conscientious objector. He was prevented from taking up a job in Harvard because Britain would not issue him a passport. Particularly shocking for Russell was that his friend and protégé Wittgenstein had enlisted in the



Austrian army and was effectively fighting for the other side. Russell wrote to his friend Ottoline Morrell, "It seems strange that of all the people in the war the one I care for much the most should be Wittgenstein, who is an 'enemy'."<sup>125</sup>

The First World War gave Russell a taste for activism (and Wittgenstein too served heroically on the opposing side), but otherwise it was more or less welcomed by other academics. In Germany, Max Scheler, who had lost his academic post because of various personal indiscretions, made a living writing patriotic pamphlets enthusing on the nature of war.<sup>126</sup> The classicist and socialist Paul Natorp also wrote some pamphlets related to the German war effort and later reflected on the meaning of war for the spirit of Germany.<sup>127</sup> Edmund Husserl was broadly supportive of Germany's claims, even though he lost a son and his second son was seriously injured, and he delivered some lectures on the political situation with reference to Fichte.<sup>128</sup> Heidegger was serving on the western front with the meteorological division.

The rise of European fascism (not just in Germany but in Italy and Spain) and the Second World War had a much more decisive impact on the academy. According to Jean-Paul Sartre, for instance, the war divided his life in two.<sup>129</sup> He went from bourgeois idealist to committed existential Marxist over the course of the 1940s and later became an apologist for the Russian Communist regime of Stalin (until the Soviet repression in Hungary in 1956).<sup>130</sup> Heidegger tied his academic career to the rise of the Nazis and, as a result, his teaching career lay in ruins along with the collapse of Germany in 1945, as a result of his being denounced to the occupying administration by another German philosopher and his former friend, Karl Jaspers. Jaspers regarded Heidegger's attempt to curry favor with the National Socialists as naive but its effect was to destroy German philosophy.<sup>131</sup>

The rise of the Nazis in Germany with their specific anti-Jewish policies led to the mass migration of intellectuals, with most members of the Vienna Circle and Frankfurt School being forced to leave Germany. The Vienna Circle members (including Carnap and Feigl) went primarily to the United States;<sup>132</sup> but Neurath went to England, as did Adorno initially. Later, Adorno also went to the United States, where he was joined by Horkheimer and Arendt. Others too, such as Reichenbach and Hempel, had to leave Germany. The war, and more specifically Nazism, cost the lives of philosophers such as Walter Benjamin, who died in 1940 on the border between France and Spain, while fleeing from the Nazis, and Edith Stein, who died in Auschwitz concentration camp in 1942. In France, the philosopher of mathematics Jean Cavallès, a member of the French Resistance, was shot by the Gestapo in 1944. Many French philosophers, including Albert Camus, were members of the French Resistance. Others, such as Sartre and de Beauvoir, had more complicated relations with the Vichy regime (Sartre was not exactly the Resistance hero he later claimed to have been; and de Beauvoir made broadcasts on a radio station blacked by the Resistance), but there is no doubt that the war radically changed all their lives. The young W. V. O. Quine, who had studied in Vienna, was so horrified by the prospect of the rise of the Nazis that he enlisted in the navy and fought in Italy. He later wrote, "I felt that Western culture was on the verge of collapse and all I was doing was philosophy of logic."<sup>133</sup>



After the Second World War, as Adorno too has recognized in a different context, everything had changed. The second half of the century has seen a steady drift towards America and the recognition of a distinct voice emerging in the US, especially in the form of pragmatism. Arthur Danto, however, recognizes that a distinctive American academic philosophy emerged only in the 1960s (see “American philosophy in the twentieth century,” Chapter 5). In reading accounts of the education of typical American philosophers such as Quine and Rorty one is struck by the fact that their orientation was entirely towards Europe. Quine had gone to Harvard to study logic with Whitehead but was disappointed and felt the need to move in a different direction. He spoke good German and traveled to Europe to study logic and became a member of the Vienna Circle. Richard Rorty was taught by Carnap at the University of Chicago; Hilary Putnam wrote his doctoral dissertation under Reichenbach at UCLA; Thomas Kuhn taught with Hempel at Princeton; Henry Allison studied with Gurwitsch at the New School for Social Research. The influence of European philosophy was dominant in American academe through the 1960s.

Given the political turmoil and cataclysms of the century, it seems rather strange that political philosophy did not really develop as a subject until the latter part of the century. Clearly the Russian Revolution appeared to justify the philosophy of Lenin and its interpretation of Marx, so thenceforth Communist countries embraced Marxist-Leninism. The so-called “western Marxism” of Georg Lukács and the Frankfurt School represented a different, less doctrinaire approach to Marxism, as did the work of Gramsci and other Italian Marxists. Hannah Arendt made a significant contribution to political philosophy with her *The Origins of Totalitarianism* (1951) and *The Human Condition* (1958), as did Karl Popper and Isaiah Berlin, both writing in the 1950s,<sup>134</sup> but the theoretical situation was transformed by the work of John Rawls, especially his *Theory of Justice* which circulated in manuscript during the 1960s before it was finally published in 1971 (see “Twentieth-century political philosophy,” Chapter 21). In Europe, a new beginning in political philosophy was made by Maurice Merleau-Ponty and Jean-Paul Sartre with their journal *Temps Modernes* (begun 1945), which published interesting and engaged critiques of colonialism and imperialism. Sartre was active in criticizing the French adventure in Algeria and Merleau-Ponty wrote a stinging attack on the Russian system in his *Humanism and Terror*<sup>135</sup> and fell out with Sartre who at that time sought to maintain solidarity between the French working class and the Russian Communist Party.<sup>136</sup> Frantz Fanon’s *The Wretched of the Earth*,<sup>137</sup> to which Jean-Paul Sartre wrote an important Preface, was an important contribution to the critique of colonialism and for its analysis of the French use of torture against Algerians. In the late 1960s the student and worker protests in France gave Sartre new prominence, whereas in the USA in the same period the work of Herbert Marcuse, with his analysis of a kind of “repressive-tolerance” that characterized advanced industrial society, also was popular among the student left.<sup>138</sup> Subsequently in Europe, political thought has continued to be predominantly leftist, whether it be in the form of the structuralist Marxism of Louis Althusser or his follower Alain Badiou, or the attempt to pursue the emancipation of society as advocated by Jürgen Habermas (see “Critical Theory,” Chapter 18), or in the analysis of forms of hegemony in Ernesto Laclau and Chantal Mouffe.

## Philosophy in the twenty-first century

How should the legacy of twentieth-century philosophy be characterized for the present day? Perhaps it will emerge that, just as Kant and Hegel emerged as the dominant figures in nineteenth-century philosophy, Heidegger and Wittgenstein will continue to be seen as the leading figures of the twentieth. But if that is so then there will need to be much more effort made to connect these two authors. After all, both Kant and Hegel were from the same intellectual stable, as it were, and Hegel's work addresses many issues initially raised by Kant. Wittgenstein and Heidegger, however, cannot easily be put in such close relation or in the same kind of terms. The century has many different philosophical voices and profound differences in style and content in doing philosophy. To paraphrase Mao, a hundred schools of thought contend. To illustrate the different styles and contents at work in contemporary philosophy, let us playfully indulge in a little thought-experiment. Imagine two books written by prominent philosophers. Both have the title "Identity and Discrimination." One is a European philosopher who is interested in the issue of shared identity, in terms of one's belonging to a family, a gender, a class, a culture, and so on. Her worry is how do we preserve and celebrate diversity. She is against discrimination in all forms and indeed regards all forms of monism as hegemonous. The other book is a careful study of the meaning of identity as expressed in Leibniz's law. Can one discriminate between identicals? What does logical identity mean and what are the epistemological criteria involved in any act of discrimination? One philosopher sees identity as follows:

Anything whatsoever has the relation of identity to itself, and to nothing else. Things are identical if they are one thing, not two. We can refute the claim that they are identical if we can find a property of one that is not simultaneously a property of the other. The concept of identity is fundamental to logic. Without it, counting would be impossible, for we could not distinguish in principle between counting one thing twice and counting two different things. When we have acquired the concept, it can still be difficult to make this distinction in practice. Misjudgements of identity are possible because one thing can be presented in many guises. Identity judgments often involve assumptions about the nature of things. The identity of the present mature tree with the past sapling implies persistence through change. The non-identity of the actual child of one couple with the hypothetical child of a different couple is implied by the claim that ancestry is an essential property. Knowledge of what directions are involves knowledge that parallel lines have identical directions. Many controversies over identity concern the nature of the things in question. Others concern challenges to the orthodox conception just sketched of identity itself.<sup>139</sup>

On the other hand, our European philosopher is suspicious of the notion of identity, and is concerned to show that all claims of identity involve the suppression of some alterity and difference. As Peter Fenves has written:

the Cartesian attempt to secure the legitimacy of knowledge finds its principal point of reference in the identity of the self-conscious subject. This subject can serve as the source of legitimation to the extent that it can immediately identify itself and can treat its act of self-identification as knowledge. Postmodern theories of identity and alterity are concerned for the most part with the nature of self-identity and with the relation between the self and whatever presents itself as other than the self ... If modern philosophy rests on the principle of self-consciousness, then one criterion for a postmodern philosophy would be its contesting of this principle.<sup>140</sup>

One philosopher is suspicious of the hegemony of identity and against discrimination, the other considers identity to be of absolutely paramount importance and that discrimination is the act of any mind that wants to understand anything. Not to be able to discriminate between elms and oak trees is a failure of knowledge. Clearly, there is a sense in which these contrasting accounts of identity could be integrated with one another. Indeed, there is an interesting collection of essays, *Identity*, edited by Henry Harris,<sup>141</sup> which consists of six essays addressing different aspects of the concept of identity, including numerical identity (what are the criteria for saying that two phenomena observed at different times are the *same* thing?), personal identity, sexual identity, national identity, and even fictional identity. The authors include Bernard Williams and Derek Parfit and draw on the work of Alasdair MacIntyre among others. The point, I think, is that analytic philosophy has, perhaps unknown to itself, expanded to become more inclusive of different standpoints and radically different metaphysical views and approaches. There is increasing recognition that concepts such as "identity" are fluid and many-sided. Besides Habermas, Ricoeur, and Apel, few Continental philosophers have been quite so expansive and accommodating in attempting to fuse their accounts with versions of problems imported from the analytic tradition. The hope of twenty-first-century philosophy is that there will be a true appreciation of the many-sidedness of philosophical problematics and of the multiplicity of modes of approach to them.

Philosophy will undoubtedly develop in unpredictable ways and it would be impossible to try to set out hard and fast tasks for the philosopher or to attempt to indicate where its future lies. As Merleau-Ponty, one of the philosophers most appreciated by all sides of contemporary philosophy, put it so perceptively in his *Éloge de la philosophie*, "The philosophical absolute does not have any permanent seat." In that same essay, he gives us an interesting portrait of the philosopher: "The philosopher is marked by the distinguishing trait that he possesses *inseparably* the taste for evidence and the feeling for ambiguity."<sup>142</sup> Certainly, Wittgenstein too, despite his logical focus, or perhaps indeed because of it, also had a "feeling for ambiguity." In his correspondence with Russell in early 1914, Wittgenstein at one point states that he hopes that Russell, in his forthcoming lectures in Harvard, will reveal something of his thinking and not just

present “cut and dried results.”<sup>143</sup> Wittgenstein had put his finger on something in the manner of Russell’s way of writing; Russell favored the scientific manner of reporting results and discoveries. Wittgenstein, on the other hand, recognized that the *process* of philosophizing is the important thing, the showing, the revealing that is done in the very acts of questioning and probing. Both aspects of philosophy – the discovery of “results” and the unveiling of the very processes of philosophical thinking – will surely continue into the twenty-first century.

## Notes

- 1 B. Croce, *What is Living and What is Dead in the Philosophy of Hegel*, trans. D. Ainslie (London: Macmillan, 1915).
- 2 For a full list of twentieth-century philosophers, see Stuart Brown, Diane Collinson, and Robert Wilkinson (eds.) *The Biographical Dictionary of Twentieth-Century Philosophers* (London and New York: Routledge, 1996).
- 3 An earlier version of this chapter was presented as a plenary address to the Society for European Philosophy conference, “European Philosophy and the Human Condition,” held at University College Cork on September 14, 2002. See also Dermot Moran, “What is historical in the history of philosophy? Towards an assessment of twentieth-century European philosophy,” in Peter Kemp (ed.) *History in Education, Proceedings from the conference “History in Education” held at the Danish University of Education March 24–5, 2004* (Copenhagen: Danish University of Education Press, 2005), pp. 53–82.
- 4 Bernard Henri-Lévy, *Sartre: The Philosopher of the Twentieth Century*, trans. Andrew Brown (Cambridge: Polity Press, 2003).
- 5 Hannah Arendt, *Eichmann in Jerusalem: A Report on the Banality of Evil*, 2nd rev. edn. (New York: Penguin, 1964).
- 6 See Richard Rorty, *Achieving Our Country: Leftist Thought in Twentieth-Century America* (Cambridge, MA: Harvard University Press, 1998).
- 7 Bernard-Henri Lévy, *War, Evil and End of History* (London: Duckworth, 2004).
- 8 See Alain de Botton, *The Consolation of Philosophy* (London: Hamish Hamilton, 2000).
- 9 Ray Monk, *Ludwig Wittgenstein: The Duty of Genius* (New York: Free Press, 1990).
- 10 Roger Scruton, *On Hunting: A Short Polemic* (London: Yellow Jersey Press, 1998).
- 11 See Peter Singer, *Animal Liberation: A New Ethics for our Treatment of Animals* (New York: Random House, 1975).
- 12 Naess defines ecosophy as follows: “By an ecosophy I mean a philosophy of ecological harmony or equilibrium. A philosophy as a kind of *sofia* or wisdom is openly normative, it contains both norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs in our universe. Wisdom is policy wisdom, prescription, not only scientific description and prediction. The details of an ecosophy will show many variations due to significant differences concerning not only the ‘facts’ of pollution, resources, population, etc. but also value priorities.” Quoted in Alan Drengson and Yuichi Inoue (eds.) *The Deep Ecology Movement: An Introductory Anthology* (Berkeley, CA: North Atlantic Publishers, 1995), p. 8. Arne Naess more or less invented “deep ecology” in a ground-breaking article, “The shallow and the deep, long-range Ecology Movement: a summary,” published in *Inquiry* 16 (1973), pp. 95–100.
- 13 See, for instance (to name but a few), John Passmore, *A Hundred Years of Philosophy* (Harmondsworth: Penguin, 1968); Dagobert D. Runes (ed.) *Twentieth Century Philosophy: Living Schools of Thought* (New York: Greenwood, 1968); Wolfgang Stegmüller, *Main Currents in Contemporary German, British and American Philosophy* (Dordrecht: Reidel, 1969); Gilbert Ryle (ed.) *Contemporary Aspects of Philosophy* (London: Oriel Press, 1976); J. Habermas, *The Philosophical Discourse of Modernity* (Cambridge, MA: MIT Press, 1987); A. Coffa, *The Semantic Tradition from Kant to Carnap* (Cambridge: Cambridge University Press, 1991); Peter Simons, *Philosophy and Logic in Central Europe from Bolzano to Tarski* (Dordrecht: Kluwer, 1992); Paul Gorner, *Twentieth Century German Philosophy* (Oxford: Oxford

- University Press, 2000); Avrum Stroll, *Twentieth-Century Analytic Philosophy* (New York: Columbia University Press, 2000); Tom Baldwin, *Contemporary Philosophy: Philosophy in English since 1945* (Oxford: Oxford University Press, 2001); Christian Delacampagne, *A History of Philosophy in the Twentieth Century* (Baltimore, MD: Johns Hopkins University Press, 2001); Brian Shanley (ed.) *One Hundred Years of Philosophy* (Washington, DC: Catholic University of America Press, 2001); and Scott Soames, *Philosophical Analysis in the Twentieth Century*, vols. 1 and 2 (Princeton, NJ: Princeton University Press, 2003).
- 14 Routledge has devoted three volumes in its History of Philosophy series to the twentieth century. Two volumes deal with analytic philosophy (seen as the dominant tradition, including epistemology, metaphysics, philosophy of language, ethics, philosophy of science); see S. G. Shanker (ed.) *Philosophy of the English-Speaking World in the Twentieth Century 1: Science, Logic and Mathematics*, Routledge History of Philosophy vol. IX (London: Routledge, 1996) and John Canfield (ed.) *Philosophy of the English-Speaking World in the Twentieth Century 2: Meaning, Knowledge and Value*, Routledge History of Philosophy vol. X (London: Routledge, 1996); whereas one volume deals with Continental European philosophy: R. Kearney (ed.) *Continental Philosophy in the Twentieth Century*, Routledge History of Philosophy vol. VIII (London: Routledge, 1994).
  - 15 See Dermot Moran, *Edmund Husserl: Founder of Phenomenology* (Cambridge: Polity Press, 2005), p. 34.
  - 16 See Edith Glaser, "Emancipation or marginalisation: new research on women students in the German-speaking world," *Oxford Review of Education* 23/2: *Writing University History* (June, 1997), pp. 169–84.
  - 17 See, e.g. G. E. M. Anscombe, *Intention* (Oxford: Blackwell, 1957); Cora Diamond and J. Teichman (eds.) *Intention and Intentionality: Essays in Honour of G. E. M. Anscombe* (Brighton: Harvester Press, 1979); and R. Teichmann (ed.) *Logic, Cause and Action: Essays in Honour of Elizabeth Anscombe*, Royal Institute of Philosophy, *Philosophy Supplement* 46 (Cambridge: Cambridge University Press, 2000).
  - 18 See Jean Grimshaw, *Philosophy and Feminist Thinking* (Minneapolis: University of Minnesota Press, 1986) and Miranda Fricker and Jennifer Hornsby, *The Cambridge Companion to Feminism in Philosophy* (New York: Cambridge University Press, 2000). See also Mary Ellen Waithe (ed.) *A History of Women Philosophers*, vol. 4: 1900–Today (Dordrecht and Boston: Kluwer, 1994).
  - 19 Theodor W. Adorno, *Negative Dialectics*, trans. E. B. Ashton (New York: Continuum, 1992), p. 320.
  - 20 Jacques Derrida, *Speech and Phenomena and Other Essays on Husserl's Theory of Signs*, trans. David B. Allison (Evanston, IL: Northwestern University Press, 1973).
  - 21 J. E. McTaggart, "The unreality of time," *Mind* 17/4 (1908), pp. 457–74. For a discussion of time that revives McTaggart, see D. H. Mellor, *Real Time II* (London: Routledge, 1998).
  - 22 See William James, "Does 'consciousness' exist?," *Journal of Philosophy, Psychology, and Scientific Methods* 1 (1904), pp. 477–91.
  - 23 David Chalmers, *The Conscious Mind* (Oxford: Oxford University Press, 1996).
  - 24 See F. Varela, E. Thompson, and E. Rosch, *The Embodied Mind* (Cambridge, MA: MIT Press, 1991).
  - 25 See, for instance, Robert Stern (ed.) *Transcendental Arguments: Problems and Prospects* (Oxford: Oxford University Press, 1999) and Mark Sacks, *Objectivity and Insight* (Oxford: Oxford University Press, 2000).
  - 26 See also Cristina Lafont, *The Linguistic Turn in Hermeneutic Philosophy* (Cambridge, MA: MIT Press, 1999).
  - 27 One should also acknowledge the many new journals that appeared in philosophy of science, especially in the 1930s, e.g. *Erkenntnis* (founded 1930), *Philosophy of Science* (founded 1934), *Synthese* (founded 1936).
  - 28 See Klaus Christian Köhnke, *The Rise of Neo-Kantianism: German Academic Philosophy between Idealism and Positivism*, trans. R. J. Hollingdale (Cambridge: Cambridge University Press, 1991).
  - 29 See C. L. Ten (ed.) *The Routledge History of Philosophy*, vol. VII: *The Nineteenth Century* (London and New York: Routledge, 1994).
  - 30 See William H. Goetzmann (ed.) *The American Hegelians: An Intellectual Episode in the History of Western America* (New York: Alfred A. Knopf, 1973).
  - 31 G. E. Moore, "The refutation of idealism," *Mind* 12 (1903), pp. 433–53.

- 32 See A. Kojève, *Introduction to the Reading of Hegel: Lectures on the Phenomenology of Spirit*, trans. James H. Nichols, Jr. (Ithaca, NY: Cornell University Press, 1969).
- 33 See J. N. Findlay, *Hegel: A Re-Examination* (London: Allen & Unwin, 1958) and Charles Taylor, *Hegel* (Cambridge: Cambridge University Press, 1975).
- 34 On Robert Brandom's appreciation of Hegel see his, "Holism and idealism in Hegel's phenomenology," in *Hegel Studien*, Band 36 (2001), pp. 57–92. Rorty made his remark regarding the Hegelian phase of analytic philosophy in his Introduction to Wilfrid Sellars, *Empiricism and the Philosophy of Mind* (Cambridge, MA: Harvard University Press 1997). Brandom endorsed Rorty's remark in his paper to the colloquium "Relation between Analytic and Continental Philosophy," which took place at the Twentieth World Congress of Philosophy held in Boston in 1998. For a discussion of Brandom's relation to Hegel, see Tom Rockmore, "Brandom, Hegel and inferentialism," *International Journal of Philosophical Studies* 10/ 4 (November 2002), pp. 429–47.
- 35 See Edmund Gettier's pithy three-page paper, "Is justified true belief knowledge?," *Analysis* 23 (1963), pp. 121–23.
- 36 Jowett's translations continue to feature prominently in a standard textbook, *The Collected Dialogues of Plato*, ed. Edith Hamilton and Huntington Cairns, Bollingen Series LXXI (Princeton, NJ: Princeton University Press, 1961).
- 37 See, for instance, W. D. Ross's translation of Aristotle's *Nicomachean Ethics* (Oxford: Clarendon Press, 1908). This translation was revised by J. Urmon and J. Ackrill for Oxford in 1980 and continues to be in use among students.
- 38 G. E. Moore, "The nature of judgment," *Mind* 8 (1899), pp. 176–93.
- 39 See Ray Monk, *Bertrand Russell: The Spirit of Solitude* (London: Jonathan Cape, 1996), p. 117.
- 40 See Bertrand Russell, *The Autobiography of Bertrand Russell, 1872–1914* (Boston, MA: Little, Brown & Co., 1951), pp. 217–18.
- 41 Russell, *Autobiography*, pp. 218–19.
- 42 See M. Horkheimer and T. Adorno, *Dialectic of Enlightenment*, ed. Gunzelin Schmid Noerr, trans. Edmund Jephcott (Stanford: Stanford University Press, 2002).
- 43 See H. Marcuse, *Eros and Civilization: A Philosophical Inquiry into Freud* (Boston, MA: Beacon Press, 1974).
- 44 P. Ricoeur, *Freud and Philosophy: An Essay on Interpretation*, trans. Denis Savage (New Haven, CT and London: Yale University Press, 1972).
- 45 G. Deleuze and Felix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem, and Helen R. Lane (London and New York: Continuum, 2004).
- 46 See R. Wollheim (ed.) *Freud: A Collection of Critical Essays* (Garden City, NY: Anchor Press/Doubleday, 1974) and his *Freud*, 2nd edn. (London: Fontana, 1991) and Juliet Mitchell, *Psychoanalysis and Feminism: A Radical Reassessment of Freudian Psychoanalysis* (Harmondsworth: Penguin, 1974).
- 47 See Karl Popper, "Philosophy of science: a personal report" (1957), reprinted in Karl Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (London: Routledge & Kegan Paul, 1963; 2nd edn. 1965), pp. 33–65. See also Frank Cioffi, *Freud and the Question of Pseudoscience* (Chicago and La Salle, IL: Open Court, 1998).
- 48 See Richard Rorty, *Philosophy and the Mirror of Nature* (Oxford: Blackwell, 1980) and his *Essays on Heidegger and Others: Philosophical Papers II* (Cambridge: Cambridge University Press, 1991).
- 49 See M. Merleau-Ponty, "The philosopher and his shadow," in *Signs*, trans. Richard McCleary (Evanston, IL: Northwestern University Press, 1964).
- 50 Edmund Husserl, *Logische Untersuchungen*, vol. 1: *Prolegomena zur reinen Logik*, text of the 1st and 2nd edns., ed. E. Holenstein, *Husserliana XVIII* (The Hague: Nijhoff, 1975), and *Logische Untersuchungen*, vol. 2: *Untersuchungen zur Phänomenologie und Theorie der Erkenntnis*, in 2 vols., ed. Ursula Panzer, *Husserliana XIX* (Dordrecht: Kluwer, 1984), trans. by J. N. Findlay as *Logical Investigations*, 2 vols., revised with new introduction by Dermot Moran and new preface by Michael Dummett (London and New York: Routledge, 2001).
- 51 See Paul Natorp, "Zur Frage der logischen Methode. Mit Bezug auf Edm. Husserls Prolegomena zur reinen Logik," *Kantstudien* VI (1901), pp. 270–83.
- 52 See Hannah Arendt, "Martin Heidegger at eighty," repr. in M. Murray (ed.) *Martin Heidegger and Modern Philosophy* (New Haven, CT: Yale University Press, 1978).



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- 54 See E. Husserl, "Renewal: its problem and method," in Edmund Husserl, *Husser: Shorter Works*, trans. and ed. Frederick Elliston and Peter McCormick (Notre Dame, IN: University of Notre Dame Press, 1981), pp. 326–31.
- 55 See M. Heidegger, "The self-assertion of the German university," in R. Wolin (ed.) *The Heidegger Controversy: A Critical Reader* (Cambridge, MA: MIT Press, 1993), pp. 29–39 and M. Heidegger, "The Rectorate 1933/4: facts and thoughts," trans. K. Harries, *Review of Metaphysics* 38 (March 1985), pp. 481–502.
- 56 See Michael Dummett, *Origins of Analytic Philosophy* (London: Duckworth, 1993), p. 5.
- 57 See G. Frege, "Diary: written by Professor Dr Gottlob Frege in the time from 10 March to 9 April 1924," *Inquiry* 39 (1996), pp. 303–42.
- 58 See Dermot Moran, "The analytic and Continental divide: teaching philosophy in an age of pluralism," in D. Evans and I. Kuçuradi (eds.) *Teaching Philosophy on the Eve of the Twenty-First Century* (Ankara: International Federation of Philosophical Societies, 1998), pp. 119–54.
- 59 See Dermot Moran, "Analytic philosophy and phenomenology," in *The Reach of Reflection: Issues for Phenomenology's Second Century*, 3 vols., Proceedings of Center for Advanced Research in Phenomenology Symposium, Florida Atlantic University, 2001, ed. Lester Embree, Samuel J. Julian, and Steve Crowell (West Hartford, CT: Electron Press, 2001), vol. 3, pp. 409–33; and Dermot Moran, "A case for pluralism: the problem of intentionality," in *Philosophy, Royal Institute of Philosophy Supplementary Volume*, ed. David Archard (Cambridge: Cambridge University Press, 1996), pp. 19–32.
- 60 See for instance, C. G. Prado (ed.) *A House Divided: Comparing Analytic and Continental Philosophy* (New York: Humanity Books, 2003); and William Egginton and Mike Sandbothe (eds.) *The Pragmatic Turn in Philosophy: Contemporary Engagements between Analytic and Continental Thought* (Albany, NY: State University of New York Press, 2004), to name but two collections. See also David Cooper, "The presidential address: analytical and Continental philosophy," *Proceedings of the Aristotelian Society* 94 (1994), pp. 1–18.
- 61 See Tom Baldwin, "Two approaches to Sartre," *European Journal of Philosophy* 4/ 1 (April 1996), pp. 81–2.
- 62 A. P. Martinich and David Sosa (eds.) *Analytic Philosophy: An Anthology* (Oxford: Blackwell, 2001).
- 63 See, for instance, Barry Smith, "German philosophy: language and style," *Topoi* 10 (1991), pp. 155–61.
- 64 See Maria Baghramian, *Relativism* (London: Routledge, 2004). Hilary Putnam defines relativism as follows: "Reason is whatever the norms of the local culture believe it to be"; see Hilary Putnam, *Realism and Reason: Philosophical Papers*, vol. 3 (Cambridge: Cambridge University Press, 1983), p. 235. See also Richard Rorty, "Relativism — finding and making," in Josef Niznik and John T. Sanders (eds.) *Debating the State of Philosophy: Habermas, Rorty and Kolakowski* (Westport, CT: Praeger, 1996), pp. 31–47. Rorty writes; "We have given up the idea that there are unconditional, transcultural moral obligations, obligations rooted in an unchanging, ahistorical, human nature" ( p. 31).
- 65 See Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd edn. (Chicago: University of Chicago Press, 1970).
- 66 See Willard Van Orman Quine, *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969).
- 67 See Cristina Lafont, *Heidegger, Language and World-Disclosure* (Cambridge: Cambridge University Press, 2000).
- 68 Dummett, *Origins of Analytic Philosophy*, p. 5.
- 69 M. Weitz (ed.) *Twentieth-Century Philosophy: The Analytic Tradition* (London: Collier-Macmillan, 1966).
- 70 See R. Carnap, "The rejection of metaphysics," in Morris Weitz (ed.) *Twentieth-Century Philosophy: The Analytic Tradition* (London: Collier-Macmillan, 1966), p. 207.
- 71 For a collection of classical analytical texts, see Robert Ammerman, *Classics of Analytic Philosophy* (Indianapolis: Hackett, 1990).
- 72 See, e.g. Peter Hylton, *Russell, Idealism and the Emergence of Analytic Philosophy*. (Oxford: Clarendon



- Press, 1990) and Dummett, *Origins of Analytic Philosophy*). See also Anat Biletzki and Anat Matar (eds.) *The Story of Analytic Philosophy: Plot and Heroes* (London and New York: Routledge, 1998).
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  - 74 Bertrand Russell, "On denoting," *Mind* 14 (1905), pp. 479–93, repr. in Bertrand Russell, *Essays in Analysis* (London: Allen & Unwin, 1973), pp. 103–19.
  - 75 See the essays, especially Peter Hylton, "'On denoting' and the idea of a logically perfect language," in Michael Beaney (ed.) *The Analytic Turn: Analysis in Early Analytic Philosophy and Phenomenology* (London and New York: Routledge, 2007).
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  - 77 Bertrand Russell, *A Critical Exposition of the Philosophy of Leibniz* (1900; repr. London: Routledge, 1993).
  - 78 See R. Rorty, *Philosophy and the Mirror of Nature* (Oxford: Blackwell, 1980), p. 359 n. 4.
  - 79 See Stanley Rosen, "Moore on common sense," in *The Elusiveness of the Ordinary: Studies in the Possibility of Philosophy* (New Haven, CT: Yale University Press, 2002), p. 174.
  - 80 Dummett, *Origins of Analytic Philosophy*, p. 4.
  - 81 See D. Dennett, *Content and Consciousness* (London: Routledge & Kegan Paul, 1969; repr. Routledge, 1993), pp. 6–18.
  - 82 See *Philosophical Review* 60 (1951) and Martinich and Sosa, *Analytic Philosophy*, pp. 450–62.
  - 83 Martinich and Sosa, *Analytic Philosophy*, p. 459.
  - 84 *Ibid.*, p. 460.
  - 85 *Ibid.*, p. 461.
  - 86 See D. Davidson, "On the very idea of a conceptual scheme," repr. in *Inquiries into Truth and Interpretation* (Oxford: Oxford University Press, 1984), pp. 184–98.
  - 87 *Ibid.*, p. 189.
  - 88 In 1929, the Vienna Circle published its manifesto entitled *Wissenschaftliche Weltauffassung. Der Wiener Kreis*, written by Rudolf Carnap, Hans Hahn, and Otto Carnap. An abridged English translation, "The scientific conception of the world: the Vienna Circle," can be found in Marie Neurath and Robert S. Cohen (eds.) *Empiricism and Sociology* (Dordrecht and Boston: Reidel, 1973), pp. 299–318.
  - 89 J. Derrida, *Of Grammatology*, trans. G. C. Spivak (Baltimore, MD: Johns Hopkins University Press, 1976), p. 4.
  - 90 For a recent example see Alain Badiou, *Manifesto for Philosophy*, trans., ed., and with an Introduction by Norman Madarasz (Albany, NY: State University of New York Press, 1999).
  - 91 M. Heidegger, "Überwindung der Metaphysik," in *Vorträge und Aufsätze* (Pfullingen: Neske, 1954), trans. as "Overcoming metaphysics," in J. Stambaugh (ed.) *The End of Philosophy* (New York: Harper & Row, 1973), pp. 95–6.
  - 92 See Michel Foucault, *The Order of Things* (New York: Random House, 1973), pp. 386–7. See also Jacques Derrida, "The ends of man," in *Margins of Philosophy*, trans. Alan Bass (Chicago: University of Chicago Press, 1982).
  - 93 See the contributions by Dummett, Davidson, Apel, and others in Kenneth Baynes, James Bohman, and Thomas McCarthy (eds.) *After Philosophy: End or Transformation* (Cambridge, MA: MIT Press, 1986).
  - 94 See Carnap, "Rejection of metaphysics," pp. 206–19.
  - 95 A. J. Ayer, *Language, Truth and Logic* (New York: Dover, 1952), p. 41.
  - 96 A. J. Ayer, *A Part of My Life* (New York and London: Harcourt Brace Jovanovich, 1977), p. 78.
  - 97 L. Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D. F. Pears and B. F. McGuinness (London and New York: Routledge & Kegan Paul, 1961), §6.53.
  - 98 L. Wittgenstein, *Philosophical Investigations*, ed. G. E. M. Anscombe and R. Rhees, trans. G. E. M. Anscombe (Oxford: Blackwell, 1953).
  - 99 Richard Rorty, "Comment on Robert Pippin's 'Naturalism and mindedness: Hegel's compatibilism,'" *European Journal of Philosophy* 7/ 2 (August 1999), p. 215.

- 100 G. W. F. Hegel, *Lectures on the Philosophy of World History: Introduction*, trans. H. B. Nisbet (Cambridge: Cambridge University Press, 1975), p. 27.
- 101 Mill already uses this phrase as a title to one of his own works, see J. S. Mill, *The Spirit of the Age* (1831).
- 102 Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi (Manchester: Manchester University Press, 1984).
- 103 Peter Hylton, *Russell, Idealism and the Emergence of Analytic Philosophy* (Oxford: Clarendon Press, 1990), p. 13.
- 104 Both Dewey and Russell gave lectures in Peking University in China in the period 1919–21, but in general there was little contact between Europe and China over the course of the century. Japanese philosophers studied with Husserl and Heidegger from the 1920s onwards. See Graham Parkes (ed.) *Heidegger and Asian Thought* (Honolulu: University of Hawaii Press, 1987) and Harmut Buchner et al., *Japan und Heidegger: Gedenkschrift der Stadt Messkirch zum 100. Geburtstag Martin Heideggers* (Sigmaringen: Jan Thorbecke, 1989). German Idealism and British empiricism both had an influence in India during the nineteenth century, but Indian philosophy itself remained stagnant during the period in question.
- 105 E. Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970).
- 106 See for instance, William Casement, "Husserl and the philosophy of history," *History and Theory* 27/ 3 (October 1988), pp. 229–40. See also Seyla Benhabib, "Another universalism: on the unity and diversity of human rights," APA presidential address for the Eastern Division of the American Philosophical Association on December 29, 2006.
- 107 See J. Patočka, "Réflexion sur l'Europe," in *Liberté et sacrifice: Écrits politiques*, trans. from the Czech into French by Erika Abrams (Grenoble: Millon, 1990) and *Plato and Europe*, trans. Peter Lom (Stanford: Stanford University Press, 2002).
- 108 See Jacques Derrida, "Une Europe de l'espoir," *Le Monde diplomatique* (November 2004), p. 3. See also his *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International*, trans. Peggy Kamuf (New York: Routledge, 1994); *Politics of Friendship*, trans. George Collins (New York: Verso, 1997); and "On cosmopolitanism," trans. Mark Dooley, in *On Cosmopolitanism and Forgiveness* (New York: Routledge, 2001).
- 109 J. Habermas, "Why Europe needs a constitution," *New Left Review* 11 (September–October 2001).
- 110 See also J. Habermas, "February 15, or, What binds Europeans together: plea for a common foreign policy, beginning in core Europe," in *Old Europe, New Europe, Core Europe: Transatlantic Relations After the Iraq War*, ed. Daniel Levy, Max Pensky, and John Torpey (London: Verso, 2005).
- 111 See Ayer, *Part of My Life*, pp. 80 and 121.
- 112 See Peter Simons, *Philosophy and Logic in Central Europe from Bolzano to Tarski* (Dordrecht: Kluwer, 1992).
- 113 See Laura Secor, "Testaments betrayed: Yugoslavian intellectuals and the road to war," *Lingua Franca* (September 1999).
- 114 In 1939 Tarski set out for a lecture tour of the USA but could not return to Poland because of the outbreak of the Second World War. He subsequently held positions at Harvard University, the City College of New York, and the Institute for Advanced Study at Princeton. In 1942 he was appointed to the mathematics department of the University of California at Berkeley, where he remained until his retirement in 1968.
- 115 E. Husserl, *The Paris Lectures*, trans. P. Koestenaum (The Hague: Nijhoff, 1970).
- 116 See E. Levinas, *The Theory of Intuition in Husserl's Phenomenology*, trans. A. Orianne (Evanston, IL: Northwestern University Press, 1973).
- 117 A. Kojève, *Introduction to the Reading of Hegel*, trans. James H. Nichols Jr. (Ithaca, NY: Cornell U.P., 1980).
- 118 Martin Heidegger, *Being and Time*, trans. John Macquarrie and E. Robinson (New York: Harper & Row, 1962).
- 119 Ayer, *Part of My Life*, p. 115 (see also p. 77 on Pritchard's efforts to resist the spread of Russell's and Moore's ideas to Oxford).
- 120 See Karl-Otto Apel, "The impact of analytic philosophy on my intellectual biography," in K.-O.

- Apel, *From a Transcendental-Semiotic Point of View*, ed. Marianna Papastephanou (Manchester: Manchester University Press, 1998), pp. 9–42.
- 121 David Pears, *Bertrand Russell and the British Tradition in Philosophy* (London: Fontana, 1967).
  - 122 Hylton, *Russell, Idealism and the Emergence of Analytic Philosophy*, p. 22.
  - 123 Bertrand Russell, *A History of Western Philosophy*, 2nd edn. (London: Allen & Unwin, 1961), p. 634.
  - 124 Monk, *Bertrand Russell*, pp. 383ff.
  - 125 *Ibid.*, p. 374.
  - 126 Max Scheler, *Der Genius des Krieges und der deutschen Krieg* (Leipzig: Verlag der Weissen Bücher, 1915) and *Krieg und Aufbau* (1916). Scheler, at least at the outbreak of the First World War, welcomed the war as an activity whereby the individual subordinates himself to the state and thus creates a higher-order community. His “Genius of war” book is enthusiastic for the struggle and is dedicated to his “friends in the field.” Later he moved more to embrace Christian socialism and toned down his enthusiasm for war. For an interesting discussion, see Sebastian Luft, “Germany’s metaphysical war: reflections on war by two representatives of German philosophy: Max Scheler and Paul Natorp,” Paper presented to the conference “An Improbable War? The Outbreak of World War I Reconsidered,” Emory University, October 16, 2004.
  - 127 See Paul Natorp, *Der Tag des Deutschen. Vier Kriegsaufsätze* (Hagen: O. Rippel, 1915).
  - 128 See E. Husserl, “Fichte’s ideal of humanity (Three lectures),” trans. James G. Hart, *Husserl Studies* 12 (1995), pp. 111–33.
  - 129 See Jean-Paul Sartre, *The War Diaries*, trans. Quintin Hoare (London: Verso, 1984).
  - 130 See Jean-Paul Sartre, *The Communists and Peace with a Reply to George Lefort*, trans. Martha H. Fletcher and J. R. Kleinschmidt (New York: Braziller, 1968).
  - 131 See Karl Jaspers, “Letter to the Freiburg University Denazification Committee,” trans. R. Wolin, in Richard Wolin (ed.) *The Heidegger Controversy: A Critical Reader* (Cambridge, MA: MIT Press, 1993), pp. 147–51.
  - 132 For an interesting discussion of the social and political circumstances surrounding the development of philosophy of science in the USA after the war, see George A. Reisch, *How the Cold War Transformed Philosophy of Science: To the Icy Slopes of Logic* (Cambridge: Cambridge University Press, 2005).
  - 133 In conversation with Giovanna Borradori; see her *The American Philosopher: Conversations with Quine, Davidson, Putnam, Nozick, Danto, Rorty, Cavell, MacIntyre and Kuhn*, trans. Rosanna Crocitto (Chicago: University of Chicago Press, 1994), p. 33.
  - 134 Isaiah Berlin originally delivered his famous paper “Two concepts of liberty” as his inaugural lecture as Chichele Professor of Social and Political Theory at Oxford in 1958.
  - 135 M. Merleau-Ponty, *Humanism and Terror: An Essay on the Communist Problem*, trans. John O’Neill (Boston: Beacon Press, 1969).
  - 136 M. Merleau-Ponty, *Adventures of the Dialectic*, trans. J. Bien (Evanston, IL: Northwestern University Press, 1973).
  - 137 F. Fanon, *The Wretched of the Earth*, trans. Constance Farrington (New York: Grove Weidenfeld, 1963).
  - 138 See especially Herbert Marcuse’s *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (Boston: Beacon Press, 1964).
  - 139 Tim Williamson, “Identity,” in E. Craig (ed.) *Routledge Encyclopedia of Philosophy* (London: Routledge, 1998).
  - 140 Peter Fenves, “Alterity and identity,” in E. Craig (ed.) *Routledge Encyclopedia of Philosophy* (London: Routledge, 1998).
  - 141 Henry Harris (ed.) *Identity: Essays Based on Herbert Spencer Lectures Given in the University of Oxford* (Oxford: Clarendon Press, 1995).
  - 142 M. Merleau-Ponty, *In Praise of Philosophy*, trans. J. Wild and J. M. Edie (Evanston, IL: Northwestern University Press, 1963).
  - 143 Monk, *Bertrand Russell*, p. 340.

Part I

MAJOR THEMES  
AND MOVEMENTS



# 1

# THE BIRTH OF ANALYTIC PHILOSOPHY

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Analytic philosophy was, at its birth, an attempt to escape from an earlier tradition, that of Immanuel Kant (1724–1804), and the first battleground was mathematics. Kant had claimed that mathematics is grounded neither in experience nor in logic but in the spatio-temporal structure which we ourselves impose on experience. First Frege tried to refute Kant's account in the case of arithmetic by showing that it could be derived from logic; then Russell extended the project to the whole of mathematics. Both failed, but in addressing the problems which the project generated they founded what is nowadays known as analytic philosophy or, perhaps more appropriately, as the analytic method in philosophy. What this brief summary masks, however, is that it is far from easy to say what the analytic method in philosophy amounts to. By tracing the outlines of the moment when it was born we shall here try to identify some of its distinctive features.

## **Frege**

### *Begriffsschrift*

In 1879 Gottlob Frege (1848–1925) published a short book called *Begriffsschrift* (*Concept Script*). What this book contains might nowadays be described as a formalization of the predicate calculus, the part of logic dealing with quantification. Frege's aim in trying to formalize logic was to codify the laws not of thought but of truth. He was commendably clear from the start, that is to say, that logic is not a branch of psychology. Logic consists of the laws to which our reasoning ought to adhere if it is to aim at the truth, not of those to which our reasoning does in fact adhere. There are certainly errors in reasoning which most people are inclined to make, but Frege's point is that it is indeed appropriate to describe these as *errors*. He regarded it as possible for there to be a form of reasoning which all of us have always been inclined to accept but which is, in some way not yet detected by any of us, a mistake.

Frege was certainly not the first to formalize part of logic: that was Aristotle. And 200 years before Frege Gottfried Wilhelm Leibniz (1646–1716) had even had the

ambition of developing a formal system that would reduce reasoning to a mechanical process like arithmetic. But there is nothing in Leibniz's surviving writings to show that he carried forward this project very far. More recently, however, nineteenth-century British logicians such as George Boole (1815–64), William Stanley Jevons (1835–82) and John Venn (1834–1923) had made significant progress: Boole had invented a notation for expressing the logical operations of negation, conjunction, and (exclusive) disjunction, and he had discovered that the logical rules which propositions involving these operations obey are strikingly similar to those of elementary arithmetic; Jevons had designed a “logical piano,” a machine which could solve problems in Boolean logic with impressive speed and accuracy.

This work can thus be seen as a working out, for one part of logic, of Leibniz's ambition. Once a proposition has been expressed in Boolean notation, it can be transformed by means of quasi-arithmetical rules into a simpler but logically equivalent form, in a manner that is quite analogous to the algebraic manipulations of elementary arithmetic. Boole's method has turned out to have widespread practical applications: it can be used, for instance, to simplify electrical circuits and computer programs.

Nonetheless, what Boole was doing was to develop a technique within the scope of logic in the sense in which it had been understood since the time of Aristotle. What distinguishes Frege's work from Boole's is that he advanced into quite new territory by inventing a notation for quantifiers and variables. There is no doubt a sense in which the idea of quantifiers and variables was already “in the air” in 1879. It is at any rate striking that Charles Sanders Peirce (1839–1914) invented his own notation for quantifiers and variables independently at almost exactly the same time as Frege (see Peirce 1885). But it was for Peirce only a notational device, not in itself a tool for reasoning, and he did not develop the idea with anything like Frege's philosophical subtlety. One reason for this, no doubt, is that Peirce was working much more in the algebraic tradition of Boole and Jevons. It did eventually turn out that Boole's idea of treating reasoning as a form of algebraic manipulation could be generalized to encompass reasoning that involves quantifiers: the notion that plays the analogous role to that of a Boolean algebra is called a “cylindric algebra.” But when this idea was explored in the 1950s by Alfred Tarski (1902–83), it quickly became apparent why no one had thought of it before: the theory is, at least by comparison to the method involving rules of inference, inelegant and unintuitive.

What is important about Frege's work, in comparison to Boole's, is thus that it enlarged the scope of formal logic decisively. It would be an exaggeration to say that Frege's was the first major advance in logic since Aristotle, but it would not be wholly wrong either. The medievals had been aware that what can be shoe-horned into the form of the Aristotelian syllogism by no means exhausts the forms of reasoning that are to be counted as valid, and they had therefore striven to extend the scope of formal logic accordingly. But they had done so piecemeal: the decisive advance had always eluded them.

The reason Frege's invention of polyadic predicate calculus counts as decisive is one that received precise expression only half a century later, when Alonzo Church (1903–95) and Alan Turing (1912–54) showed in 1936 (independently of one



another) that it is not mechanically decidable which arguments involving polyadic quantification are logically valid. By contrast the corresponding problem for arguments involving only monadic quantification (or, indeed, for the Aristotelian syllogistic) is mechanically decidable. Church's and Turing's discovery marks a major step in logic, since by showing for the first time that there are problems in logic which cannot be solved mechanically it demonstrated a disanalogy between logic and elementary arithmetic, and hence showed that there must be some limits to Leibniz's dream of a mechanical calculus to take over the task of reasoning.

Although Frege never knew of this limitative result, he seems to have had a sense from the outset of the remarkable power of the method he had invented:

Pure thought, irrespective of any content given by the senses or even by an intuition a priori, can, solely from the content that results from its own constitution, bring forth judgments that at first sight appear to be possible only on the basis of some intuition. (Frege 1879: §23)

This remark of Frege's about the power of reasoning that involves polyadic quantification is in marked contrast to what earlier philosophers had said about Aristotelian logic and its mediaeval accretions. When Descartes, for example, said of logic that "its syllogisms and most of its other instructions serve to explain to others what one already knows" (*Discourse on Method*, part 2), it was syllogistic – therefore decidable – logic he had in mind. And Kant, in presenting the central task of the first *Critique* as that of explaining how synthetic a priori knowledge is possible, had taken arithmetic as his first and best example of a domain of synthetic truths. If what he meant by an analytic truth was anything that can be deduced from explicit definitions by syllogistic logic, then what is analytic is in an important sense trivial. If, on the other hand, we enlarge the scope of the analytic to include what can be deduced by means of polyadic logic, what then remains of Kant's claim that arithmetic is synthetic (and hence, according to Kant, dependent in some way on the spatio-temporal structure of the world as we experience it)?

### *Grundlagen*

Frege was not the only person interested in this question. J. W. Richard Dedekind (1831–1916), in his beautiful treatise *What are Numbers and What Should They Be?* (*Was sind und was sollen die Zahlen?*, 1888), also attempts to show, contrary to Kant, that arithmetic is independent of space and time. There are three stages involved in establishing this claim. The first is to characterize the natural numbers in axiomatic terms and show that the familiar arithmetical properties follow logically from these axioms. The second is to show that there exists a structure satisfying these axioms. The third is to abstract from the particular properties of the structure used in the second stage, so as to identify the natural numbers as a new structure satisfying the axioms. Dedekind's execution of the first of these three stages may be counted a complete success: the axioms he identified (which are nowadays called Peano's

axioms) do have as (second order) logical consequences all of the truths of arithmetic. But the second and third stages are more problematic. In order to achieve the second part of the program Dedekind found that he needed what is now called the axiom of infinity, which asserts that there exist infinitely many objects. Dedekind thought he could prove this axiom, but for his proof to be regarded as correct we would at the very least have to widen the scope of logic even further than Frege had done, since what he proves is at best that the realm of thoughts that are available to us as reasoning beings is infinite. And for the third stage of the program Dedekind appealed to a sort of creative abstraction that has seemed obscure to many later writers.

Frege's aim in *Die Grundlagen der Arithmetik*, 1884 (*The Foundations of Arithmetic*) was the same as Dedekind's – to show that arithmetic is independent of space and time – and the shape of his approach was also the same. First he identified an axiomatic base from which the properties of the natural numbers could be deduced, then he tried to show logically that there exist objects satisfying these axioms, and finally he needed a principled reason to ignore whatever properties the objects chosen in the second stage may have that do not follow from the axiomatic characterization of them identified in the first stage.

But although the three stages of the program were the same for Frege as for Dedekind, how he executed them differed significantly. In the first place Frege's axiomatic characterization of the natural numbers treated them as finite cardinal numbers and characterized cardinal numbers by means of the principle that the cardinals of two concepts  $F$  and  $G$  are equal if and only if there exists a one-to-one correlation of the  $F$ s with the  $G$ s (or, as is sometimes said, if  $F$  and  $G$  are “equinumerous”). This equivalence, known in modern literature on the topic (with tenuous historical license) as “Hume's Principle,” can be used to derive the properties of the natural numbers in much the same way as Peano's axioms can. For the second stage of the program, showing that there are objects satisfying Hume's Principle, Frege made use of the notion of the extension of a concept, i.e. a sort of logical object associated with a concept in such a way that two concepts have the same extension just in case they have the same objects falling under them. Frege defined the number of  $F$ s to be the extension of the (second-order) concept under which fall all those concepts equinumerous with the given concept  $F$ .

Having defined numbers in terms of extensions in this way, Frege needed some account of why the extra properties numbers acquire accidentally as a consequence of the definition can be ignored. But what Frege's account was is somewhat hazy. It is plain that he thought some role was played by the “context principle,” the methodological principle that it is only in the context of a sentence that words mean anything. The importance he placed on this principle is shown by the fact that he mentioned it in both the introduction and the conclusion to the *Grundlagen* as well as in the text, but it is less easy to see what this importance amounts to.

It sometimes seems, indeed, as if the importance of the context principle may lie not so much in Frege's use of it but in the significance it has been given subsequently by Frege's most noted commentator, Michael Dummett (1925– ). According to Dummett, Frege's enunciation of the context principle marks a fundamental shift

in philosophy, the so-called “linguistic turn,” of comparable significance to Kant’s Copernican turn a century earlier.

The puzzle, though, is to see what role the context principle is supposed to play in Frege’s account of numbers. If he had sought to treat Hume’s Principle as a contextual definition of numbers, that role would be clear enough: the context principle seems designed precisely to allay any concern one might have that a contextual definition does not say what the term it introduces refers to but only gives us the meaning of whole sentences in which the term occurs. But Frege rejects the idea of treating Hume’s Principle as a contextual definition of numbers because, while it settles the truth conditions of some of the identity statements in which number terms can occur, it does not settle them all. (Most famously, to use Frege’s “crude example,” it does not settle whether Julius Caesar is a natural number.) Instead, as we have seen, Frege treats Hume’s Principle only as a contextual *constraint* – a condition, that is to say, that any definition of natural numbers must satisfy if it is to be regarded as correct. But if we end up giving an explicit definition of numbers and then showing that numbers so defined do indeed satisfy the constraint, it is not at all clear what role is left for the context principle to play.

A further (and, as it was to turn out, much worse) problem for Frege was that the explicit definition of numbers that he settled on defined them in terms of the notion of the extension of a concept. But what is that? The best that he could be said to have achieved by the end of the *Grundlagen* was to reduce the problem he started with, of explaining how numbers are given to us, to the rather similar question of how extensions of concepts are given to us.

The similarity between the problems, as Frege thought of them, is indeed rather more than superficial. For Hume’s Principle, the contextual specification of the identity conditions for numbers, has the form of an abstraction principle, which is to say that it asserts the logical equivalence of, on the one hand, an identity between two terms (in this case number terms) and, on the other, the holding of an equivalence relation (in this case equinumerosity) between the relevant concepts. But note now that the explanation we gave of the notion of the extension of a concept – that concepts have the same extension just in case the same objects fall under them – is an abstraction principle too. If the Julius Caesar problem puts paid to the idea of introducing numbers by means of the first abstraction principle, does it not also put paid to the idea of introducing extensions by means of the second?

This is a question Frege never satisfactorily answered. In the *Grundlagen* he did not even address it, mentioning only (in a footnote) that he would “assume it is known what the extension of a concept is” (§68). Plainly a little more needs to be said, but when he came to say it, in *Grundgesetze der Arithmetik*, 1893–1903 (*The Basic Laws of Arithmetic*), he confined himself to treating the notion of an extension within the formal language of the *Begriffsschrift*. In that language he does indeed introduce extensions by means of the abstraction principle just mentioned (which he calls “Basic Law V”),<sup>1</sup> but he does not have to address the Julius Caesar problem because the formal language he is dealing with does not have terms for referring to Roman emperors.

It is plain that this is only a deferral of the problem, not a solution. Frege was clear, after all, that any satisfactory account of arithmetic would have to explain its

applicability to the world, and he was scathing about the failure of formalism to deal with just this point. So at some point he would have to expand the formal language to encompass terms for Roman emperors, so that they could be counted, and he would have to do so in such a way as to settle the question whether Julius Caesar is a natural number (or, indeed, the extension of a concept).

### Sense and reference

What was appealing to Frege about abstraction principles such as Hume's Principle or Basic Law V lay partly, as we have seen, in the validation which he somehow thought they receive from the context principle. But it also lay in his belief that they are in some weak sense logical. Just what that weak sense is, however, Frege was never able to say precisely. Indeed he granted that Basic Law V was more open to doubt than the other axioms of his theory. Nonetheless, he remained attracted to the thought, first enunciated in the *Grundlagen*, that the left hand side of an abstraction principle, which expresses an identity between the objects the principle seeks to introduce, is somehow a recarving of the content of the relation of equivalence between concepts which occurs on the right hand side.

The difficulty, then, is to say what the notion of content is which can give substance to this metaphor of recarving. When he wrote the *Grundlagen*, Frege had only a very coarse-grained theory of content to offer, according to which any two logically equivalent propositions have the same content. By the time of *Grundgesetze*, however, Frege had elaborated the theory of sense and reference for which he is now famous.

There is nothing deep, of course, in the distinction between a sign and the thing it signifies, nor in the distinction between both of these and the ideas I attach to a sign when I use it. What goes deeper is the claim that if we are to have a satisfying account of language's ability to communicate thoughts from speaker to listener we must appeal to yet a fourth element – what Frege calls sense.

The interest of Frege's notion of sense lies in two features of it. First, senses are abstract. Since the sense of an expression is what it is that is communicated from speaker to hearer, it must be possible for each of us to grasp it and it cannot, therefore, be something private to either of us, as an idea is. So a sense is not a mental entity. But neither, plainly, is it physical. It therefore inhabits what Frege calls a third realm,<sup>2</sup> defined negatively, of elements that are neither physical nor mental. (This alone, of course, has been enough to make many twentieth-century philosophers treat the notion with deep suspicion.)

Second, it is not just names like "Hesperus" and "Phosphorus" that have sense. The thought expressed by a whole sentence is a sense for Frege, and it is somehow composed out of the senses of the subsentential expressions that make up the sentence.<sup>3</sup> The theory is, that is to say, *uniform* in attributing sense to the meaningful elements of language: no linguistic item, for Frege, latches onto the world directly, but the reference of each is mediated by its sense, which is the mode by which the linguistic item presents the object it is supposed to refer to.

Both these aspects of Frege's theory are problematic. Quite apart from any suspicion some might have of abstract entities, it is hard to get a stable grasp of the notion of sense Frege required: a notion, namely, that is finely grained enough to distinguish the sense of "Hesperus" from that of "Phosphorus" (which it must if it is to explain why I can learn something about astronomy when you tell me that Hesperus = Phosphorus); and yet not so fine that it distinguishes the sense I, ignorant of astronomy, attach to the word "Hesperus" from the sense you, who know much more about the planets, do (since if it does, the sense cannot be what is communicated when you tell me). And the compositionality of sense is puzzling too. It is certainly puzzling what sort of compositionality could make it the case that the two sides of an abstraction principle have the same sense. But even if we prescind from that and agree not to regard Frege's notion of sense as an attempt to legitimate this aspect of his project of using an abstraction principle to ground arithmetic, it remains puzzling what sort of composition is supposed to be at work.

## Moore and Russell

### Objective propositions

The second strand in the birth of analytic philosophy began in 1898. Bertrand Russell (1872–1970) later described it as having been born in conversations between him and George Edward Moore (1873–1958). What is clear at any rate is that the first publications that bear witness to it are Moore's articles, "The nature of judgment" and "The refutation of idealism."

The overall shape of the revolution is clear: Moore thought that by conceiving of propositions as objective complex entities he could resist the temptations of idealism. In a dictionary entry, "Truth," Moore wrote:

Once it is definitely recognized that the proposition is to denote not a belief (in the psychological sense), it seems plain that it differs in no respect from the reality to which it is supposed merely to correspond, i.e. the truth that *I exist* differs in no respect from the corresponding reality *my existence*. (Moore 1901–2)

At the center of the project, in other words, was what would now be called an identity theory of truth. But if the overall shape of the project is clear, the details are not. Although "The nature of judgment" is written in a crisp style that is in marked contrast to the narcoleptic pedantry of some of Moore's later work, it is nonetheless difficult to determine exactly what its arguments are. The targets of Moore's criticism are broadly spread: although it is Bradley's post-Hegelian denial that absolute truth is ever attainable which is the principal target, at times Berkeley's view that *esse est percipi* ("to be is to be perceived") or Kant's view that the relations the objects of experience bear to one another are supplied by the mind are also attacked.

Moore's conception of a proposition is embodied in two central doctrines. The first is that the entities of which a proposition is composed (which he calls "concepts")

are themselves the items the proposition is about. He opposes this to F. H. Bradley's view that when I have an idea of something, that thing is itself part of the idea. This opposition is plainly not exhaustive of the possibilities, but once he had disposed (no doubt rightly) of Bradley's view, Moore seems to have seen no need of an argument for his own. Nonetheless, the doctrine is central to the refutation of idealism as Moore conceives of it. Propositions are the objects of judgment, and the concepts that make up the proposition are therefore part of what we judge, but the view is nonetheless realist because this is "no definition of them"; "it is indifferent to their nature," he says, "whether anyone thinks them or not" (Moore 1899: 4). Concepts are, that is to say, objective entities.

The second central doctrine is that there are no internal relations between concepts – no relations between concepts that are part of the nature of the concepts related. What it is for a proposition to be true is just for the concepts it is composed of to be externally related to each other in a certain way. Once again, the main target is Bradley (1846–1924), who had denied that external relations are ever real. If knowledge is conceived of as an internal relation between the knower and the proposition known, the mere act of coming to know a proposition will alter it, since the property it now has of being known is internal to it and therefore makes it different from what it was before I knew it. For Bradley, therefore, no judgment is ever wholly true: judgment is inherently distorting. For Moore, on the other hand, the act of judgment relates a proposition to the judging subject only externally and does not thereby alter what is judged. But it is much less clear why in opposing Bradley's view Moore should have gone to the opposite extreme and said that there are *no* internal relations between concepts at all. And, as in the case of the first doctrine, Moore seems (at this stage at least) to have been oblivious to the need for an argument.

### *The Principles of Mathematics*

The doctrine that there are no internal relations between concepts runs into an obvious difficulty in the case of identity statements. If the identity " $a = a$ " expresses anything about  $a$ , a relation between  $a$  and itself, it seems clear that this must be internal. So if there are no internal relations, we are forced to conclude that it does not express anything at all. This is perhaps not so bad in itself, but we shall need to say something about the identity "Hesperus = Phosphorus," which expresses genuine astronomical information. And a lot more will have to be said about arithmetic, in which apparently informative identity statements (such as " $7 + 5 = 12$ ") play such a central role.

The work in which this was attempted was Russell's *Principles of Mathematics* (1903). To modern readers (of whom there are not as many as one might expect, given its place in the history of the subject) this comes across as a transitional work: it contains extended passages which we can recognize as analytical philosophy in quite the modern sense, but these are juxtaposed to passages written in a style that strikes us as wholly antiquated, introducing for no apparent reason bizarrely elaborate classifications that develop into an architectonic of almost Kantian complexity. In this regard

Russell's book stands in interesting contrast to Frege's *Grundlagen*: there are indeed occasional *longueurs* in this book, arising in the main when Frege targets errors that we are no longer tempted to make, but the arguments Frege uses to dispose of them do not strike us as obsolete.

Russell's main purpose in writing the *Principles* was to make plausible a version of what is now called "logicism": he wished to generalize to the whole of mathematics Frege's more limited claim that arithmetic is part of logic. Central to this project, as Russell now conceived it, was his adoption of Moore's conception of a proposition as containing the parts of the world it is about. But Russell now amended this conception by adding to it the notion of a denoting concept. A denoting concept is what one might call an "aboutness shifter" (Makin 1995); its task is to enable a proposition to be about something else that is not itself part of the proposition. On Moore's view the proposition expressed by the sentence "I met John" contains me, John and the universal *meeting*. What is expressed by "I met a man" similarly contains me, meeting, and a third element expressed by the phrase "a man." But what is this third element? It cannot be any particular man, since it is just the same proposition whichever man it was that I actually met.

The proposition is not about *a man*: this is a concept which does not walk the streets, but lives in the shadowy limbo of the logic-books. What I met was a thing, not a concept, an actual man with a tailor and a bank-account or a public-house and a drunken wife. (Russell 1903: §56)

Yet there must be *some* connection between the man with the bank account and the propositional component in question. In the *Principles* Russell calls the propositional component a "denoting concept" and the relation it has to the man that of "denoting." "A concept *denotes* when, if it occurs in a proposition, the proposition is not *about* the concept but about a term connected in a certain peculiar way with the concept" (ibid.).

Russell seizes on denoting as the central element in his account of mathematics.

The concept *all numbers*, though not itself infinitely complex, yet denotes an infinitely complex object. This is the inmost secret of our power to deal with infinity. An infinitely complex concept, though there may be such, can certainly not be manipulated by the human intelligence; but infinite collections, owing to the notion of denoting, can be manipulated without introducing any concepts of infinite complexity. (ibid.: §72)

A proposition about all numbers therefore does not itself contain all the (infinitely many) numbers but only a (finite) concept which denotes all numbers.



### “On denoting”

In 1901, when Russell already had a complete draft of *The Principles of Mathematics*, he discovered the famous paradox which bears his name. He showed, that is to say, that the denoting concept, the class of all classes which do not belong to themselves, does not denote anything (since if it did, the class it denoted would belong to itself if and only if it did not belong to itself, which is absurd).

The paradox had already been discovered by the mathematician Ernst Zermelo (1871–1953) at Göttingen a couple of years earlier (and other somewhat similar paradoxes were known to Cantor). What is significant about its rediscovery by Russell is the manner in which the problem it raised now affected philosophy. The most immediate effect of the paradox on Russell was that it made him focus his attention on those denoting concepts (such as, most famously, that of the present king of France) which do not denote anything. The point, of course, is not that he had until then been unaware that according to his theory there would have to be such concepts, but only that the paradox showed him the need to gain a better understanding of how they function. He had said that a proposition in which a denoting concept occurs “is not about the concept but about a term connected in a certain peculiar way with the concept.” If the term in question does not exist, the way in which it is connected with the concept will indeed be peculiar.

But the moment of revelation for Russell came when he saw that the relationship is peculiar even when the term *does* exist. For if there is a relationship between the concept and the thing it denotes, there will be a true proposition expressing that relationship, and this true proposition will be about the concept. But a denoting concept, let us recall, is defined as one whose job is to occur in a proposition but to point at something else which the proposition is about. So how can *any* proposition be about the denoting concept itself? What sort of entity should occur in a proposition in order for the proposition to be about, say, the denoting concept expressed by the phrase “the first line of Gray’s *Elegy*”? Not, certainly, the denoting concept itself, since if it is doing its aboutness-shifting job properly, it will ensure that the proposition ends up being not about the concept but about what it denotes, i.e. about the sentence “The curfew tolls the knell of parting day.” Nor, clearly, is it any use to put in the proposition the denoting concept “the meaning of the first line of Gray’s *Elegy*,” since that would make the proposition be about the meaning of the sentence “The curfew tolls the knell of parting day,” which again is not what we want.

Up to this point there is something that is apt to strike the reader as puzzling. The argument is supposed to show that there can be no informative proposition about the concept expressed by the phrase “the first line of Gray’s *Elegy*.” Yet this last sentence seems to express a proposition that is about just this concept. Russell has to say that it is not what he wants. Why? At this point he introduces a further constraint. The relationship between a concept and its denotation (if any) is not, he says, “linguistic through the phrase.” Concepts exist, he evidently thinks, whether or not we choose to devise means to express them in language. So the relationship between the concept and its denotation exists independent of language and hence so does the proposition

expressing it. So any sentence in which a linguistic item, such as the phrase “the first line of Gray’s *Elegy*,” is mentioned (rather than used) cannot be what we are after, since the proposition it expresses will be about language whereas the proposition we are trying to express would, if it existed, be independent of language.

It is a staple of undergraduate essays on Russell’s theory of descriptions to point out that it deals with the case of definite descriptions which do not refer to anything, but this, while true, was only ever part of the point. Russell’s earlier theory of denoting had of course recognized that there are denoting phrases which do not denote anything. There is certainly in such cases a puzzle about the role of the corresponding denoting concept: if a denoting concept is thought of as a sort of pointer, a denoting concept that does not denote anything is a pointer pointing at nothing. But Russell’s objection to the theory applies just as much in the case of denoting concepts that do denote something.

The argument we have just described (which is always known as the Gray’s *Elegy* argument because of the example he uses to make the point) led Russell to reject the theory of denoting he had put forward in the *Principles*. What he replaced it with was an account according to which the true structure of the proposition a sentence expresses is to be revealed by translating it into the predicate calculus with identity. The sentence “I met a man,” for instance, might be translated as  $(\exists x)(Mx \ \& \ Rax)$ , where “ $\exists x$ ” means there exists at least one  $x$ , “ $Mx$ ” means that  $x$  has the property of manhood, “ $Rxy$ ” means that  $x$  met  $y$  and “ $a$ ” denotes me. (In words: there is someone I met who has the property of manhood.) The denoting phrase “a man” has disappeared, to be replaced by the notation of quantifier and variable. And, as undergraduates learn in their elementary logic course, “The present king of France is bald” can be translated as  $(\exists x)(Kx \ \& \ (\forall y)(Ky \supset x = y) \ \& \ Bx)$ , where “ $\forall y$ ” means “for all  $y$ ,” “ $\supset$ ” means “implies,” “ $Bx$ ” means that  $x$  is bald and “ $Kx$ ” means that  $x$  is currently a king of France. (In words: There is currently a bald king of France such that every current king of France is equal to him.) Once again, the denoting phrase has disappeared in the translation, to be replaced with quantified variables.

### Logicism

What was significant about this method of translation was that it showed how the grammatical form of a sentence might differ from the logical form of the proposition the sentence expresses. Thus in the standard example, “The present king of France is bald,” the sentence has a subject, “The present king of France,” which does not correspond to any single component of the proposition it expresses. The theory thus avoids the need to appeal to a shadowy realm of nonexistent objects – often called “Meinongian” although this is unfair to Alexius Meinong (1853–1920; see Oliver 1999) – to explain the meaning of the sentence.

This is a general method of considerable power. Wherever in philosophy we come across linguistic items which appear to refer to entities which are in some way problematic, the possibility now arises that the terms in question may be what Russell soon called “incomplete symbols,” that is to say expressions which have no meaning

on their own but which are such that any sentence in which the expression occurs can be translated into another in which it does not. By this means we eliminate reference to the problematic entities without rendering meaningless the sentences which apparently refer to them.

The first application Russell made of this idea was to the case which had originally prompted him to examine the problem of the present king of France, namely that of classes. In *Principia Mathematica* (1910–13), written jointly with Alfred North Whitehead (1861–1947), he developed a theory in which terms apparently referring to classes are incomplete symbols which disappear on analysis. The solution to the paradox Russell had discovered was to be that any sentence in which the term “the class of all classes which do not belong to themselves” occurs would resist rewriting according to the translation rules and would therefore turn out not to express a proposition at all.

This solution does not just drop out all by itself, however. It is easy enough to formulate rewriting rules for eliminating class terms (so that, for instance, a proposition that appears to be about the class of all men turns out really to be about the property of manhood), but if that is all we do, we simply transfer the focus of attention to the corresponding paradox for properties (in Russell’s terminology, propositional functions): we consider, that is to say, the property which holds of just those properties which do not hold of themselves. In order to avoid such paradoxes as this, Russell found it necessary to stratify propositional functions into types. Russell’s theory is said to be “ramified” because it stratifies propositional functions in two ways, once according to the types of the free variables they contain and then again according to the types of the bound variables.

As we noted earlier, Whitehead and Russell’s aim in *Principia Mathematica* was an extension of Frege’s. They wanted to embed not just arithmetic but the whole of mathematics in logic. If they had succeeded, they would perhaps not quite have solved the epistemological problem of how we come to know mathematical truths, but they would at least have made it subsidiary to the corresponding problem for logic. However, they did not succeed. Their principal difficulty was that the paradox-avoidance measures they had to take do too much. In order to embed traditional mathematics in the theory of classes, we need to be able to count as legitimate many class terms that are *impredicative*, which is to say that the properties which define them somehow involve the classes themselves and are thus ineliminably circular. In order that such class terms should count as legitimate it was necessary to assume the axiom of reducibility, which asserts that every such circular propositional function can be replaced by a logically equivalent non-circular one. But if *Principia Mathematica* was to be taken as showing that mathematics is part of logic, Whitehead and Russell had to maintain not only that the axiom of reducibility is true but that it is a truth of logic. And the reasons they gave for thinking that it is were unconvincing. A further difficulty was that in order to derive higher mathematics they had to assume the axiom of infinity, which asserts that there are infinitely many objects. Since they did not share Dedekind’s conception of thoughts as objects, they could not adopt his “proof” of this axiom. Their view therefore seemed to make the truth of higher mathematics depend on an unverified physical hypothesis.

Because of these difficulties over the axioms of reducibility and infinity, therefore, Whitehead and Russell's attempted reduction of mathematics to logic is generally regarded as a failure. Far more influential in philosophy, however, was the method of logical analysis of which it was an instance. The aim of this method, in application to any sphere of discourse, is to find the true logical form of the propositions expressed in the discourse. In the background, no doubt, was the hope that this would in turn, because of the conception of a proposition as made up of the things it is about, reveal the entities acquaintance with which the discourse requires. It was thus an assumption of the process, which Russell most of the time scarcely thought worthy of argument, that there is in this sense a determinate epistemological base to the discourse. In 1911 he coined the phrase "logical atomism" to describe this assumption.

### Sense-data

What, on this view, is the ultimate subject matter of ordinary discourse about the physical world? To answer this question we need to examine how Russell dealt with non-referring expressions. Russell analyzed "The present king of France does not exist" as  $\sim(\exists x)(Kx \ \& \ (\forall y)(Ky \supset x = y))$ . (In words: it is not the case that there is exactly one present king of France.) And an analysis of the same form is to be used in any case where we say that something does not exist. Thus, for instance, if we say that Homer did not exist, we should be taken to mean that no one person wrote both the *Odyssey* and the *Iliad*. Thus, Russell thought, we avoid the difficulties involved in supposing there to be a person, Homer, with the awkward property of nonexistence. "Homer" is thus for Russell an example of a term that is grammatically a proper name, but not logically so, since the correct logical analysis of "Homer does not exist" reveals "Homer" to be really a definite description in disguise. And in the same sort of way "Sherlock Holmes does not exist" might be analyzed by replacing "Sherlock Holmes" with a definite description such as "the detective who lived at 221b Baker Street."

Russell used the term "logically proper name" for any proper name which functions as such not just grammatically but logically – for any name, that is to say, which logical analysis does not reveal to be really a disguised definite description. But in ordinary language logically proper names are the exception rather than the rule. For it is not just words for spurious classical poets and fictional detectives that turn out to be disguised descriptions. The eliminative doctrine applies in any case where I can say intelligibly, even if falsely, that someone does not exist: since I can wonder whether Plato existed, "Plato" is (at least in my idiolect) a disguised definite description. The same will apply to anything whatever of whose existence I can coherently entertain a doubt: the term referring to it must on this view be a disguised definite description.

It follows that a term "*a*" in my language can be a logically proper name only if the sentence "*a* does not exist" is not merely false but unintelligible: the object *a* must be something of whose existence I am so certain that I cannot intelligibly doubt it. This is a very demanding criterion: even tables, chairs, and pens do not fulfill it since they might be holograms, tricks of the light, or hallucinations. The only things in the physical realm that do fulfill the criterion, according to Russell, are sense-data. Even

if the green table on the other side of the room were an illusion, the patch of green at the center of my visual field when I (as I think) look at it would certainly exist. It follows that if I say something about the table (that it is oblong, for example), the proposition that I express does not contain the table itself but instead contains various sense-data that I have experienced, such as the green patch just mentioned.

Where does this leave the table? At first Russell was inclined to infer its existence as the best explanation for the sense-data. (If I look away or leave the room and come back in, the various sense-data I experience have a regularity which is best explained by positing a table which causes them.) But later Russell was less inclined to ascribe any independent existence to the table and preferred to regard it as *constructed* out of the sense-data. "Whenever possible, substitute constructions out of known entities for inferences to unknown entities" (Russell 1924).

By taking items of experience as building blocks in this way Russell showed evident sympathy with a central strand of empiricism, but he was very far from being a classical empiricist in Locke's mold, since he certainly did not think that sense-data are the only constituents of propositions. He maintained a liberal ontology of universals such as love or meeting, which he thought were constituents of propositions such as "John met Mary and fell in love with her." Universals, he somewhat over-exuberantly claimed, are "unchangeable, rigid, exact, delightful to the mathematician, the logician, the builder of metaphysical systems, and all who love perfection more than life." (Russell 1912: ch. 9)

### Difficulties with the theory

One curious side effect of Russell's theory is that it forced him to abandon the notion that modalities of possibility and necessity may be applied to propositions. The reason is as follows. Recall Russell's argument for the identification of the simple entities as those things whose existence it would be incoherent to doubt. The argument was that if *a* is a simple entity then the sentence "I doubt whether *a* exists" cannot be intelligible, since if it is intelligible, the Russellian analysis will reveal "*a*" to be not a logically proper name but a disguised description, in which case *a* is not simple. We concluded, therefore, that simples are things whose existence is indubitable. But we can evidently run an exactly analogous argument in the case of the sentence "it is possible that *a* does not exist": if this is intelligible, the Russellian analysis will reveal "*a*" to be a disguised description once more.

But if we simply use the second argument to place a further constraint on the simples, the theory collapses, since we now need the simples to be entities whose existence is not only indubitable but necessary, and even sense-data do not fulfill this criterion: I may be sure that there is a patch of green in the center of my visual field, but can I not also represent to myself the possibility that it might not have been (if, for instance, I had painted the wall a different color)?

The only way out for Russell if there are to be any simples in the world at all is to say that despite appearances to the contrary I cannot in fact represent the possibility of there not having been that sense-datum. If talking of propositions as possible is to

be legitimate, it will have to be explained as a way of saying something not about how the world could have been but about how it actually is. If I say that I could have been killed cycling to work this morning, for instance, I am really saying something about how busy the traffic was on the main road or how carelessly I was steering.

Frege, we have seen, made explaining communication one of the central tasks of his theory of meaning; that is why he had to insist that the sense of an expression is not simply an idea in my mind but a distinct, inter-subjectively available entity. For Russell, on the other hand, it was not really part of the task he was engaged in to explain communication; on his view the fact that we communicate at all emerges as a strange kind of miracle. For the sense-data experienced by me are not the same as those experienced by anyone else. Even if you are in the room with me, the angle at which you look at the table, and hence the exact sense-data you obtain from it, will be different. As a consequence the logically proper names in my language do not mean the same as those in yours (see Russell 1918: §II). The only entities the propositions you and I express have in common are universals. Since the propositions of mathematics and logic, Russell thought, have no components that are not universals, there is the prospect that we can genuinely communicate them, but in all other cases some degree of failure seems inevitable.

Russell's theory is thus at risk of a kind of solipsism. At first sight it might also be thought to flirt with idealism. The sense-datum I experience is private in the sense that no one else but me has experienced it. It seems a short step from there to the claim that the sense-datum is an idea in my mind. But if we say that, then the world is constructed out of ideas, and this is idealism.

So at any rate a casual reader of Russell's *The Problems of Philosophy* (1912) might think. But it is not Russell's view (or Moore's). Something is not a sense-datum unless it is experienced, but saying that does not commit us to identifying the sense-datum with the experience. Russell and Moore both conceived of sense-data as objective entities to which we may bear a relation of acquaintance (Russell) or direct apprehension (Moore). Sense-data may, they came to think, exist when they are not being experienced; and among the things of the same sort as sense-data – Russell called them “sensibilia” – there may be some that no one ever has experienced or ever will experience. To say that no sensible is a sense-datum unless someone is sensing it is thus on their view much like saying that no man is a husband unless there is someone he is married to.

### The multiple relation theory of judgment

A proposition, according to Russell and Moore, is a sort of complex made up out of entities of various sorts: sensibilia, ideas, or universals. If I give two sense-data that I am experiencing the names “*a*” and “*b*,” for instance, the sentence “*a* is above *b*” might express a proposition which consists of *a*, *b* and a certain spatial relation (a universal) of aboveness. But what it is for *a* actually to be above *b* is just that there should be a complex consisting of *a*, *b* and this spatial relation. The proposition may be thought of as asserting the existence of a certain fact. So in the case where the proposition is

true, it is identical with the fact whose existence it asserts. But what of the case where the proposition is false? In that case there is no fact, as there is when the proposition is true. It is hard to see how there can be a complex consisting of  $a$ ,  $b$  and aboveness if  $a$  is not in fact above  $b$ , since what it would be for  $a$  to be above  $b$  is just that there should be such a complex.

The solution to this problem, Russell came to think, was to eliminate propositions from the account of what it is to make a judgment. And Russell's logical method apparently gave him the means to achieve this. In "A judges that  $p$ ," the expression apparently referring to a proposition  $p$  was to be treated as an incomplete symbol to be eliminated on analysis, in much the same manner as the present king of France, so that the judgment would turn out to consist not in a binary relation between the person  $A$  who makes the judgment and the proposition that is judged, but in a multiple relation between  $A$  and the various components of the erstwhile proposition. So, for instance, "Othello judges that Desdemona loves Cassio" will turn out on analysis to express a relationship between four entities: Othello, Desdemona, Cassio, and love.

Now one might think that this theory is at risk of a regress: it eliminates the proposition  $p$  from the analysis of "A judges that  $p$ ," to be sure, but is not "A judges that  $p$ " itself another proposition requiring analysis in turn? Presumably, though, Russell was proposing an analysis not of the proposition "A judges that  $p$ ," but only of the judgment itself, i.e. of the fact (when it is fact) that  $A$  judges that  $p$ . Since the difficulty that led him to adopt the theory was only a difficulty with false propositions and not with facts, there is no problematic regress at this point.

There is, however, a different problem. If I say "Othello judges that Desdemona loves Cassio", I do not thereby commit myself to believing about Desdemona what Othello believes, but I do at least express it. Now what is essential to expressing a judgement is the verb. Yet in my presentation of Russell's theory a moment ago, I was compelled by grammar to turn the verb "loves" into the noun "love". The analysis therefore no longer expresses what it is that Othello judges. The judgement relation, as Russell conceived it, has nouns in its argument places rather than verbs, and is therefore powerless to explain why I cannot judge, for instance, that the table penholders the book.

Ludwig Wittgenstein (1889–1951), who was at that time still officially Russell's student at Cambridge, pointed out this difficulty to him in the summer of 1913. "Every right theory of judgment," he said in his *Notes on Logic*, "must make it impossible for me to judge that this table penholders the book. Russell's theory does not satisfy this requirement" (Wittgenstein 1979: 103). Moreover, since the objection depends not on detailed features of Russell's theory but only on its overall shape, it is presumably devastating. At any rate it devastated Russell, who abandoned forthwith a book he was writing (*Theory of Knowledge*) in which the theory played a central role.



## *The Tractatus*

### Propositions

But if Wittgenstein had disposed of Russell's theory, he had not disposed of the need which it was intended to fill. What was needed, he repeatedly urged, was "a correct theory of propositions." The problem of false propositions which Russell tried to solve by means of the multiple relation theory had arisen from Russell's conception of propositions as complexes. He had started, that is to say, from the view that "The book is on the table" and "the book" both refer to complex entities, and had tried to analyze these entities in similar ways. Wittgenstein's starting point was the realization that there is a fundamental error in Russell's way of conceiving the matter. Sentences are not like names, and the reason they are not like names lies precisely in the feature which had led to Russell's puzzlement, namely that they are capable of truth and falsity.

Wittgenstein called this the bipolarity of the proposition. He was especially struck by the symmetry that exists between a proposition and its negation, a symmetry which Russell's conception of propositions as complexes did not account for. Wittgenstein thought of  $p$  and  $\sim p$  as being two sides of the same coin, and hence rid himself of the temptation to think of one of them as essentially more complex than the other. There is no more reason to think that negation is in some way a constituent of  $\sim p$  than that it is a constituent of  $p$ , and hence no reason to think that it is a constituent of either. "My fundamental thought," he said, "is that the 'logical constants' do not represent" (1922: 4.0312).

How, then, is the bipolarity of the proposition achieved? Wittgenstein's answer to this question is famously known as the picture theory: a proposition pictures how the world would have to be for the proposition to be true; the proposition is true if things are as it pictures them to be. Wittgenstein's theory avoids Russell's difficulty over false propositions because the entities which make up the proposition are not the real-world objects but only linguistic proxies for them – names. Wittgenstein's was nonetheless an identity theory, as Moore's had been, and not a correspondence theory. For the names are arranged in the proposition (picture) in the *same* way as their real-world correlates, the objects, are arranged if the proposition is true. The theory thus nicely sidesteps Frege's powerful objection to correspondence theories, that correspondences come in degrees but truth does not. "What is only half true is untrue," as Frege (1918: 60) succinctly puts it.

So far, though, picturing is only a vague metaphor. Plainly much more would have to be said if we wanted it to amount to a semantic theory, and it is far from clear, to me at least, whether it can be said in such a way as to make the theory coherent. Lying behind the picture theory, however, there is what seems to me to be a genuine insight, of which there are glimmerings in Frege, but which Wittgenstein was the first to bring fully to light: it is an essential component of what enables a sentence to express something about the world that the complexity of the proposition the sentence expresses should track the complexity of the possibilities of arrangement of the world which it represents.

Wittgenstein's way of cashing out this insight is to conceive of a proposition not merely as saying how the world is but as contrasting how it says the world is with other ways the world could have been but isn't. The role of a proposition, we might say, is to divide all the possible worlds into two classes: if the actual world is in one class, the proposition is true; if it is in the other, the proposition is false. The bipolarity noted earlier is explained by the fact that the negation of the proposition divides the world into exactly the same two classes: what is reversed is only which class is to count as true and which false. (Wittgenstein calls the division of possible worlds which a proposition effects its *sense*.) A *tautology* is a proposition which is true in all possible worlds; dually, a *contradiction* is one which is true in none. Wittgenstein called these two extreme cases "senseless" because, placing all the possible worlds in one class or the other, they cannot really be said to divide them at all.

Notice, then, that the notion of possibility is built into the expressive nature of propositions from the start. This fact makes vivid how different Wittgenstein's conception was from Russell's. Russell's conception had forced him to abandon the notion that propositions may be possible or necessary at all, whereas for Wittgenstein it is precisely this that makes them expressive. For Russell an entity can be simple only if its existence is indubitable, whereas for Wittgenstein the simple entities (which in the *Tractatus* are just called "objects") are just those that are necessarily existent. The role of propositions, on Wittgenstein's view, is to express possible configurations of the world; the role of objects is to be the hinges around which these possibilities turn. What varies between possible worlds, that is to say, is not what objects there are but only how they are combined with one another to form states of affairs. What makes language expressive is that the substitutional possibilities of the linguistic elements which it allows for match precisely – are identical with – the combinatorial possibilities of the objects these elements represent. That "John" and "Adam" are words of the same grammatical category is the linguistic correlate of the fact that John and Adam themselves are capable of getting into just the same situations.

### Mathematics

We saw earlier that Wittgenstein's conception of the sense of propositions gave him an elegant criterion of logical truth: a proposition is a logical truth (tautology) just in case it is true in all possible worlds. Using this criterion Wittgenstein showed that Russell's axiom of reducibility is not a logical truth. So much the worse, Wittgenstein thought, for mathematics. Rather than try to repair Russell's system so that mathematics would consist of tautologies, he simply ditched it, or most of it: the only part of mathematics he kept was simple arithmetic, equations such as  $7 + 5 = 12$ . Equations, he held, do not express genuine senseful propositions, but nor are they logical truths (i.e. tautologies). Instead, they have the same form as general claims that certain sorts of symbols express tautologies.

We need not go into the details of Wittgenstein's account of mathematics here (see Potter 2000: ch. 6). What is important here is to note that Wittgenstein opposed the idea that mathematics consists of tautologies, and yet went out of his way to emphasize

in the *Tractatus* how *similar* the equations of mathematics are to tautologies: “The logic of the world, which the propositions of logic show in tautologies, mathematics shows in equations” (Wittgenstein 1922: 6.22). If this is the similarity, then, what is the difference? The fundamental difference between tautologies and equations lies in how they can be applied. A tautology, such as  $p \vee \sim p$ , can be seen as a sort of limiting case of a genuine proposition. (For more on this see the following section.) Its component parts, such as  $p$ , have sense, and the ways in which those parts are combined to form the whole are ways in which propositions with sense can be formed. It is just that in this case the sense so formed turns out to be empty. What happens when we try to form a parallel explanation of the equation  $7 + 5 = 12$ ? The intended application is that this equation allows us to infer such facts as that if there are 7 apples and 5 oranges then there are 12 pieces of fruit. The general principle the equation encodes is thus:

(A) If the number of  $F$ s is 7, the number of  $G$ s is 5 and nothing is both an  $F$  and a  $G$ , then the number of things that are either  $F$ s or  $G$ s is 12.

But this is now plainly not parallel to the tautology case. For no one instance of (A) carries the import of the equation  $7 + 5 = 12$ . If we try to treat the equation as meaning the universal generalization of (A), we run into a technical difficulty connected with the theory of types, namely that we can only generalize over one level in the hierarchy at a time, which is not what we want; we ought to be able to count first-level properties by just the same means as we count apples. But even if we prescind from this difficulty and focus only on the case where what we are trying to count are Wittgensteinian objects, we still do not get what we want; it is possible that no first-level property has just five instances, and in that case the equation  $7 + 5 = 13$ , interpreted according to the current proposal, would come out true, as would every other equation with the number 5 on the left hand side (because the antecedent of the conditional would be uninstantiated). This sort of accidental truth is plainly not what we were aiming for, so the only thing left to us is to interpret  $7 + 5 = 12$  as meaning that (A) is not merely always *true* but always *tautological*. This, though, cannot *itself* be a tautology since it is at the wrong semantic level for that: as we are about to see, nothing which expresses that something is a tautology is, according to the *Tractatus*, itself a tautology.

### Saying and showing

Wittgenstein’s logic was truth-functional: the truth-value of a compound proposition is always a function of the truth-values of its component propositions. But propositional attitudes are not truth-functional. There are truths I do not believe and falsehoods I do, so “I believe that  $p$ ” is not a truth-function of  $p$ . Wittgenstein therefore had to reject the view that “A believes that  $p$ ” and “A doubts whether  $p$ ” and their ilk are really propositions.

But if they are not propositions, what are they? Wittgenstein’s gnomic utterance on the matter tells us only that they are of the same form as “ $p$  says that  $p$ ” (1922: 5.542).

His idea was that for  $A$  to believe that  $p$  is for  $A$  to have in mind a symbol of an appropriate sort which says that  $p$ . The key element in the holding of a belief is thus the ascription of sense to a certain symbol. But this ascription is *not* a proposition. More generally, nothing can be a proposition that attempts to express the expressiveness of a symbol. So, for instance, we cannot say that the name " $a$ " refers to  $a$ .

To see why Wittgenstein made this claim, we need to contrast it carefully with another that is superficially similar. Wittgenstein distinguished between a sign, which is an arrangement of words (or, in the degenerate case, a single word), and a symbol, which is what the sign becomes when I read it as saying something. That the sign "Snow is white" says that snow is white is plainly a contingent fact about English: the word "white" might have meant black, for instance. But anyone who is fluent in English will, on seeing the sentence, immediately read it as saying what it says in English: they will, as Wittgenstein would put it, see in the sign a particular symbol. And it is not contingent that that *symbol* says that snow is white: if it said something else, it simply wouldn't be the same symbol.

This shows readily enough, I think, that

The symbol " $p$ " says that  $p$

is not a proposition with sense, i.e. something that is true in some possible worlds and false in others. And in the same way we can understand why

The name " $a$ " refers to  $a$

is not a proposition with sense either.

What is harder to see is why they cannot be tautologies. To see this let us compare them with

Either it is raining or it isn't.

This does not express a sense: it does not, in Wittgenstein's terms, divide the possible worlds into two classes. But this is only because it puts all the worlds into one class: it has the right general shape to be a proposition with sense, but its parts cancel one another out and end up saying nothing. We can see this by noting that we can approximate what it says (i.e. nothing) by means of propositions that do have sense. For instance:

Either it is raining or it is snowing.

Either it is raining or it is snowing or it is overcast.

Either it is raining or it is snowing or it is overcast or it is sunny.

...

If we carry on like this, eventually we list all the ways the weather could be, and the resulting disjunction says nothing about the weather at all, i.e. it is a tautology.

Return now to our earlier example, “The name ‘*a*’ refers to *a*.” It is not hard to convince oneself that there is nothing analogous we can do to approximate this by means of propositions with sense. Hence we are forced to conclude that it is not senseless but *nonsense*: it is not something of the right shape to have a sense which ends up cancelling out and saying nothing – not a limiting case of senseful propositions – as “Either it is raining or it isn’t” was; rather is it something which is not of the right shape to have a sense at all.

The examples of nonsense which we have considered so far are what might broadly be called semantic: they attempt to say what it is that some symbol expresses. But once Wittgenstein had identified the category, there were many other sorts of discourse that he realized should be put in it. Consider, for example, an ethical claim such as “Killing babies is wrong.” It is easy to see that this is not a tautology: not only is it fairly obviously not a matter of logic, but it does not have the sort of triviality that “Either it is raining or it isn’t” has: it cannot be approximated in the same manner by senseful propositions. What is harder in this case, in contrast to the semantic examples considered earlier, is to see why it is not a contingent truth. But if it were contingent, there would be some possible worlds where killing babies is wrong and others where it is not. What if the actual world happened to be one of those in which killing babies is not wrong? One might be tempted to say then that that would be a worse *world* than one in which killing babies is wrong. But if one said that, then it would really be this last claim that was doing the ethical work, not the original claim that killing babies is wrong. Either way, therefore, the claim which carries the ethical content is not a contingent truth. Since there are in Wittgenstein’s system only three categories – senseful, senseless, and nonsensical – we must conclude that sentences making ethical claims are nonsense.

The same goes for almost all the spheres of discourse which philosophy has traditionally found problematic: aesthetics, religion, scientific laws, the relationship between mind and body. In all these cases, and others, Wittgenstein held that the solution to our philosophical difficulties is, properly speaking, their *dissolution*. Our mistake was to treat as senseful propositions linguistic expressions which turn out to be nonsense.

### Important nonsense?

What is most important here is to see what the scope of Wittgenstein’s argument for nonsense is. Notice, in particular, that the argument does not depend on some of the features of Wittgenstein’s system that have subsequently been rejected, such as his atomism or his assumption that elementary propositions are logically independent of one another. Notice, too, that it cannot simply be assimilated to arguments such as the liar paradox, which depend on diagonalization arguments. Indeed the conclusions of these diagonalization arguments are typically weaker than Wittgenstein’s because they demonstrate only the *relative* inexpressibility of the notions in question (in the case of the liar paradox, truth). The liar paradox shows, that is to say, only that the truth predicate for a language cannot consistently belong to the language itself. But

the now-familiar Tarskian resolution of the paradox simply recognizes a hierarchy of languages: the notion of truth for any language in this hierarchy is expressible in the next language up.

There is of course nothing remotely surprising about the fact that for each language there are notions which that language cannot express. (Unsurprisingly, for example, classical Latin has no word for a mobile phone.) All that was ever surprising about the liar paradox was that truth turned out to be such a notion. The inexpressibility which Wittgenstein demonstrates, on the other hand, is of a radically different kind, since what he shows is that what we are trying to say simply does not have the right shape to be said in *any* language, however extended, provided only that the language obeys the fundamental Tractarian constraint that it aims to distinguish between ways the world could be. So in any case of Tractarian inexpressibility moving to a meta-language will not do the trick.

Part of what is powerful about Wittgenstein's inexpressibility argument, then, is its generality. But notice also, on the other hand, how restricted its conclusion is. "Nonsense" in the *Tractatus* is, as we have seen, a technical term defined in contrast to "sense." Even if we accept the Tractarian picture according to which the *primary* purpose of any functioning language is the expression of sense, it does not follow that that is its only purpose; we would need a further argument if we wanted to conclude that any linguistic item which does not succeed in expressing sense is simply gibberish. Not only does the *Tractatus* not supply such an argument; it is plain that Wittgenstein himself did not believe the conclusion. There is ample testimony to the importance he placed on ethics and religion (not only then but throughout his later life).

Even if we ignore ethics and religion, moreover, it would be hard to hold resolutely to the view that in the *Tractatus* all nonsense is gibberish, given that what is there characterized as nonsense includes not only such mundane items as ascriptions of belief but also arithmetical equations such as  $7 + 5 = 12$ .

There is a danger, therefore, that the emphasis recent work has placed on a contrast between so-called "old" and "new" (or irresolute and resolute) readings of the *Tractatus* (see, for example, McCarthy and Stidd 2001) may create a polarized debate between two equally implausible extremes. If the old, irresolute reader is supposed to be someone who thinks that nonsense can be appropriately expressed by moving to a meta-language, then it is hard to find a respected commentator on the book who counts as irresolute. (The nearest, perhaps, is Russell, who briefly canvassed the idea in his introduction to the *Tractatus*, but even he immediately noted that this was not Wittgenstein's own view.) And nonsense, on the other hand, is no doubt nonsense; but a resolute reader who steadfastly maintains that nonsense is simple gibberish misses the subtlety of Wittgenstein's view.

The challenge to all readers of the *Tractatus*, whether they choose to label themselves new or old, is to explore the constraints there plainly are on which nonsense we may utter in which circumstances – constraints which do not apply to gibberish. The *Tractatus* offers us a reason why logic does not apply to nonsense, a reason whose attraction is that it contrives in a recognizable sense not to threaten the universality of logic. That, if it is right, is an important conclusion. It is equally

striking, however, how much nonsensical sentences have in common grammatically with senseful ones. The same observation, of course, could be made about Lewis Carroll's nonsense verse, "Twas brillling, and the slithy toves / Did gyre and gimble in the wabe." Much more would have to be said, however, before we could derive from the *Tractatus* the suggestion that the psychological effects of the sentence " $7 + 5 = 12$ " are importantly analogous to those of nonsense verse, or that the constraints on correct mathematics are anything like those on good poetry.

One does well to remember that when Wittgenstein said that he believed himself to have found the final solution to the problems of philosophy, he meant what he said. In particular, he intended the doctrine of saying and showing to solve (or more properly, once again, to dissolve) the problem of the relationship between the self and the world – the problem, that is to say, to which realism and idealism represent contrasting solutions. His thought was that the things which cannot be said but only shown – symbolic expressiveness, ethics, aesthetics, God – are all different aspects of this relationship. And their absolute unsayability was for him a way of coming to see that what this is is not really a *relationship* at all. The traditional philosophical picture, let us recall, sees a problematic gap between the self and the world, which realism attempts to bridge. Idealism obviates the need for a bridge by removing the world from the picture. What Wittgenstein does, by contrast, is in a certain sense to remove the self. Or, more accurately, he conceives of my self as constituted by the process of representing the world in which I am engaged. And what we are showing when we speak nonsense is always an aspect of this process.

If this is right, then the consequences for philosophy are far-reaching indeed. All the "big" questions of philosophy are, according to the *Tractatus*, not really questions at all and cannot be answered by the application of logical reasoning in anything like the manner that Russell and others were attempting. For logical reasoning applies only to propositions, and the sentences which occur in "big" philosophy do not express propositions. Wittgenstein's closing admonition, "Whereof one cannot speak, thereof one must be silent" (1922: 7), therefore enjoins us not to try to discuss these questions. It certainly does not follow, however, that we should dismiss them as worthless. There may well be other processes – of more or less conscious reflection, perhaps, or of prayer – which may lead us to awareness that killing babies is wrong, that a painting is beautiful, or that God exists.

### *Reactions to the Tractatus*

There is certainly something very mystical about Wittgenstein's view of the unsayable, and it is unsurprising that neither Cambridge atheists such as Russell nor scientific positivists in Vienna such as Carnap were inclined to take much notice of it. What they took much more seriously at first was Wittgenstein's dismissal of the logicist reduction of mathematics to the theory of classes. He rejected it because, as he put it, "The theory of classes is altogether superfluous in mathematics. This is connected with the fact that the generality which we need in mathematics is not the *accidental* one" (1922: 6.031).



According to Wittgenstein, let us recall, mathematical theorems (to the extent that he granted them house room at all) are not themselves tautologies but have the form of claims that various other symbols are tautologies. There seemed to be little prospect of giving an account of any more than elementary arithmetic in accordance with this view.

What was needed if Wittgenstein's view was to be refuted, therefore, was a demonstration that the theorems of the theory of classes were indeed simply more elaborate tautologies. The person who attempted this was Frank P. Ramsey (1903-30), in his paper on "The foundations of mathematics" (1926). What he argued was that the theory of classes could indeed be regarded as part of logic because of a logical notion that he called a "propositional function in extension." On Wittgenstein's understanding, a propositional function is what we obtain if we take a proposition and replace some symbolic element in it with a variable. Thus, for instance, the proposition "Socrates is dead" gives rise to the propositional function "x is dead." If we now replace the variable in this propositional function with another name, "Plato" for example, we obtain the proposition "Plato is dead," which in an immediately recognizable sense says the same thing about Plato as the previous proposition did about Socrates. Ramsey's new notion, by contrast, is simply a function (in the mathematical sense) taking objects to propositions: we might, for instance, define a propositional function in extension  $\phi$  so that

$\phi$  (Socrates) = Queen Anne is dead.

$\phi$  (Plato) = Einstein is a great man.

The difficulty Ramsey's notion was designed to overcome is that if we combine Wittgenstein's understanding, according to which  $\phi a$  must say the same about  $a$  as  $\phi b$  says about  $b$ , with Whitehead and Russell's idea that talk about classes is to be reduced to talk about propositional functions, we obtain the result that the only sort of class we can talk about is, in Wittgenstein's terminology, *accidental*, i.e. a class of things having some property in common. We cannot talk about the *essential* classes which we need in mathematics, e.g. classes defined by enumeration such as  $\{a,b\}$ . Another usage would be to call the first notion *de dicto* and the second *de re*, since they differ in how they vary across possible worlds. In a world in which  $a$  and  $b$  happen to hold all their properties in common, the *de dicto* notion is unable to retrieve the *de re* class  $\{a,b\}$ . With Ramsey's notion, by contrast, we can talk about the class  $\{a,b\}$  by defining a propositional function in extension which expresses tautology if  $x = a$  or  $x = b$  and expresses contradiction otherwise.

If Ramsey's notion of propositional function in extension were indeed, as he claimed, an "intelligible notation," we would therefore be well on the way to resurrecting Russell's logicist program. Unfortunately, however, it is not. If we wish to claim that mathematics consists of tautologies, it is no use treating equations as merely abbreviated embodiments of their intended applications; the only course is to treat them as tautologies in their own right, their tautologousness not being seen as derived from their applications. Ramsey's account is evidently an instance of this general

strategy. But if we do this, we shall eventually have to explain how these tautologies nevertheless do get applied: we shall have to establish a connection between the new ways of expressing senses thus introduced and the old ones. But now our difficulty is that we have broken the link with a crucial aspect of Wittgenstein's account of tautologies described earlier, namely that they can be seen as limiting cases of genuine propositions, i.e. as trivial cases of forms capable of expressing non-trivial senses. Without that link mathematics floats free of the rest of language and the account lapses into a version of formalism.

That is the philosophical reason for Ramsey's failure: for the details consult Potter 2000 (ch. 8). There is also a technical reason, which was discovered by Kurt Gödel (1906–78) just after Ramsey's premature death in 1930. One way of expressing what Gödel's incompleteness theorems demonstrate is that arithmetic (and mathematics more generally) have a complexity that tautologies do not have. This shows that mathematics cannot simply be regarded as consisting of more complicated tautologies: the difference is one of kind, not degree. The incompleteness theorems, in other words, force us to recognize a distinctively mathematical notion of necessity distinct from the logical notion of tautology picked out by Wittgenstein.

The claim that there is only one kind of necessity, namely logical necessity, was in fact the first of the Tractarian doctrines that Wittgenstein himself retracted, but his reason was not mathematical. In the *Tractatus* he had admitted it as necessary that nothing is both red and green simultaneously. Since he then held that the only sort of necessity is logical necessity, he was forced to conclude that red and green are not simples but have some analysis from which the incompatibility emerges as tautological. But he did not trouble to supply the required analysis, or even sketch how it might go.

When he resumed philosophy in the late 1920s, he began to meet members of the Vienna Circle such as Friedrich Schlick (1882–1936), Friedrich Waismann (1896–1959) and (for a time) Rudolf Carnap (1891–1970). Their approach to philosophy, heavily influenced as it was by scientific method, was certainly not to Wittgenstein's taste. Nonetheless, it may well have been their influence that led him to wonder how the analysis of color words is actually supposed to proceed. Moreover, it is not just color incompatibilities that have to be dealt with. If I look at a lamp, a patch in my visual field is filled with light of a certain intensity: the same patch cannot simultaneously be filled with light of another intensity. This incompatibility, too, would according to the *Tractatus* have to be analyzable in some way. When Wittgenstein came to realize that it cannot (Wittgenstein 1929), he abandoned the doctrine that elementary propositions are logically independent. In other words, he came to hold that there are internal relations – necessary relationships – between atomic facts.

This is not perhaps such a major retraction. In the *Tractatus* he simply asserted the doctrine of the logical independence of elementary propositions without argument, and one might even wonder whether he had simply taken it over from Moore. More significant, however, is the problem of identifying the simple entities which logical atomism presupposes. We have seen that Russell took them to be sense-data.

Wittgenstein did not, but made only one remark in the *Tractatus* about what else they might be: "Space, time and colour (colouredness) are forms of objects" (1922: 2.0251). Points in space, moments in time<sup>4</sup> and coloredness (but not, as we have just seen, the various colors such as red and green) are therefore Tractarian objects. It might be thought surprising that he said so little about such an apparently central question, but in a way what is more surprising is that he said even this much. For there is a sustained passage in his wartime notebooks (June 1915) in which he lays out the difficulties there are in supposing that we have *any* stable conception of what is simple in the world.

What he evidently recognized in 1915, but chose in the finished book simply to ignore, was that what we take to be simple is highly sensitive to context, shifting not just from one conversation to another, but even from sentence to sentence. In his later philosophy Wittgenstein tried to capture something of this sensitivity to context by means of the notion of a "language-game": our language is to be thought of not, as in the *Tractatus*, as a single unit, but as an overlapping patchwork of sub-languages (games) in which different (and sometimes conflicting) notions of simplicity may be at work.

It is a truism of modern Wittgenstein scholarship that the *Philosophical Investigations* do not represent the clean break from the *Tractatus* that was once supposed: the similarities between early and late are as significant as the differences. One example of this is the continuing importance in his later work of the idea that the expressiveness of a proposition is inherently contrastive, so that something can make sense only if its negation also makes sense. It is, for example, a repeatedly exploited thought in his later work that in order for us to count something we do as correct we must have an account of what it would be for it to be a mistake.

This continuity in thought between early and late is especially apparent in the notion of the unsayable. The perplexity which the later Wittgenstein encourages in us about what it is to follow a rule cannot be dissolved by means of a further rule, since the new rule would merely inherit the same perplexity. Yet Wittgenstein does not intend our perplexity to be permanent: we do indeed apply rules correctly all the time. When he invokes what he calls "our form of life" as a solution to the problem, he intends it to play much the same role as the metaphysical subject plays in the *Tractatus*. The point of the rule-following considerations is to free us of a conception he takes to be misleading – the conception, that is to say, according to which there can be any further question as to whether our application of the rule is *really* correct if we take it to be so. And this is just the same picture whose abandonment Wittgenstein recommended in the *Tractatus* as a way of dissolving the dispute between realism and idealism.

This has been a recurring theme in twentieth-century philosophy, taken up with considerable sensitivity by Hilary Putnam (1926– ) (see Putnam 1981), for example. His use of the so-called permutation argument has much in common with Wittgenstein's use of the rule-following considerations; he aims not to question whether "cat" really refers to cats but to reject the idea, central to what he calls metaphysical realism, that there is a perspective from which we can coherently ask whether it does or not.

## Analytic philosophy

### What it is not

The survey we have given of themes in the birth of analytic philosophy is certainly selective, as is inevitable in a volume of this kind. Nonetheless, there would, I think, be widespread agreement that what I have described are at any rate *some* of the origins of analytic philosophy. The fact of this agreement is itself quite remarkable: not all intellectual movements have such clearly identifiable births, nor ones so localized. But when one tries to identify philosophical views that characterize analytic philosophy, the picture becomes murkier: it is surprisingly hard to find a coherent cluster of views that would be subscribed to by all those twentieth-century philosophers who have been taken to belong to the analytic tradition.

The idea which gave the tradition its name, that an analysis of sentences could reveal the true structure of the propositions they express and hence the true nature of the world, has re-emerged in various forms, and is not yet quite dead, but it certainly is not universally accepted. Followers of Willard Van Orman Quine (1908–2000), for example, have held that no sentence-by-sentence analysis can hope to explain what we are saying. The correct way to understand the relationship between language and the world was not even a point of agreement between the founders of the tradition, let alone their inheritors. And the assumption, prominent in philosophy since ancient times, that there is anything we might term the *given*, an unanalyzable substance of which the world is composed, seems to be believed by hardly anyone in the analytic tradition nowadays.

One thing that analytic philosophers have certainly had in common has been a belief that natural science, as it has been practiced since the early nineteenth century, has conformed very largely to the norms of rationality, and that its evident success owes much to its employment of these norms. That, however, is scarcely enough to distinguish analytic philosophers from anyone else. Many of them have also been tempted to argue in the other direction – to use the practice of natural science as an aid to identifying these norms, and its success as a justification for them. But it is a further step, on which they have certainly not all agreed, to claim that the norms exemplified in the practice of natural science are the only rational norms we have.

I mentioned earlier Frege's "linguistic turn." Part, at least, of what this involved was his realization that if we are to analyze the structure of thought, we have no choice but to engage in an analysis of language, for the straightforward reason that, except perhaps in the first-personal case, language is our primary means of access to thought. Whether it is also constitutive of the linguistic turn to claim that language is our only means of access is more controversial, however. This stronger claim has been repeatedly urged by Dummett, who has even asserted (1993) that an acceptance of it is a necessary condition for anyone to count as an analytic philosopher.

It is of course unsurprising that a precise delineation of a hitherto vaguely understood boundary should place a couple of cases on unexpected sides of the fence, so Dummett is no doubt right to be unperturbed that Gareth Evans (1946–1980) and Christopher Peacocke (1950–), for example, do not count according to his definition

as analytic philosophers. But what about Russell? In the great phase of his work we have been discussing here (between 1898 and 1914) Russell always conceived of the subject matter of philosophy as consisting of abstract configurations of parts of the world. He changed his mind, as we have seen, about what these configurations are (facts, propositions, judgments); and it was a profound insight for him when his discovery of the theory of descriptions led him to the idea that the surface grammar of a sentence can mislead us significantly about the structure of the part of reality to which it corresponds. But although this insight led him to be somewhat more careful than before about the distinct structure of language, it did not lead him to the linguistic turn in Dummett's sense. It was only after 1918 that Russell abandoned the view that logic is transparent (see Russell 1959: 145) and became interested in the relationship between language and fact.

Even in his later philosophy, however, Russell would still not count on Dummett's view as an analytic philosopher, because taking up the study of meaning led him directly to abandon the form of anti-psychologism which Dummett takes to be another essential characteristic of analytic philosophy. Russell abandoned, that is to say, the view that "the study of *thought* is to be sharply distinguished from the study of the psychological process of *thinking*" (Dummett 1978: p. 458).

In Frege's hands anti-psychologism was a thesis about logic with normative content: logic is the study not of the laws by which we in fact think but of those by which we ought to think; and the normativity of the "ought" here was not, Frege thought, simply to be resolved into an account of the benefits that accrue if we reason according to these rules rather than others.

This normativity is something Carnap explicitly renounced, at least for a time. "In logic," he said in (1934), "there are no morals," because what counts as a logical truth depends on the linguistic framework we adopt and this choice is determined only by pragmatic, not normative, constraints. Carnap did not hold this ruthlessly pragmatic line for very long, but even while he did, he did not thereby rid logic wholly of normativity: it remained the case, he believed, that once we have adopted a framework, what follows from what within the framework is a determinate matter that admits of right and wrong.

Something similar applies to the later Russell. During his most psychologistic phase, he thought that "the non-mental world can theoretically be completely described without the use of ... logical words" (1938: 43). Concepts like disjunction and negation are required, he thought, only because of "such mental phenomena as doubt or hesitation." He did not say, and it does not follow, however, that once we have acquired these concepts their properties are up to us to settle.

Most extreme of all was the later Wittgenstein, whose endeavors to expose what the normativity of logical reasoning amounts to led him to deconstruct it completely. Even in his case, however, the aim was to reject an inappropriate picture of normativity rather than to give us a license, when arguing, to say whatever we like.

Another feature which has been offered as distinctive of analytic philosophy is what one might call the one-level view of language – the view, that is to say, that all cognitive content is factual content (see Skorupski 1997). The discussion of the

*Tractatus* earlier will have made plain how little sympathy I have with this view or, therefore, with the idea that it might be essential for an analytic philosopher to hold it. It was no doubt an influential strand in logical positivism, and many Quineans seem to take naturalism to be somehow an endorsement of something very like it, but Wittgenstein did not share it, early or late, and it is not widely held today outside Quinean circles.

That the view was ever influential is indeed attributable to a failure by its proponents to appreciate the role of the metaphysical subject in Wittgenstein's philosophy. That my language is *mine* makes it normative in a way that a simple listing of its rules does not capture. The point is quite general: if we identify any process as constitutive of our rationality, we must recognize that a bare description of that process will inevitably fall short of representing what is involved, since it will leave out the further fact that the process is ours. The error that consists in failing to realize this is one that has been made not only by positivists. It may be traced too, for example, in a kind of argument for physicalism that has found favor more recently. Even if modern physics were all that our best theory of the world came to, there would be a further fact, not contained in the theory itself, namely that it was indeed our best theory.

One might be tempted, therefore, to conclude that the analytic tradition is no more than that – a tradition; to conclude, that is to say, that what unites its practitioners is only that they agree on the historical origins from which their disparate approaches to philosophy have stemmed. This is no doubt helpful, but it is in the end too coarse-grained, not so much because there have been philosophers outside this historical tradition (such as Bernard Bolzano, 1781–1848) whom we would nevertheless wish to describe as analytic, but rather because there have been many in the twentieth century who took inspiration from the authors I have discussed here but who would generally be considered to lie outside this tradition.

Another method that is tempting is to define analytic philosophy by what it is not. And no doubt this too has its point. Just as Protestantism has, historically and to some extent theologically, been defined by its opposition to Roman Catholicism, analytic philosophy has undoubtedly acquired its identity partly by its oppositions, first to what is unhelpfully described as Continental philosophy (Hegel, Nietzsche, Heidegger, Sartre) and then more recently to postmodernism. But these oppositions, although they tell us something about the nature of analytic philosophy, do not tell us very much, if only because neither Continental philosophy nor postmodernism is much easier to characterize than it is.

### What it is

Nonetheless, even if none of these ideas picks out analytic philosophy precisely, each has some truth in it. There is at the very least a cluster, if not of beliefs, then of working methods which very many of those who regard themselves as analytic philosophers have held in common and which serve, when taken together, to illuminate something distinctive in their approach. We can insist first of all, I think, that the term “analytic philosophy” is not wholly inappropriate: although there is no general

agreement about what is analyzed and why it is being analyzed, the analytic method does nonetheless involve analysis.

The most prominent debate here concerns the holism of Quine, which has substituted the theory for the sentence as the appropriate unit on which surgery is to be performed. According to Quine, that is to say, it is misleading to attempt the analysis sentence-by-sentence. In explaining this idea Quine (1960: 3) famously adopted a metaphor of Neurath's according to which our theory is a ship which we must rebuild while staying afloat. (Quine himself called it a raft, perhaps to emphasize its fragility.)

Another leading idea has been the importance of rational argument in philosophy, not just as a tool but also as something which it is one of our primary tasks reflexively to critique and explain. I alluded earlier to the view, characteristic of a sort of naturalism, that rational norms just are scientific norms. A rather similar view, namely that rational argument just is logical argument, is nowadays even more widespread. I am not wholly convinced that this identification is correct, but what is at any rate clear is that it was only the developments in logic which began with Frege's invention of quantifier-variable notation in 1879 that made it even plausible. It is no accident, in other words, that analytic philosophy was born shortly thereafter.

Analytic philosophy may thus be seen as the inheritor of the eighteenth-century debate between the rationalist and empiricist traditions. For part of the twentieth century, indeed, analytic philosophers hoped that modern logic would close the gap between these two: rationalists, on this view, had appealed to reason as a source of knowledge distinct from sense experience only because they had thought of logic as essentially trivial; the power of modern logic reawakened, for a time at least, the hope that some version of empiricism might give us, if not all we want, then at least all we need by way of knowledge.

Another common element in the analytic method has something to do with the ineluctability, when one argues from within a perspective, of the structural features of that perspective. But it is hard to formulate what this comes to in a way that all analytic philosophers would agree on. Perhaps the best formulation is Wittgenstein's: we must grant what he called the hardness of the logical "must" (1953: §437).

The underlying point here goes well beyond logic. What is fundamental, not just in logic, is that there is a distinction between being true and being taken to be true. What exactly this distinction comes to has certainly not met with agreement among analytic philosophers. Nor is it even agreed whether it makes sense to suppose that our best theory of the world might be wrong: one sort of anti-realism consists precisely in denying this. Nonetheless, what analytic philosophers who present matters in terms of theory choice share is the view that there are criteria for the acceptance or rejection of a theory that are not wholly internal to the theory itself.

It is at the very least disputable, that is to say, whether it makes sense to suppose that we might all be wrong about everything; but it is not disputable that some of us may be wrong about something. Views which make errors impossible have surfaced from time to time, but only as proposals for dealing with specific problematic spheres of discourse (Wittgenstein in his middle period held such a view about arithmetic, for example) and certainly without much acclaim.



The final belief that many analytic philosophers hold in common is the one that Russell and Moore came to in their escape from Hegelianism, namely that the content of a judgment is not changed by the mere act of judging it. Not only is there a difference between being true and being taken to be true, but the latter does not change the former. (It is important, incidentally, to distinguish this from the superficially similar claim that coming to know something to be true does not change what is true. This last claim may well be false, as quantum mechanics tells us.) By means of their insistence on this point analytic philosophers aim to resist a sort of wholly general pessimism, prominent in the Continental tradition, which concludes that we can never accurately represent anything about the world because the very act of representing ensures that we thereby miss our target. This no doubt contributes to the fact that hostility to postmodernism has been especially strong among analytic philosophers.

### Why it is

If we now have a sense of the dominant features that characterize the analytic movement, the further question then presses of why it has arisen. There are two facts to be explained here. On the one hand, the analytic tradition has achieved a dominance in English-speaking philosophy departments that is, in its way, astonishing; in some departments, indeed, authors in other traditions (Sartre, Derrida) are mentioned so rarely that undergraduates presume their works to be a sort of pornography. On the other hand, the dominance is limited in both respects – only to philosophy departments, and largely (although this is now changing) to the English-speaking world.

As with other intellectual movements, some of the reasons for acceptance and rejection lie outside the discipline itself, in a jumble of historical, cultural, and linguistic facts. An important factor contributing to the influence in America of logical positivism, for example, was the flight of (mainly Jewish) philosophers from Nazi Europe in the 1930s. The lack of influence of some Continental writers in Britain may have been partly a consequence of British linguistic incompetence. The approach to historical texts popular among analytic philosophers, of arguing with their authors on equal terms, and ignoring the awkward fact that Kant is not available to answer back, will from some cultural perspectives seem unduly disrespectful. The popularity of ordinary-language philosophy in Oxford after the Second World War was no doubt due partly to the fact that, unlike other approaches to philosophy then current, it could at least be practiced competently by a “Greats”<sup>5</sup> man without the least knowledge of modern science and mathematics.

One rather more internal factor in the acceptance of the analytic approach was undoubtedly its success: analytic philosophy made enormous progress in the fifty years after its birth, especially in the philosophy of mathematics, but also in the philosophies of language, mind, and science. Once again, though, we cannot easily exclude external factors completely. The articles which Russell and Moore published in *Mind* during the 1900s are evidently more interesting and more illuminating than almost all of what surrounds them, but is that because of the power of the philosophical methods they had hit on or simply because they were able and inventive thinkers?

The analytic virtues of conceptual clarification and rational argument are no doubt applicable to problems that are not distinctively philosophical. (That, at any rate, is what we tell prospective philosophy students.) But the benefits the study of analytic philosophy is supposed to confer, of freeing the mind from prejudice and enabling it to see what is important in a problem, have their limits, as anyone who has attended a staff meeting in a philosophy department will attest. Moreover, it is noticeable that the successes of the method are much more prominent in some areas of philosophy than in others: analytic philosophy has told us much more since the early twentieth century about the nature of mathematics and science than it has about art. For that reason it is perhaps no great surprise that literary critics have not on the whole been very interested in it.

The more general point lying in the background is this. Analytic thinking – thinking in accordance with the norms of analytic philosophy – may seem, to someone embedded in it, simply to be the same as clear thinking. The difficulty we have had in characterizing what analytic thinking involves might encourage the suspicion that this is not quite right. What I have tried to emphasize here is how the analytic method was developed at a particular time, in particular places, in response to particular problems. It may well be that some of what postmodernists say about the nature of the reader's response to a literary text is horribly confused, but it does not follow that anything analytic philosophy has to say about the matter, by being less confused, is thereby more illuminating.

### Notes

- 1 Basic Law V is actually somewhat more general, but the extra generality is irrelevant to the point under discussion here.
- 2 The expression “*ein drittes Reich*” did not when Frege used it in (1918) have all the connotations which it later acquired.
- 3 Frege also thought that the notion of reference could, parallel with sense, be given a treatment that is uniform for sentences and the expressions that make them up, so that a sentence has a reference, namely its truth value, in just the way that a name has a reference, namely the object it names. This element of Frege's theory is clearly wrong, as Wittgenstein (1922: 4.063) showed.
- 4 Or perhaps regions of space and intervals of time – Wittgenstein does not say which.
- 5 “Greats” refers to the Oxford University undergraduate classics course, from which until quite recently most Oxford philosophers were drawn.

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## Further reading

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- Dummett, M. (1993) *Origins of Analytical Philosophy*. London: Duckworth. (A delightfully thought-provoking and opinionated perspective on the historical origins of analytic philosophy).
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- Potter, M. (2000) *Reason’s Nearest Kin: Philosophies of Arithmetic from Kant to Carnap*. Oxford: Oxford University Press. (More detail on much of the material discussed in this chapter).

## 2

# THE DEVELOPMENT OF ANALYTIC PHILOSOPHY: WITTGENSTEIN AND AFTER

*Hans-Johann Glock*

My aim is to chart and critically assess the development of analytic philosophy from roughly the 1930s onwards. The most striking feature is the transformation of the self-assured (if distinct) programs of logical atomism and logical positivism into highly diverse strands which come to question and undermine the very idea of analysis and finally of analytic philosophy itself. To begin with, I recount the linguistic turn of the early Wittgenstein and the logical positivists, and then turn to the emergence of two branches of analytic philosophy: logical construction (“ideal language philosophy”) led by Carnap and conceptual analysis (“ordinary language philosophy”) inspired by the later Wittgenstein. Next I describe the collapse of positivism under the impact of Quine and Kuhn, and after that the rehabilitation of metaphysics through Strawson, Quine, and Kripke. The subsequent sections look first at the reversal of the linguistic turn in the philosophy of language and mind in the 1970s and after, and then at the conception of moral and political philosophy within the analytic movement.

In the remainder, I consider some more recent issues that are important to the self-image and to the practice of analytic philosophy. I defend conceptual analysis against the accusation of indulging in a cult of common sense and ordinary use, and I insist, against naturalism, that it is both feasible and necessary to distinguish between factual, conceptual, and moral issues. The next sections favorably contrast the pragmatist approach to language epitomized by Wittgenstein with the mentalist and Platonist alternatives, and then explore the connections between meaning, use, and rules. I end by asking whether at the beginning of the twenty-first century there is still a distinctive analytic movement, by pronouncing on its philosophical legacy and by speculating about its future.

### The linguistic turn

To some commentators, anyone who addresses philosophical problems in a discursive and rational fashion qualifies as an analytic philosopher. On this construal, the vast majority of philosophers have been analytic. But on a more discerning and fruitful construal analytic philosophy is a distinctive historical movement that flourished in the twentieth century (see Glock 2008). This movement had two interconnected roots. One was the interaction between logic and mathematics. The foundational crisis of mathematics in the nineteenth century spawned Frege's and Russell's logicist project of setting mathematics on secure logical foundations (see "The birth of analytic philosophy," Chapter 1). This first led to the technical development of the new function-theoretic logic, next to the application of logical analysis for the purposes of avoiding ontological commitment to *entia non grata* in Russell's theory of descriptions, and finally to the philosophical reflections on the nature of logic in Wittgenstein's *Tractatus*. The other root is Moore's and Russell's revolt against the idealism and monism of the British neo-Hegelians. On the one hand this led to Moore's attempt to break down concepts into their ultimate constituents. On the other it led to reflections on the nature of propositions, concepts, and facts that culminated in Wittgenstein's picture-theory.

Certain ideas in Frege, Russell, and Moore implied that language plays a more important role in philosophy than it had been accorded since John Locke's *Essay Concerning Human Understanding* (1690). Frege's context-principle suggested that the way to understand certain concepts lies in analyzing the sentences in which they occur. Similarly, Russell's theory of descriptions suggested how traditional philosophical problems concerning existence and intentionality might be solved by paraphrasing sentences in the idiom of formal logic. And Moore's program of conceptual analysis breathed new life into the Socratic ambition of defining terms like "good" or "knowledge" that give rise to philosophical problems. Nevertheless, all three early pioneers of analytic philosophy explicitly stated that philosophy is essentially concerned with reality rather than either thought or language. Both logical and conceptual analysis were attempts to parse abstract entities – thoughts, propositions, facts, or concepts – which were treated as non-linguistic in character (see Hacker 1996: chs. 1–2).

It was the *Tractatus* which took the linguistic turn for which analytic philosophy remains famous – or notorious – in many quarters. Whereas his predecessors were largely inspired by Platonist ideas – in Russell's case combined with a hefty dose of empiricism – Wittgenstein pursued a Kantian project (see "Kant in the twentieth century," Chapter 4). Echoing Kant's ambition to draw the bounds between possible knowledge and illegitimate speculation, the *Tractatus* aimed to "draw a limit to thought." At the same time, Wittgenstein gave a linguistic twist to the Kantian tale. Language is not just a secondary manifestation of something non-linguistic. For thoughts are neither mental processes nor abstract entities, but themselves propositions, sentences which have been projected onto reality. Thoughts can be completely expressed in language, and philosophy can establish the limits and preconditions of

thought by establishing the limits and preconditions of the linguistic expression of thought. Indeed, these limits *must* be drawn in language. They cannot be drawn by propositions talking about both sides of the limit. By definition, such propositions would have to be about things that cannot be thought about and thereby transcend the limits of thought. These limits can only be drawn *from the inside*, namely by delineating the “rules of logical grammar” or “logical syntax” (*Tractatus* 3.32–3.325). These rules determine whether a combination of signs has sense, whether it is capable of expressing a thought and hence of representing reality either truly or falsely. What lies beyond these limits is not unknowable things in themselves, as in Kant, but only nonsensical combinations of signs, e.g. “The concert-tone A is red.”

Many philosophers of the past have disparaged the theories of their predecessors as false, unfounded, or pointless. But according to Wittgenstein metaphysical theories suffer from a more basic defect, namely that of being “nonsensical” in the sense of being meaningless or unintelligible. It is not just that they provide wrong answers, but that the questions they address are misguided questions to begin with (what the logical positivists later called “pseudo-questions”). They are based on a misunderstanding or distortion of the rules of logical syntax, and must hence be rejected. Legitimate philosophy is not a *doctrine* but an *activity*, namely a “critique of language” to be pursued through *logical analysis*. Without propounding any propositions of its own, it brings to light the logical form of meaningful propositions which, according to the *Tractatus*, are confined to the propositions of empirical science. This positive task is complemented by the negative task of demonstrating that the statements of metaphysics are nonsensical, since they violate the rules of logical syntax.

With engaging modesty, Wittgenstein felt that the *Tractatus* had solved the fundamental problems of philosophy and abandoned the subject after its publication in 1921. Meanwhile, the book had come to the attention of the logical positivists of the Vienna Circle. The logical positivists aimed to develop a “consistent empiricism.” They agreed with British empiricism and Ernst Mach (1838–1916) that all of human knowledge is based on experience, but tried to defend this position in a more cogent way, with the help of modern logic, a point they stressed by using the label “logical empiricism.” Inspired by Frege, Russell, and Wittgenstein they employed logical rather than psychological analysis to identify the elements of experience, reality, and language (Carnap et al. 1929: 8). Moreover, they invoked the *Tractatus* to account for the propositions of logic and mathematics, without reducing them to inductive generalizations (Mill), lapsing into Platonism (Frege), or admitting synthetic a priori truths (Kant). Logic and mathematics, they conceded, are necessary and a priori; but they do not amount to knowledge about the world. For all a priori truths are analytic, that is, true solely in virtue of the meanings of their constituent words. *Logical* truths are tautologies which are true in virtue of the meaning of the logical constants alone, and *analytical* truths can be reduced to tautologies by substituting synonyms for synonyms. Thus

- (1) All bachelors are unmarried

is transformed into

(1') All unmarried men are unmarried

a tautology of the form " $\forall x ((Fx \ \& \ Gx) \rightarrow Gx)$ ," or in words: "for all  $x$ , if  $x$  is a man and if  $x$  is unmarried, then  $x$  is unmarried." Necessary propositions, far from mirroring the essence of reality or the structure of pure reason, are true by virtue of the conventional rules governing our use of words (e.g. Ayer 1936: 21–4 and ch. 4). Nowadays the logical positivists are best known for verificationism, the view that the meaning of a proposition is its method of verification (the "principle of verification"), and that only those propositions are meaningful which are capable of being verified or falsified (the verificationist "criterion of meaningfulness"). On the basis of this criterion, they condemned metaphysics as meaningless, because it is neither a posteriori – by contrast to empirical science – nor analytic – by contrast to logic and mathematics. Metaphysical pronouncements are vacuous: they neither make statements of fact that can ultimately be verified by sensory experience, nor do they explicate the meaning of words or propositions

Legitimate philosophy boils down to what Rudolf Carnap (1891–1970) called "the logic of science" (1937: 279). Its task is the logico-linguistic analysis of those propositions which alone are strictly speaking meaningful, namely those of science. To complete this linguistic turn, Carnap reformulated philosophical problems and propositions from the traditional "material mode" – concerning the nature or essence of objects – into the formal mode – concerning linguistic expressions, their syntax and semantics.

The logical positivists took over the analytic methods of logical atomism while repudiating the (diverse) metaphysical rationales given for them by Russell and Wittgenstein. From the latter they inherited the linguistic turn, from the former the ambition to vindicate empiricism by means of reductive analysis. They were committed to the "unity of science," the idea that all scientific disciplines, including the social sciences, can be unified in a single system with physics as its foundation. The theoretical terms of science are defined through a more primitive observational vocabulary and this makes it possible to break down all significant propositions into propositions about what is "given" in experience.

These so-called "protocol-sentences" or "observation-sentences" occasioned the first major split within the positivist movement. According to the "phenomenalists," led by Moritz Schlick (1882–1936), these sentences are about subjective sense-experiences; according to the physicalists, led by Otto Neurath (1882–1945) and later joined by Carnap, they are about physical objects rather than mental episodes. The physicalist option does justice to the fact that the objects of science must be intersubjectively accessible. The price to be paid is that even the propositions which constitute the empirical foundations of science are fallible, a view which was also supported by Karl Popper (1902–94), an associate of the Vienna Circle.

Another controversy arose over the status of philosophy *vis-à-vis* science. All logical positivists believed that philosophy should emulate not just the rigor of the formal and empirical sciences but also their cooperative and technological spirit. But whereas Schlick and Carnap held fast to a qualitative distinction between the



empirical investigation of reality and the philosophical analysis of the propositions and methods of science, Neurath adopted a naturalistic stance according to which philosophy itself dissolves into a unified physicalist science.

Carnap had originally been impressed by Wittgenstein's strictures against any attempt to talk about the relation between language and reality, and he had therefore restricted the analysis of language to logical *syntax*, the intra-linguistic rules for the combination of signs. In 1935, however, Alfred Tarski (1902–83) published a seminal paper that defined the central semantic notion of truth in a way that avoids semantic paradoxes like that of the liar. This persuaded Carnap to drop the restriction to syntax, and his subsequent attempts to explicate semantic notions have had a profound influence on analytic philosophy of language.

Verificationism also came under pressure. The principle of verification was attacked by conceptual analysts influenced by Wittgenstein and Austin, who pointed out that linguistic meaning attaches not just to declarative sentences capable of being true or false and hence of being verified or falsified, but also, for example, to interrogative, imperative, and performative sentences. In response, logical positivists restricted the principle to what they called "cognitive" as opposed to emotive (for example) meaning (Carnap 1963: 45; see Stroll 2000: 84–6).

This concession deprives the principle of verification of its central semantic role, unless it can be shown that even non-declarative sentences must have a truth-apt and hence verifiable component (see below). It does not threaten the verificationist critique of metaphysics, since metaphysics purports to provide descriptions of reality with cognitive content. But traditional metaphysicians objected that the criterion of meaningfulness is self-refuting, since it is neither empirical nor analytic, and hence meaningless by its own light (e.g. Ewing 1937). In response, some logical positivists presented it as a heuristic maxim on how to use the term "cognitively meaningful," which is justified by its usefulness (Carnap 1937: 51). Alas, its usefulness lies mainly in serving as a stick with which to beat metaphysics, which leaves open the crucial question of whether the latter deserves such punishment. A more promising response is to present the criterion as a non-trivial analytic proposition, a consequence of the term "meaning" (Ayer 1936: 20–1). The trouble is that plenty of sentences which competent speakers count as perfectly meaningful do not allow of conclusive verification. As logical positivists such as Carl Hempel (1905–97) came to realize (see Hempel 1950), the verificationist critique of metaphysics faces a dilemma. If it insists on conclusive verifiability or falsifiability, it rules out sentences which are part of science ("All quasars are radioactive" cannot be conclusively verified and "There are unicorns" cannot be conclusively falsified). If it insists merely that a statement should allow of some kind of confirmation or disconfirmation, it is too liberal, in that it allows back in metaphysical sentences like "Only the Absolute is perfect."

### Logical construction vs. logical analysis

Meanwhile in Cambridge there emerged a new generation of logical analysts, Ramsey pre-eminent among them. The Cambridge analysts shared neither the anti-

metaphysical fervor of the logical positivists nor their verificationism. They did, however, share with them Wittgenstein's "thesis of extensionality" (simple propositions occur in complex ones only in such a way that the truth-value of the latter depends solely on those of the former) and Russell's empiricist aspiration of analyzing propositions and concepts into constructions referring exclusively to the contents of experience. Alas, their attempts to reduce all meaningful propositions to truth-functional constructions out of elementary propositions referring to sense-data were no more successful than Russell's fledgling attempts and Carnap's heroic effort in *Der logische Aufbau der Welt*, 1928 (*The Logical Structure of the World*).

Analysis worked well enough when it came to showing that – grammatical appearances notwithstanding – we are not committed to the existence of the present king of France, the round square or the average Briton. Such "logical" or "same-level analysis" aims to present the actual logical form of a proposition and thereby its logical implications or inferential role. It contrasts with "new-level" or "metaphysical analysis," a reductionist procedure supposed to eliminate things of one kind in favor of things of an ontologically more basic kind (Stebbing 1932; Wisdom 1934). The flipside of new-level analysis was *logical construction*. This procedure can be pursued in the material mode, as in Russell's elimination of allegedly fictional entities like numbers in favor of classes of classes and propositional functions. Or it can be pursued in the formal mode. Thus Carnap and Quine sought to replace linguistic constructions that refer to problematic entities by constructions that refer only to entities of a less problematic kind. New-level analysis seemed to have succeeded in mathematics, by reducing numbers to sets.<sup>1</sup> However, it failed in other areas. Even the prima facie undemanding analysis of propositions about nation-states into propositions about individuals and their actions proved tricky. When it came to the phenomenalist reduction of propositions about material objects to propositions about sense-data, the difficulties were insuperable. The occurrence of sense-data is neither necessary for the presence of a material object, since we may fail to perceive objects even under favorable conditions, nor sufficient, because of the possibility of illusion and hallucination. Other stumbling blocks included attributions of belief: the truth-value of "Sarah believes that Blair is honest" is not determined simply by that of the sentence expressing the belief, contrary to the thesis of extensionality (Urmson 1956: 60–74, 146–62).

As regards the analysis of *concepts*, an additional hurdle was the so-called "paradox of analysis" (Langford 1942). Suppose that "brother" is analysed as "male sibling". Either the analysandum has the same meaning as the analysans, in which case the analysis is trivial and nothing is learned by it; or the two are not synonymous, in which case the analysis is incorrect.

It is tempting to blame the failure of reductive analysis on the vagaries of ordinary language: the proposed analysis fails to say precisely the same thing as the analysandum simply because the analysandum does not say anything precise to begin with. This was the attitude of a strand within analytic philosophy that is known as "ideal language philosophy" and comprises Frege, Russell, Tarski, the logical positivists, and Quine. It holds that owing to their logical shortcomings (ambiguity, vagueness,

referential failure, category-confusions), natural languages need to be replaced by an ideal language – an interpreted logical calculus – at least for the purposes of science and “scientific philosophy.”

According to Carnap, the attempt to reveal the underlying logical form of sentences in the vernacular is futile; analysis should instead take the form of logical construction, not just in the sense that eliminated phrases are reconstructed out of acceptable ones, but in the sense of devising *entirely new artificial languages*. “The logical analysis of a particular expression consists in the setting-up of a linguistic system and the placing of that expression in this system.” (1936: 143). Carnap’s procedure of “rational reconstruction” or “logical explication” bypasses the paradox of analysis (1928: §100; 1956: 7–9). The objective is not to provide a synonym of the analysandum, but to replace it by an alternative expression or construction, one which serves the cognitive purposes of the original equally well while avoiding drawbacks such as obscurity, philosophical puzzlement, and undesirable ontological commitments. In the same vein, Quine regards it as a “philosophical paradigm” that “whatever good had been accomplished by talking of an ordered pair  $\langle x, y \rangle$  could be accomplished by talking instead of the class  $\{\{x\}, \{x, y\}\}$ ,” without claiming that these expressions carry the same meaning (1960: §53; see also the section “The rehabilitation of metaphysics,” below).

Emboldened by the emergence of Brouwer’s intuitionist logic, which denies the law of the excluded middle recognized by the bivalent logic of Frege and Russell, Carnap espoused a “principle of tolerance” in logic (1937: §17). We are at liberty to construct novel calculi, constrained only by the demand for consistency and considerations like ease of explanation and avoidance of puzzlement. This pragmatist attitude puts him at odds with the *Tractatus*, for which there is a single “logical syntax,” a logico-metaphysical structure which *all* meaningful languages – including natural languages – must have in common, since it is only by sharing this structure with reality that a sign system is capable of representing reality. It also puts him at loggerheads with Frege, Russell, and Quine, who insist that an ideal formal language should uniquely mirror the metaphysical structure of reality.

An alternative to both reductive analysis and logical constructionism emerged from 1929 onwards, when Wittgenstein returned to Cambridge and subjected his own earlier work to a withering critique. The eventual result was his second masterpiece, *Philosophical Investigations*, 1953 (*Philosophische Untersuchungen*).

The color-exclusion problem forced Wittgenstein to realize that nothing could possibly fit the bill of logically independent elementary propositions (see “The birth of analytic philosophy,” Chapter 1). This had the further consequence that there are logical relations between propositions which do not result from the truth-functional combination of such elementary propositions. Ordinary language is not “a calculus according to definite rules” (1953: §81), as the *Tractatus* had assumed. Its rules are more diverse, diffuse, and subject to change than those of artificial calculi. The atomistic idea of unanalyzable names and indecomposable objects is a chimera. The distinction between simple and complex is not absolute but relative to one’s analytic tools and even to one’s philosophical purposes.

The collapse of logical atomism also undermines the picture theory of the proposition. If there are no ultimate constituents of facts – objects – which are simple in an

absolute metaphysical sense, then there are no corresponding constituents of propositions which are simple in an absolute semantic sense. Wittgenstein also jettisoned the idea that a proposition must have a logical form which it shares with what it depicts. The spell of this idea was broken by an exchange with the economist Sraffa, who presented him with a Neapolitan gesture of contempt and asked “What is the logical form of *that*?” The explanation of how propositions represent possible facts cannot be that they are arrangements of logical atoms which share a logical form with an arrangement of metaphysical atoms.

Moreover, the possibility of linguistic representation does not presuppose a one-to-one correlation between words and things. Fundamentally, Frege, Russell, and the early Wittgenstein all shared a referential conception of meaning, according to which the meaning of an expression is an object for which it stands. This conception is doubly wrong. Not all meaningful words are names that refer to objects. The referential conception is modeled solely on proper names, mass nouns, and sortal nouns. It ignores verbs, adjectives, adverbs, connectives, prepositions, indexicals, and exclamations (Wittgenstein 1958: 77; 1953: §§1–27). Moreover, even in the case of referring expressions, their meaning is not the object they stand for. “The word ‘meaning’ is being used illicitly if it is used to signify the thing that ‘corresponds’ to the word.”

“When Mr. N.N. dies one says that the bearer of the name dies, not that the meaning dies” (1953: §40). There are two parts to this objection. First, if the meaning of a word were an object it stands for, referential failure would have to render a proposition like “Mr. N.N. died” senseless. Secondly, identifying the meaning of a word with its referent is what Gilbert Ryle (1900–76) called a category mistake, namely of confusing what a word stands for with its meaning: the referent of “Mr. N.N.” can die, but not its meaning. Wittgenstein also presented an alternative to the referential conception: the linguistic meaning of an expression is its “use in the language.” The meaning of a word is not an entity of any kind – whether physical, mental, or abstract, but its use according to linguistic rules (see below).

Both the picture theory and verificationism restrict meaningful propositions to statements of fact. Wittgenstein now rejects the idea, epitomized in the *Tractatus* notion of the general propositional form, that the sole function of language is to describe reality. In addition to statements of fact there are not just questions and commands but “countless” other “language-games,” linguistic activities such as telling jokes, thanking, cursing, greeting, praying, etc. Furthermore, the logical and semantic rules that constitute a language – Wittgenstein calls them “grammatical rules” – do not have to mirror the structure of reality but are “autonomous.” They are not responsible either to physical reality or to a Platonic realm of “meanings.” Language is not the self-sufficient abstract system which it appears in Frege, Russell and the *Tractatus*. Rather, it is a human practice which in turn is embedded in a social “form of life” (1953: §23).

Wittgenstein still held that philosophical problems are rooted in misunderstandings of language. But he rejected both logical analysis and logical construction as means of resolving these confusions. There are no logically independent elementary propositions or undefinable names for analysis to terminate with. Indeed, not all legitimate

concepts can be sharply defined by reference to necessary and sufficient conditions for their application. Such *analytic definition* is only one form of explanation among others. Many philosophically contested concepts are united by “family-resemblances,” overlapping similarities rather than by a common characteristic mark. In particular, propositions do not share a common essence, the single propositional form detected by the *Tractatus*. Finally, the idea that analysis can make unexpected discoveries about what ordinary expressions *really mean* is misguided. The rules of language cannot be “hidden” beneath the surface and await discovery by logicians and linguists. Rather, competent speakers must be capable of recognizing them, since they are the normative standards which guide their utterances. To fight the “bewitchment of our understanding through the means of our language” we need neither the construction of artificial languages nor the uncovering of logical forms beneath the surface of ordinary language. Instead, we need a description of our public linguistic practices which constitute a motley of language-games (1953: §§65–88, 108, 23).

Wittgenstein’s new ideas, combined with Moore’s defence of common sense against both idealism and skepticism, had a profound impact on a movement which dominated British philosophy between the 1930s and the 1960s. Its opponents called it “ordinary language” or “Oxford philosophy,” since its most eminent proponents – Ryle, Austin, and Peter Strawson (1919–2006) – were based there. They themselves preferred labels such as “conceptual analysis” or “linguistic philosophy.” For they took a linguistic turn by regarding philosophical problems as conceptual and concepts as embodied in language. To possess a concept is to know the meaning of certain expressions; and concepts are neither mental occurrences nor entities beyond space and time, but abstractions from our use of words.

Initially, Ryle upheld the view that ordinary language creates philosophical confusion because its surface conceals its underlying logical form. Later he denied that there is a logical form to be discovered underneath the surface of ordinary language (see Rorty 1967: 305). Strawson (1952) argued at length that the predicate calculus – the weapon of choice for previous logical analysts – does not reveal the true structure of ordinary discourse. The gulf between the truth-functional connectives and their vernacular correlates is wider than commonly accepted. Similarly, by paraphrasing away singular referring expressions, Russell’s theory of descriptions misconstrues their distinctive role, which is to pick out the things we talk about. According to Strawson, the subtlety and variety of natural languages is mangled by the Procrustean bed of formal logic. No matter whether it stands in the service of reductive analysis or of logical construction, formal logic is not a sufficient instrument for revealing all the logical and conceptual features that have a bearing on philosophical problems and philosophical argument.

What survives is conceptual analysis and linguistic paraphrase. Philosophical problems are resolved by explaining expressions and by establishing the status and inferential powers of the statements in which they occur. The structure of “I have a pain” is the same as that of “I have a pin”; yet Wittgenstein maintained that these statements are disanalogous moves in the language-game (1953: §§572–3). Similarly, Ryle advocated that philosophy should chart the “logical geography” of our concepts.

In *The Concept of Mind* he argued that the Cartesian dualism of mind and body results from “category mistakes”: it treats mental concepts which signify behavioral dispositions as if they referred to processes that are just like physical ones, only more ethereal. Ryle accepted that philosophy is a meta-discipline which does not “talk sense with concepts” but tries to “talk sense about concepts” (1949: 9-10). Yet he rejected Wittgenstein’s therapeutic simile according to which “the philosopher treats a question like a disease” (1953: §255).

J. L. Austin (1911–60) exemplified linguistic philosophy, especially to its enemies, since he was a master of observing minutiae of linguistic use: “*what we should say when*, and so why and what we should mean by it.” For example, he carefully contrasted apparently equivalent terms such as “appear,” “look,” and “seem” by looking at the different situations that license their application. But his interest in language was not motivated solely by the desire of rectifying confusions, and he even toyed with the idea that linguistic analysis might turn into a branch of linguistics (1970: 181, 231–2). By a similar token, whereas Wittgenstein and his disciples regarded the quest for systematic theories as a misguided intrusion of scientific methods into philosophy, Austin founded a systematic approach to language, namely speech act theory. At the same time, even Austin was suspicious of the craving for uniformity that logical positivism shared with traditional philosophy. Thus he condemned as a “descriptive fallacy” the dogma that language has just a single function, namely to describe.

### The collapse of logical positivism

The rise of Nazism forced most logical positivists to emigrate, mainly to the USA. By the 1940s their views had achieved the status of orthodoxy, partly aided by the existence of an indigenous form of empiricism derived from American pragmatism. It is probably no more than mild hyperbole when Donald Davidson (1917–2003) states that he got through graduate school by reading Feigl’s and Sellars’ anthology of positivist writings (1980: 261).

Labels such as “logical analysis,” “philosophical analysis,” and “conceptual analysis” had been rife since Russell and Moore, and they were soon joined by “linguistic philosophy” and “the analysis of language.” But pertinent uses of “analytic(al) philosophy” came relatively late. One of the first occurs in Ernest Nagel (1901–85) (see Nagel 1936). But the label caught on only after the war, perhaps through Arthur Pap (von Wright 1993: 41n; Hacker 1996: 275–6n). Later it was extended from logical positivism to conceptual analysis (Beck 1962; Montefiori and Williams 1966).

Thus, between the 1930s and 1950s, analytic philosophy established itself as a self-conscious philosophical movement or tendency, albeit one splitting into two distinct branches: logical construction and conceptual analysis. At the same time, however, some assumptions uniting these two branches came to be questioned. The main protagonist of this development was the Harvard logician W. V. O. Quine (1908–2000). Quine was heavily indebted to the logical positivists. He shared their predilection for artificial languages, the conviction that natural science constitutes the paradigm of human knowledge, their vision of a unified science, their suspicion of



abstract entities, and the empiricist credo that sensory experience not only provides the evidence on which our beliefs rest (doctrinal empiricism), but also endows our language with its meaning (conceptual empiricism), “Whatever evidence there is for science is sensory evidence,” and “all inculcation of meaning of words must rest ultimately on sensory evidence” (1969: 75). But just as the logical positivists had tried to improve on Hume and Mach, Quine tried to improve on them, replacing their logical empiricism by a more pragmatist variety.

Quine first came to fame in 1951 through “Two dogmas of empiricism” (reprinted in 1953). The article vigorously attacked the two pillars of the logical positivists’ conception of philosophy, namely the distinction between analytic and synthetic propositions and the project of reductive analysis. The linguistic turn promised a *distinctive role for philosophy*, without dubious appeals to a Platonic realm of abstract entities, Aristotelian essences, or Kantian pure reason. While science results in empirical propositions that describe reality – and are hence synthetic – philosophy results in analytic propositions which unfold the meaning of the terms employed by science or common sense.

A similar line was taken by Wittgenstein and linguistic philosophers. In spite of their considerable disagreements, these philosophers accepted that there is a qualitative difference between science, which is concerned with factual issues and hence a posteriori, and philosophy, which is concerned with conceptual issues, and hence a priori. Quine overturned this picture by vigorously denying that there is a significant qualitative difference between apparently a priori disciplines like mathematics, logic, and philosophy on the one hand, and empirical science on the other. Unlike John Stuart Mill (1806–73), Quine did not simply assimilate necessary propositions to empirical generalizations. Instead, he questioned the distinctions that had traditionally been used to set philosophy and science apart, in particular the analytic/synthetic distinction. He thereby challenged the idea that there is a distinct type of proposition which articulates logical and conceptual connections rather than empirical facts, and reinvigorated radical empiricism, according to which even apparently a priori disciplines are ultimately based on experience.

Quine’s attack on the analytic/synthetic distinction involved two lines of reasoning, one concerning epistemology and scientific method, the other concerning semantics and ontology. The impetus of the first line is that the analytic/synthetic distinction presupposes a second dogma of empiricism, namely “reductionism,” the view that every meaningful statement is translatable into a statement about the immediate experiences that confirm it. Reductionism would allow one to define analytic statements as those which are confirmed come what experience may. However, Quine argues, it is at odds with the *holistic* nature of scientific belief-formation, the fact that our beliefs form a “web” in which each belief is linked to all others, and ultimately to experience. This means that it is impossible to specify confirming evidence for individual statements. It also means that any belief can be abandoned for the sake of preserving other parts of the web, and hence that there are no a priori statements immune to empirical revision.

Quine’s semantic argument is that analyticity is part of a circle of *intensional* notions – notions concerning what expressions mean or say – that cannot be reduced to purely



*extensional* notions – notions like reference, concerning what expressions stand for or apply to. But, he insisted, all these notions are obscure, because there are no criteria of identity for “intensions”: while we know what it is for two expressions to have the same extension, we do not know what it is for them to have the same intension or meaning. In *Word and Object* Quine supported this contention by focusing on “radical translation,” the translation of a completely foreign language from scratch (1960: ch. 2). Because such translation cannot assume any prior understanding, it helps to appreciate that translation is “indeterminate”: there is no fact of the matter as to whether two expressions are synonymous, and hence no criteria of identity for intensions. For this reason, scientific philosophy should eliminate them from its ontology.

The result of Quine’s assimilation of the analytic and the synthetic, the *a priori* and the empirical, is a thoroughgoing naturalism. For Quine, philosophy is a branch of or continuous with natural science (meta-philosophical naturalism). There is no genuine knowledge outside natural science (epistemological naturalism), and the latter provides the sole standard for what is real (ontological naturalism). This naturalistic conception of knowledge in turn requires a new, “naturalized epistemology.” Like traditional epistemology, this novel discipline investigates the relationship between our beliefs and the empirical evidence for them. Yet it does so not by providing an *a priori* “rational reconstruction” (à la Carnap) of the *reasons* we have for accepting scientific theories, but through a *scientific* investigation – behaviorist psychology or neurophysiology – of what *causes* us to adopt them. In the wake of Quine, this naturalistic conception of philosophy has achieved the status of orthodoxy, especially in the USA. Few analytic philosophers these days would dare to publish a book in the philosophy of mind without at least professing their allegiance to some form of naturalism in the preface, however implausible such professions may ultimately be.

Reductionism and verificationism proved to be an Achilles’ heel of logical positivism not just in the philosophy of language, but also in the philosophy of science. Their failure undermined *logical* empiricism, but other versions soon came to the fore. Close to Quine’s *holistic* empiricism is Karl Popper’s *fallibilism* (1934). Popper rejected the verificationist criterion of meaningfulness on several grounds. First, separating meaningful science from nonsensical metaphysics is not just unfeasible but also undesirable, since metaphysical speculation provides an invaluable stimulus to scientific research. Second, what is needed is a demarcation not between sense and nonsense, but between empirical science and other disciplines. Finally, the criterion for that demarcation cannot be verifiability. Science depends on universal laws, and these can never be conclusively verified, since they cover an infinite number of cases. Instead, it is *falsifiability*. A theory is scientific if it allows for the derivation of predictions that can be falsified by empirical data. Science proceeds not by fine-tuning inductive generalizations, but by bold conjectures, the logical deduction of predictions from these conjectures, and their ruthless refutation in the light of novel data.

For the logical positivists, scientific theory-formation was an *ahistorical* activity, namely of constructing theoretical frameworks to fit the available empirical evidence. Popper introduced a historical element, because a novel scientific theory is judged largely by the extent to which it can explain the observations that refuted its

predecessors. He nevertheless retained the image of scientific progress as a linear and rational process in which theories are conclusively falsified and replaced by new ones which increasingly approximate the truth. This image was questioned by Thomas Kuhn (1922–96) (see Kuhn 1970), and Paul Feyerabend (1924–94) (see Feyerabend 1975). They maintained that the history of science does not consist of rational shifts from inferior to superior theories, but of “paradigm-shifts” that are partly dictated by non-cognitive factors (social, aesthetic, etc.). There is no universal scientific rationality which would allow us to maintain that more recent theories are objectively better than their predecessors. They also questioned the Kantian distinction between the “context of discovery” and the “context of justification,” which had allowed the logical positivists to keep the rational reconstruction and defense of scientific theories apart from an explanation of their origins, whether it be physiological or sociological.

Although few analytic philosophers have swallowed their relativistic conclusions, Kuhn and Feyerabend turned philosophy of science from ahistorical methodological questions to the history and, to a lesser extent, the sociology of science. Since the 1970s, the preoccupation with methodology also came under pressure from metaphysics. Casting off what they regarded as positivistic shackles, philosophers of science maintained that unobservable theoretical entities and the laws of nature are mind-independent features of reality rather than merely linguistic expedients for the explanation and prediction of experience (see “Philosophy of science,” Chapter 14).

### The rehabilitation of metaphysics

In this respect, post-positivist philosophy of science was part of a more general trend. The ground for this rehabilitation of metaphysics had been cleared by the aforementioned withdrawal of the verificationist criterion of meaningfulness. Into this ground analytic philosophers planted three distinct metaphysical seeds.

The first was Quine’s naturalistic approach to ontology. For Carnap, the only genuine questions of existence are scientific questions like “Are there neutrinos?” or “Are there prime numbers greater than  $10^{10}$ ?”; they concern particular groups of entities and can be solved within a specific “linguistic framework.” By contrast, philosophical questions like “Are there material objects?” or “Do numbers exist?” concerning whole categories of entities are either meaningless or “practical” in nature. They boil down to the pragmatic question of whether for scientific purposes it is convenient to adopt a linguistic framework like that of the natural numbers.

By contrast, Quine’s naturalism resulted in a “blurring of the boundary between speculative metaphysics and natural science” (Quine 1953: 20). Philosophy is concerned with the “limning of the most general traits of reality.” It investigates the fundamental “furniture of our universe,” and differs from science only quantitatively, in the generality and breadth of its questions. Quine declares himself to be “no champion of traditional metaphysics.” He denies that a priori philosophical reflection can establish what kinds of things there are. Nevertheless, he finds a place for ontology (1966: 203–4). Like traditional ontology, Quine’s naturalistic variety seeks to establish what kinds of things there are. But it does not pursue this aspiration