# CHAPTER SEVEN

# *Later German philosophy: Hegel, Nietzsche*

The philosophers Hegel (1770–1831) and Nietzsche (1844–1900) in many ways could hardly be more different; they differ in style, method and conclusions. Hegel is methodical and technical where Nietzsche is deliberately unsystematic and literary; this renders them both obscure and difficult to understand, but in different ways. Yet there is a connecting intellectual element, although what each makes of this common element produces quite different philosophies.

The question arises as to what extent we can have a metaphysics of reality: to what extent we can be said to have knowledge of reality: how in a general way the world necessarily is in itself, as distinct from how it merely appears. A problem arises from the apparent separation of our view of how the world is and the world itself; once this separation takes place the problem is to determine to what extent our view of the world given in the concepts can be known to correspond to the world itself: reality. One way of looking at this problem of knowledge of reality is to try to determine which of our basic concepts with which we think about the world reflect actual objective and necessary features of the world, and which of our concepts reflect the contribution of what is merely subjective or contingent. In describing reality we aim to identify features that are true from any point of view, which is, so to speak, the point of view of things themselves.

A common connection between Hegel and Nietzsche is the German intellectual tradition derived from Kant. Kant's philosophy sets up the way in which the question of our knowledge of reality is asked. Kant suggests that there is no way that the basic concepts through which we have necessarily to think about the world can be shown to be valid for the world as a reality beyond experience and independent of all subjective conceptions. Such independence would entail a world to

which we could never possibly know if our conceptions applied. What Kant says is that our basic concepts do nevertheless have a kind of objectivity through being necessarily valid *a priori,* if not for things-in-themselves beyond experience, then in all cases for how things can appear to us and to any rational beings. We cannot justify the assertion of the objectivity and necessity of our conceptions of the world either from experience or logically by their denial being contradictory. Their necessity and objectivity are derived from the universal intersubjectivity of any rational mind necessarily using these concepts in all possible thought and knowledge; therefore anything that is experienced must be formed by these concepts. The function of philosophy is not then to give metaphysical knowledge of reality as a whole—thus including things-in-themselves beyond possible experience, and hence beyond being known as subject to our conceptions—but must be content to give us knowledge of the *a priori* structure of experiences, that is, the world as it appears. Kant also says that it is within experiences that the appearance/reality distinction must be made. The natural world as studied by science is the totality of possible experiences. The function of philosophy is to justify rationally the necessary application to appearances of the basic concepts which are presupposed by natural sciences. For example, philosophy alone cannot determine what causes what, but it can justify the necessity of the concept of causation that is logically presupposed by science: the concept of causation, that every event must have some cause, is shown to be necessarily true in so far as the concept is applied to all possible appearances but not to things-in-themselves.

Hegel and Nietzsche make something quite different of the philosophy of Kant. Hegel thinks he can show that our concepts of reason are necessarily and objectively valid for reality as a whole, which includes appearances and things-in-themselves but ultimately eliminates the distinction between them; thus knowledge of reality is possible; metaphysics is possible. Nietzsche concludes that our concepts can have no necessary and universal validity because no concept can; they are interpretations that must be seen as originating in certain features of the distinctively human condition; there can be no overall non-perspectival conceptual system, devoid of all and any points of view, which would give a complete description of reality.

Hegel sees the solution as lying in metaphysical or absolute idealism. In Kant's position, where the mind and the world are separate in some sense, the concepts used by the mind can be known to be *a priori* valid only to the extent that the world is regarded as subject to mind or basic mental categories; that is, they are *a priori* valid only for the world regarded as an appearance or phenomenon. This leaves a problematic residual noumenal world, or thing-in-itself, which is unknowable, beyond the phenomenon, because it is by definition that which is independent of all of our conceptual

determinations. So long as features of the world are only partly a product of mind, our concepts are assured as objectively valid only for that part for which the mind is responsible. Thus with Kant we cannot know reality as a whole, including reality as it is in itself, but know it only as it appears: as it comes before the mind. The answer for Hegel is to show how the mind and the world really form an identity as one absolute spiritual entity which transcends the dualism of subject and object; the concepts of thought are thereby necessarily objectively valid for reality as a whole, not only for appearances, because to know those concepts is the same as to know the structure of reality itself; there is no world to which rational concepts could fail to apply because the world in its entirety is a developing product of the essence of absolute mind or reason. Our concepts no longer merely give the form of any possible appearance of things, objective merely for the world as experienced; rather, they are again absolutely or unconditionally objective for the world-in-itself because the world as determined by mental categories is one with the world itself. The world/concept dualism is collapsed, as is knowledge and the object of knowledge; thus the absolute objectivity of concepts is regained with respect to reality in its entirety because there is no residual thing-in-itself-world of which we have not taken account and for which our concepts can fail to hold. This is not to say the world is the product of finite individual minds as in subjective idealism; it is rather a manifestation of infinite mind or spirit, or mind as such. The understanding of the world is thus mind understanding the development of itself.

In Nietzsche we see the triumph of perspectivism: the concepts which constitute our notion of the world can have no unique objective validity and represent one partial possible set of concepts which give an interpretation which *is* the world to us; they give us, through a set of classificatory and ordering concepts, a usable picture of the world whose function and explanation are largely pragmatic. Our concepts, far from describing the world in an objective and necessary way— being valid from any point of view or universally—are constructed by humans for their own peculiarly human purposes, especially the purpose of survival. That is not to say that because there is no one necessary way of construing the world any way is as good as any other; but one view is not better than another in the traditional sense of corresponding better to reality at all; views are better because they enhance power and control to live one's life in certain specific ways and according to certain values. There can be no one conceptual framework that gives the complete truth about the world; all views are partial. Perspectives are a necessary condition of having a world at all. Our rational conception of the world seems objective and necessary because we seem not to be able to throw it off; but such conceptual ordering of the world as we experience it is a kind of simplifying

fiction or falsification that serves to make the world amenably ordered and calculable for human beings.

## *Hegel*

Georg Wilhelm Friedrich Hegel (1770–1831) was born in Stuttgart, the son of a minor civil servant with a Lutheran background. He was educated at the University of Tübingen, studying philosophy and theology. There he met the poet Hölderlin and the philosopher Schelling. The French Revolution, which occurred during his time at university, made a deep impression on Hegel; he thought it was momentous in its rigorous application of reason, but it was also a great failure because reason was applied in an abstract way that took no account of particular circumstances of the community. After university he held various private tutorial posts, and began working on his philosophy. Hegel taught philosophy at the University of Jena from 1801 to 1803. On leaving he began his first great philosophical work, *The phenomenology of spirit*. Jena was occupied by the French in 1807 following the defeat of the Prussians by Napoleon, and the university closed. After working as a newspaper editor, Hegel was from 1808 to 1816 the headmaster of a Gymnasium at Nuremberg. From 1816 to 1818 he was Professor of Philosophy at the University of Heidelberg where he wrote the *Encyclopedia of the philosophical sciences*. Hegel had by this time attained a significant reputation as a philosopher, and was offered in 1818 the prestigious post of Professor of Philosophy at the University of Berlin. In 1821 he published the *Philosophy of right*. The position in Berlin he held until his death from cholera at the age of sixty-one.

Seminal influences on Hegel's work derive from his study of Greek philosophy, particularly Plato and Aristotle, but also Heraclitus and Eleatics such as Parmenides. Of philosophers nearer to his time, Spinoza and Kant greatly affected Hegel's philosophical outlook. Among contemporary thinkers important to Hegel we have to look to Fichte (1762–1814) and Schelling (1775–1854).

The aim of philosophy, according to Hegel, should be to show how a complete understanding of reality as a totality is possible, and this entails that all reality has to be conceptually accessible; that there is nothing real which is not captured by the concepts of reason; there is also nothing which is a concept of reason which is not real. To reach this end Hegel claims to prove the necessity of absolute idealism.

Part of the key to the philosophy of Hegel is found in his rejection of Kant's limitation of rational philosophical knowledge to the basic *a priori* conceptual structure of appearances, which rendered things-in-themselves—things as not known in their appearances—unknowable. Thus reality in its entirety is not knowable since things-in-themselves

are beyond possible appearances and excluded. Kant's position gives an oddly bifurcated world: the world as experienced and the world as not experienced; and within this duality, if we are to talk meaningfully about "reality" at all, we must talk of some characteristics within appearances, and not ascribe it to things-in-themselves. Kant's "critical philosophy" aims to delineate the limits of philosophical knowledge and understanding; all knowledge and understanding are conceptual—bring things under concepts—or are expressed in concepts; and if the application of our concepts is limited, then so are knowledge and understanding. Hegel makes a distinction between understanding and reason; he thinks that proper philosophical reason can go beyond the limits set to our knowledge by Kant. For Kant the limits of knowledge of reality are reached when we meet antinomies or contradictory theses which are irredeemably opposed and between which we cannot rationally choose; for Hegel philosophical reason can find a way of transcending the contradiction in a new synthesis.

The question arises as to why Kant feels the need to posit an unknowable noumenon at all. Overall, the reason must derive from the realization that the sense of "reality" he is able to give within the realm of appearances is not fully satisfying. Kant suggests that the raw sensation of intuitions must have an external cause and the cause is the thing-in-itself; but the thing-in-itself cannot be the cause of anything, since the category of causality cannot apply to it. In any case, Kant's successors were quick to point out that noumenon is contradictory. Even if we avoid giving any function to noumenon, it is still said to exist; and this means the category of existence applies to it in flat contradiction of the assertion that no categories can apply to it; even if only one category is applicable to noumenon, it cannot be wholly unknowable, which contradicts the initial supposition that it is unknowable.

The collapse through contradiction of the conception of the thing-in-itself leads inexorably to absolute idealism, and to the complete knowability of everything. If noumenon is eliminated as the external source of the given element in knowledge, sensation, to which the mind introduces *a priori* form, then the distinction between form imposed by mind and given content derived from sensation is destroyed, and the universe must in its entirety be a product of mind. This attacks the vital Kantian distinction between form and content, between the *a priori* and *a posteriori*. What can be brought under concepts is knowable; but noumenon is contradictory if posited as that which cannot be brought under concepts, since it can at the very least be known to exist: it *is*. Therefore everything is necessarily knowable, since it is contradictory to posit that which cannot be brought under concepts. To posit an unknowable "something" is contradictory, since in positing it as something which *exists* we apply a concept, and to apply a concept is to know that thing to which the concept is applied.

Indeed, Hegel suggests that the whole notion of being able to know the limits to our knowledge is impossible. We should also note that proving that all is knowable is by no means the same as saying that all is known and that there are not things of which we are ignorant. Everything must be knowable because a minimum condition for there being something unknown in the totality of the universe is that it is, but in that case it is something known, not unknown. If the thing-in-itself is said to be "nothing", we have applied a concept that makes it completely knowable. In short, if X is posited as unknowable, it is knowable, therefore it is knowable.

The result of this is that we must reject all talk which divides knowledge of reality from reality itself for we can have no conception of reality apart from knowledge, no place to stand where we could compare knowledge and reality. We always work from within existing knowledge to understand reality.

The argument that reality in its totality is knowable logically inclines one to monism: for the universe to be understandable as a whole everything must be explicable—which is not the same as everything being actually explained—and for it to be possible for everything to be explicable the universe must be posited as one self-explanatory, self-contained entity. This is the Absolute or reality as a whole revealing itself in the fully adequate conceptual description of the Absolute Idea or Notion where subject and object are one in a self-thinking thought. The Absolute is the universe or reality as a totality; in short, everything. Everything in the universe is understood through something else in the universe; but if the universe—reality as a whole—is to be understood or explained it must in total form a whole which is self-explanatory; otherwise a regress of explanation could not be ended. As Hegel puts it, "The truth is the whole", for to understand any part involves understanding the whole. If we try to understand the truth about a part in isolation we will find that a contradiction will arise in that we have to refer to some relation outside it; ultimately we can draw this process to a close only when we have a view of the whole and there is nothing outside left to refer to; we thereby transcend and include all relational thinking in describing reality.

Once the thing-in-itself that is inaccessible to our concepts is eliminated by being shown to be impossible, then all reality is accessible to concepts, for to posit that which is inaccessible to concepts is contradictory. Thus the real is the rational and the rational the real. What this means is that all that is real is the rational process of concept generation, and hence is knowable, and the rational process of concept generation is the real. The world in its totality is the necessary unfolding of the logic of concepts. There is no longer any question of our concepts failing to apply to reality in the sense of the totality of the universe, for just as Kant's categories were objective for all

appearances, Hegel's concepts now apply to reality itself, for the world as it falls under concepts is all the world can be at any moment in its unfolding: it is the real.

The function of philosophy is to construct or understand the Absolute, to prove that the truth about reality as a whole is knowable. Since it is not possible to posit anything apart from what falls under mental concepts, to trace the development of concepts is to trace the development of reality itself. In the Absolute, mind (the subjective) and object (the objective) are collapsed into an ultimate subject that rises above the duality because its object is *itself;* that is, the totality thinks about what can be its only object, itself. The Absolute is the actualization of this self-thinking thought: reality as a whole fully understanding itself as a whole. Some writers have given the Absolute a theistic interpretation and have seen the description of the Absolute as a description of God; however, it cannot be a transcendent God, but God immanent in the world. Absolute knowledge is the point at which the infinite mind, through our finite mind, has a complete understanding of reality, and that is when the Absolute has a complete understanding of itself, including the process that led to that complete understanding. Absolute knowledge captured in the Absolute Idea gives a perfect conceptual description of the nature of reality including, of course, the charting of the logical progression of increasingly adequate concepts to that Absolute knowledge which is the realization that the true nature of reality is that of the totality which knows itself. Absolute knowledge is the realization in the Absolute Idea that reality is ultimately a self-thinking thought, that absolute idealism is necessarily true so that reality is ultimately one infinite self-thinking mind. Reality is like a sphere with a perfect mirror on its inner surface where every part is perfectly reflected in another—but in this metaphor we would have to realize that the sphere could not have an outer surface.

It is important to note that the mind referred to here—which produces through its concepts reality in its entirety and is thus identical with that reality, so that to understand reality is just the same as to understand those concepts of mind—is not finite individual mind, but one infinite or objective mind, whose essence is reason. Reality can be nothing but the conceptual construction of infinite mind (spirit or *Geist*), so knowledge of reality turns out to be mind's knowledge of itself. But the infinite mind understands itself through finite minds; and the conceptual development manifest in finite minds in various human activities, especially in philosophy, will reflect the conceptual development of reality itself. The development of the world, present reality as a whole, is towards the Absolute and is just the same as the development to that point at which reality has a fully adequate understanding of itself in the Absolute Idea under the category of a single self-thinking thought.

There is a strong teleological element in Hegel's account of reality; the universe moves towards the Absolute as the end or result. Reality is identical with, and includes, the process of infinite mind's conceptual development towards absolute knowledge, which is knowledge of reality, which is reality as self-knowing. Reality at any stage or "moment" in the development can be nothing other than the total system of concepts of reality, which are manifest through the conceptual development of finite minds. In the end state of this conceptual development, where the Absolute is a fully self-knowing thought, the subjective and objective, the concept of reality and reality itself, indeed all conceptual opposites, differences and relations, are an identity contained in a unity. A fully comprehensive knowledge of reality will involve the identity of all opposing concepts, for the Absolute includes in itself all concepts—all determinations. Otherwise the understanding will be inadequate, as it will not be complete; for what is rational is real, and what is rational is what can be brought under concepts, therefore if some concepts are not included, there cannot be an understanding of the Absolute, since such an understanding leaves something out. The Absolute cannot be either one thing or its opposite, but must be both in an identity. Where all conceptual opposites become one, or identities, it might be supposed that the Absolute is an indeterminate, undifferentiated and unknowable "something" where conceptual characterization is impossible because opposites have become identities. But Hegel does not think of the Absolute as the vanishing point at which all conceptual differentiation is destroyed; rather, it is where all opposing concepts are unified into one all-encompassing entity which preserves their real opposition: an identity-in-difference. The opposition of concepts is not merely apparent, but real, and their real difference is preserved in their identity. The Absolute, in knowing itself as a totality, recognizes the various phases that lead to that final state as real moments in its life. In the progress towards the Absolute nothing is lost. An analogy might be the way in which the colour white is produced by combining all colours.

If the rational is the real and the real the rational, this means that reality just is the process of infinite mind actualizing the end state: reality as the self-knowledge of the totality. This process of conceptual development, which is also necessarily the development of reality itself towards the Absolute, is dialectical. The dialectic development of reality towards the Absolute takes place under three headings:

(1)   Logic
(2)   Philosophy of Nature
(3)   Philosophy of Mind.

We can trace the development of dialectical Logic working itself out towards the Absolute—towards the complete truth about the nature of

reality, the whole, which is the Absolute's conception of itself—in any of the above. They must all amount to aspects of the same thing: the necessary march of reason towards the total truth about the universe, which is an infinite mind's understanding of itself.

In (1) Logic describes the inner essence of the Absolute in its pure form, including of course the necessary movements towards its actualization. It is the study of the development of the Absolute in the non-temporal dialectical Logic of conceptual development itself abstracted from its manifestations in human minds or the natural world. The manifestation of the process of the Absolute in (2) and (3) involves the discernment, among the mass of facts about nature and human world history, of the bare bones of reason's conceptual development in nature and through history given in (1). What is studied under (2) and (3) is the progress manifest in the temporal world of the Logic of the Absolute. In all cases this follows the same overall pattern: objectivity as thesis, subjectivity as antithesis, which form a unity in the Absolute Idea.

It is vital to understand that the terms of Hegel's Logic are not propositions but concepts and that, unlike traditional logic, it is concerned not with mere form but also with content. Traditional logic is concerned with valid argument-forms; the universal necessity of these forms derives precisely from their being valid regardless of content. We can see this in the following syllogism.

All $X$ is $Y$.
$f$ is an $X$.

Therefore $f$ is a $Y$.

This argument is valid whatever we substitute for $X$, $Y$, or $f$; but for that very reason traditional logic on its own can tell us nothing about the actual world and is purely hypothetical, valid regardless of actual truth. It is important to understand that Hegel is concerned with a Logic of concepts which have content and which tell the truth about reality. Once the distinction between conceptual development and reality is ultimately eliminated as an untenable opposition, the dialectic Logic of conceptual development is the development of reality itself. The form/content distinction disappears, and thus the aim of Hegel's Logic is truth.

The dialectic of concepts is a structure whereby less adequate conceptions of reality are overcome but retained to form conceptions which are more adequate. We can envisage this as a series of expanding concentric circles, each of which is more adequate in its description of reality. At any level less than the whole, the concepts we employ to describe reality are found to be contradictory; what this contradiction amounts to is the idea that isolated description is contradictory in different ways in different cases, but always because it

cannot be genuinely isolated. The attempt to describe a thing which is less than the Absolute or whole in isolation will be contradictory because it will necessarily involve relations to things outside it. Thus the concept $A$ will be found to involve not-$A$. It is not that both are simultaneously true, thus breaking the law of non-contradiction, not-($A$ and not-$A$); it is that both separately are inadequate in expressing the truth, and to get nearer the truth they have to be raised up into a higher synthesis which contains the truth from both. The less adequate conceptions are not discarded but preserved in the more adequate conceptions. Ultimately it is found that the whole system of concepts is interdependent, and the whole system alone removes all contradictions and gives an adequate description of the truth about reality. Up to the point of absolute knowledge the impetus to improved conceptual mastery of reality comes from reason being driven by contradictions in its attempt to complete a conceptual description of a part of reality in isolation. The intellect cannot rest content with an incomplete and, in Hegel's sense, therefore an internally contradictory view of reality. The method involved in attaining the complete conceptual grasp of reality involves an essentially triadic structure: concept $A$ ("thesis") is inadequate in capturing reality on its own and is found logically to involve its opposite $B$ ("antithesis"); we cannot think the $A$ without the $B$; $A$ is thus "contradictory" in isolation from its relation to $B$; so both are found to be inadequate descriptions of reality, and thus form, preserving their opposition and identity, $C$ ("synthesis"). But the $C$ is also then a thesis and will also be found to be inadequate, and to involve its antithesis $D$, which will give rise to their resolution in $E$; and so on.

$A$ (thesis)

$\rightarrow$  $C$ (synthesis/thesis)

$B$ (antithesis) $\rightarrow$  $E...$

$D$ (antithesis)

The nature of reality is deduced from the first principle using the triadic dialectical method. The first principle turns out to be a category or concept, since concepts have the right kind of logical, rather than temporal, priority through their level of inclusiveness. The first concept with logical priority is Being or "isness". This is the fundamental category of reality: whatever is real *is*, it has the most abstract quality of "isness"; whatever the determinate character of any real thing in the world, it logically presupposes the category Being. But, just because it is the absence of all determination, Being is a vacuity and is found to be identical with Nothing; Being contains within it its opposite, Nothing. Reason cannot rest with this contradiction. From the process of Being passing into Nothing because the two are identical, we see that equally Nothing passes into Being;

this leads to a concept in which the concepts of Being and Nothing are unified in an identity of opposites: Becoming. In the category of Becoming the concepts of Being and Nothing are preserved in their difference and also in their identity. They are "sublated" or "put aside" in a higher unity. The poorest, but still true definition or conception, of the Absolute is Being; this is the starting point of the logical derivation of all the concepts which give increasingly adequate definitions of the Absolute which is reality as a totality; the dialectical deduction of concepts produces increasingly adequate definitions or conceptions which include the earlier ones, ending in the most adequate definition of the Absolute, the Absolute is the Absolute Idea: self-thinking mind.

It should be noted that philosophy, in exhibiting the development of reason through our actual history, as in (3) above, is not disputing, or indeed discovering, historical facts; what it is doing is giving an interpretation describing their dialectical Logic. The mass of factual details is boiled off to leave the outline of the dialectical process.

In (3), which is the Absolute manifest as mind or spirit, we can trace the Logic of the conceptual development in consciousness towards attaining the complete truth about reality as necessarily being absolute idealism. The Absolute's knowledge of itself is not identical with the thoughts of any finite mind, but finite minds are carriers of the increase in conceptual mastery down through history. Thus we are tracing in the philosophy of spirit the conceptual development of mankind, which is the development of consciousness to ever higher levels of understanding, eventually participating in the Absolute's self-knowledge. The phenomenology of mind or spirit studies forms of consciousness as they acquire a better grasp of reality. We can trace the manifestation of the dialectic of spirit in its objective manifestations through the history of public institutions, societies and cultures, which is the development of the idea of freedom.

In the Philosophy of Mind we can follow the dialectical development in two connected ways: (a) "Subjective Mind", (b) "Objective Mind",

(a) *"Subjective Mind"*
This is the phenomenology of mind—mind's appearance to itself—the way that mind itself has developed with dialectical necessity to higher levels of consciousness so as to participate in absolute knowledge. Hegel traces consciousness from its lowest levels to the highest. This has three main phases.
(i) *Consciousness* This starts with "sense-certainty": the awareness of raw unclassified sensations. But it soon becomes clear that *knowledge,* through awareness of bare particulars, is contradictory because the awareness is ineffable: to articulate it without using the universal categories is impossible; even "this", "here", "now" take us beyond what is immediately

given. Universal terms are required. This leads on to the next stage, "perception", in which we classify what we perceive under sensuous universals—"table", "star". But soon it is clear that non-sensuous universals are involved which are not encountered in experience—"many", "one"—and these are posited as existing as separate realities. These form the basis for scientific laws. The universals are studied as independent objects.

(ii) *Self-consciousness* This begins with the stage at which we realize that the conceptual structure of the world is a construct of mind; we become conscious of ourselves as active categorizers and law makers. Consciousness recognizes the object not as a not-self but simply as itself. This is the beginning of self-consciousness; we are turned back on ourselves. But the object still remains obstinately regarded as external to the self and at the same time really one with self. This gives rise to the next phase, "desire", in which the aim is *pure* self-consciousness where the only object truly is itself; so the self tries to destroy the external object by consuming it. But the very need to destroy the external object shows that the self is still dependent for its self-consciousness on the external. This solipsist phase gives way to one in which the existence of other selves are recognized in the world: other egos which are, of course, themselves self-conscious. If we cannot negate the object, it must negate itself; but only consciousness can negate itself; so the external object is recognized as an ego. The independence of the egos rival one another; this struggle is recognized in the master/slave relationship, in which one seeks to destroy the other. The independence of the other ego is negated by the master in regarding the slave as a thing without self-consciousness but as mere consciousness. Thus the object for the slave is not itself, but merely the external objects on which it labours for the master. But again contradiction arises because the master finds he is dependent on the slave through the fact that the extent of independence of his self-consciousness depends on negating the self-consciousness of the slave, which proves independence of the slave, but that means the slave must after all be self-conscious. The master finds he needs the slave for his recognition as the master. Also the slave becomes self-conscious in seeing himself in what he creates. Each now recognizes the other as self-conscious again. The mutual acceptance by all selves of each other ushers in the notion of "universal self-consciousness".

(iii) *Reason* The equal recognition of all egos means that another consciousness is for my self-consciousness another self-consciousness, and is therefore myself. Ego contemplates ego

as its object. Thus the object of self- consciousness is in whatever it contemplates simply itself. Thus we reach pure self-thinking thought, where the only object of thought is itself, and the distinction between self and other is made within self, since there is nothing beyond infinite mind. Thus we have absolute idealism.

We can see how the triadic dialectic works here: objectivism and subjectivism are combined in absolute idealism where the distinction is transcended because the Absolute is the totality. The object for the totality identical with mind can only be itself.

(i) Consciousness
(the object is
independent of
self).

→ (iii) Reason (subject/
object distinction
is collapsed).

(ii) Self-consciousness
(the object is
identical with
subject).

(b)  *"Objective Mind"*
This constitutes the public manifestation of spirit, which is in turn the development of the dialectic. Hegel supports this belief with interpretations of actual historical periods. Roughly, this historical progression is "The Oriental World" (in which only one, the despot, is free), "The Greek World" (in which only some, non-slaves, are free), "The Germanic World" (in which, eventually, all are free). The overall direction of history is towards consciousness of freedom. Freedom is understood by Hegel not as absence of coercion and doing what one likes, but as acting from self-determination; and that means acting according to universally valid rational principles because in acting under the determinations of universal rational prescriptions one is most free from individual causal circumstances. Obedience to absolute moral laws and ethical individualism are synthesized in the "organic community" in which the individual is free because the rational moral principles he would, as an individual, obey in order to be free are also the specific rational laws of the community: they are in harmony. Moreover, since the community forms the individual, what he naturally desires or wills is no longer pitted against the attempt to obey abstract rational moral principles; rather, he

naturally wills those rational principles which are also society's laws.

Hegel's philosophy of absolute idealism can itself be seen as a result of a triadic synthesis of Platonism and Kantianism in the search for knowledge of reality, which means the possession of necessary and universal truths about the actual world. Empiricism alone cannot through experience support such truths; such truths can only be known *a priori* as the conceptual truths of the intellect.

(I) Platonism is a form of objectivism: one in which the sensible world is found to be ontologically unsuitable for necessary and universal truths. So the concepts constituting these truths are said to be mind-independent and concerning an intelligible, world-transcendent realm of mind-independent things-in-themselves, but they are not properly applicable to the sensible world.

(II) Kantianism is a form of subjectivism: one in which the sensible world cannot rationally justify such necessary and universal truths. So the concepts constituting these truths are said to be mind-dependent and concerning a sensible realm of mind-dependent appearances, but they are not applicable to things-in-themselves.

(III) Hegelian absolute idealism. The concepts which are objective in Platonism (I), apart from mind and not applicable to the sensible world, and the concepts which are subjective in Kantianism (II), dependent on mind and applicable only to the sensible world, are synthesized in absolute idealism (III): they are found to constitute reality itself in its totality. The concepts constituting necessary and universal truths are subjective or mind-dependent *and* objective or mind-independent because rational essence of mind, infinite mind, is the only reality there can be; apart from reality constituted by the rational concepts of mind there can be no reality. Finite mind participates in infinite mind in so far as the infinite mind is in the finite, and that means in so far as finite minds accord with the dialectical rationality of infinite mind, which is to the extent that finite mind abides by reason which is what is universal and essential about mind. Thus objectivism and subjectivism, and the subject/object dichotomy, are synthesized and transcended in absolute idealism, where infinite mind and the whole of reality are one self-thinking entity: the Absolute.

We can conclude with a general remark on Hegel's philosophy. Absolute knowledge is reached when the Absolute fully understands itself in the Absolute Idea: for the totality to understand itself is to show how the completely adequate understanding of reality is possible. It is extraordinary to note that Hegel thinks that his philosophy *is* the culmination of the Absolute's self-knowledge, not just a description of it; Hegel's own philosophy is the manifestation in the world of the Absolute's full conceptual grasp of itself in the

Absolute Idea in which the object and subject are one: the subject can
have as its object only itself. The development of infinite mind has
reached its culmination and is manifest through Hegel's finite mind:
the philosophy of absolute idealism.


## Nietzsche

Friedrich Nietzsche (1844–1900) was born in Röcken in Germany the
son of a Lutheran pastor. His father died in 1849; his upbringing was
dominated by his pious mother, also his sister and aunts. His rigorous
early education, which included classics, took place at the famous
boarding school at Pforta, near Naumburg. For most of his life
Nietzsche laboured under the effects of poor health, including weak
eyesight; for days on end he was struck down by crippling migraines.
Nietzsche studied philology at the University of Bonn and then at
Leipzig; while a student he encountered the greatest influences on his
early thinking, the composer Richard Wagner (1813–83) and the
philosopher Arthur Schopenhauer (1788–1860). Nietzsche's
outstanding academic achievements are indicated by his appointment,
when only twenty-five, as Professor of Classical Philology at the
University of Basel. He resigned from Basel in 1878 because of ill-
health. From 1878 to 1889 he led an immensely lonely life wandering
from place to place in Europe, often in the high Swiss mountains. It
was during this time that most of his major works were written. His
romantic intentions were always hopelessly unfulfilled, and he
remained unmarried. In 1889 Nietzsche rushed into a street in Turin
and embraced a horse that was being flogged; he then suffered a
massive mental collapse that plunged him into a vegetative insanity
for the rest of his life; during the last ten years of his life all spark of
intelligence left Nietzsche's mind; the decline may have been due to
acquired or inherited syphilis. Until the end of his life he was looked
after mostly by his mother but also by his sister Elisabeth, who
propagated mythology and obscurity around Nietzsche's work.
    It is impossible not to be controversial in giving an account of
Nietzsche's philosophy; this is partly because of the scattered nature of
his views on any one subject, and partly because of his manner of
writing. In concentrating on that part of Nietzsche's philosophy
concerned with the nature of philosophy, knowledge and metaphysics,
one must be aware that a great deal of his interest lies in the realm of
values and how one ought to live one's life; but the two areas are
intimately connected in Nietzsche's thought. Nietzsche's grounds for
rejecting the possibility of absolute knowledge in general include
values in particular. Although Nietzsche deliberately does not produce
a systematic exposition of his views, nevertheless all parts of his
philosophy are interconnected. The overriding consideration in the

account of Nietzsche given here is to take seriously his repeated pronouncement that he was doing something quite different from what had gone before in philosophy. With this in mind, one should avoid attempting to fit him conveniently into any philosophical school. It is all too easy to construe Nietzsche as presenting albeit novel answers to the same old philosophical problems. His aim, however, is to question the very concepts in which traditional philosophical problems are couched. Traditional philosophy has been concerned to present to philosophical problems answers which it aims to be universally and objectively true. But the presupposition that lies behind this advancement of a philosophical position as universally valid is that such universal and objective truths are possible—and it is exactly this that Nietzsche denies is the case. This denial is not the same as advocating scepticism with regard to knowledge, for scepticism too assumes that knowledge must involve necessity and certainty, but thinks it is something we cannot attain.

The key to Nietzsche's philosophy is his attack on absolutism of any sort, final universally binding answers to philosophical problems, which easily leads to dogmatism. There are, in fact, no eternal transcendental truths waiting to be discovered, independent of all thinkers whatsoever.

Nietzsche refers to all views or theories as false or as fictions. Everything is false, and what we regard as true are but convenient errors required for our lives. This applies to our common-sense or herd view of the world, which he regards as a convenient fiction, but on which our survival has come to depend: it is a world of independent things, of various kinds, that causally interact according to certain laws, and is observed by a relatively permanent self. This view has become so deeply entrenched that we no longer recognize it as a *view,* among other possible views, at all. In particular the *a priori* categories that Kant regards as universally valid, and hence objective, are regarded by Nietzsche as having no absolute necessity or universal validity, but as products of human interests and purposes; they are no more than psychologically *a priori*. All views of the world are attempts to schematize and organize experience for the sake of control and power over our environment. But there is no reason therefore to suppose that the way we view the world—our conception of reality—need be universally valid in terms of power and control for everyone. Nietzsche is opposing ideals which produce an ossified and idealized "fabricated world" which is then regarded as the only "real world". In *Twilight of the idols* Nietzsche says, "I mistrust all systematizers and avoid them. The will to a system is a lack of integrity."

We must come to see our truths, and our claims to knowledge, in all fields of activity for what they are: interpretations from certain perspectives. There is also no possibility of a complete view of anything or everything. Thus we find that he attacks metaphysics,

knowledge, truth, moral values and values in general, in so far as definitive answers are proposed. Once we see that we have no more than different perspectives on the world, we are liberated from the tyranny of supposing that any view has ever to be accepted as a final universally valid view. It is not just a matter of being modest in our philosophical claims by saying that we are not sure if we have finally solved certain philosophical problems; it is a matter of actively denying that such final solutions are ever attainable.

Nietzsche objects to the pretence of philosophers that they have, or at least can have, a disinterested concern for the truth and knowledge, one that is unaffected by, and separable from, any considerations of conditions that would define in some way a point of view or perspective: the specific values, personal predilections, and attitudes to life that characterize what kind of people they are. It has been the habit of metaphysicians to juxtapose a superior absolute disinterested view of the world—which usually means positing another "real world" beyond or behind the apparent one—with the unthought-out vagaries of the common-sense view of the world whose chief aim has not been the disinterested pursuit of knowledge and truth. There is no such disinterested point of view which would fulfil the condition for describing reality; all views are inherently perspectival and thus not exhaustive; the view from nowhere is no view at all; it is not even an unattainable ideal.

Unlike the systems of metaphysics proposed by past philosophers, which give a view of reality, the indisputable value of the commonsense view of the world is that it at least has been of pragmatic use to us: it has promoted the survival of our species. Indeed, the common-sense view has prevailed and is regarded as "true" precisely because it aids survival; the views that did not aid survival have, of course, died out with their proponents or have been rejected as "errors". The entrenchment, the seeming necessity of our commonsense view, is determined not by its logically absolute or universal necessity or by its accurate reflection of reality, but by its huge value in promoting a particular kind of life and attitude to life: specific interests and values. The imposition of false simplifications or coarsenings by which we give order to our world is a precondition for survival; they arrange a world in which our existence is made possible. This applies to our belief in "things", natural laws and causality, the self, and even logic. In this sense Nietzsche's account of why we have the concepts we have, and which views we hold to be true, is naturalistic, rather like the position of Hume. Nietzsche says in the book *The will to power* that "Rational thought is interpretation according to a scheme that we cannot throw off." We become the prisoners of our "truths" and "knowledge": we forget they are fictions serving our survival, and instead of their serving our needs, we serve the "truths" and "knowledge" which we come to regard as more than

instruments of survival. The "truths" and "knowledge" were designed to fit us and our needs; once we lose sight of this the relation is reversed, and we begin to fit the "truths" and "knowledge". For Nietzsche this relation is particularly important in the area of human values.

That a view promotes certain interests and values is not objectionable in itself because every view does this in different ways. What Nietzsche objects to is the dogmatism he sees as inherent in the various metaphysical systems of the past, which suppose they can rise above perspectival interests and values and present to us a disinterested, non-perspectival, complete, view of things truly, as they really are in themselves. The philosophers' metaphysical systems, however, are really doing the same kind of thing as common sense: they are producing organizing schemata that reflect specific deep values and interests. This would be fine provided we realized what we were doing, because we are not obliged to accept the systems unless we want to accept those specific values as well, values which point to a way of life and an attitude to life. The notion that metaphysics seeks a non-perspectival value-free view of reality contains latent dogmatism because if the view is transcendentally universal and necessary, as it is usually claimed to be, then it demands of everyone that they accept it regardless of their specific perspectival view and values. But Nietzsche's point is that there are *only* perspectives.

Nietzsche objects to the claim that the metaphysical systems of philosophers are superior to common sense in being more true in the sense of corresponding to the true nature of reality: all views are equally false or fictions in *that* sense. Nietzsche does not defend common sense against the metaphysicians because it gives the truer view of reality, but on the grounds that it has, at least in the past, proved beneficial to life. He does not attack common sense because it is false or a fiction—not presenting to us the truth about reality in the sense of corresponding accurately to reality—but because it has now become inimical to life and harmful to that which is strongest and best in us. Nietzsche wishes to *replace* the common view of the world, not on the grounds that his view is truer in the sense of more accurately describing reality in the way that traditional metaphysics advocates— the common view is not therefore claimed to be *refuted*—but because his view supports certain values, attitudes and a mode of life which he wishes to advocate for the future development of man. His attempt to replace common-sense or herd views of the world and values with new views does not involve utterly overthrowing existing values, but he admits it is dangerous because the herd view has undoubtedly had survival value; the ushering in of new views is difficult and opens up the possibility of our destruction through disorder or harmful views.

It is sometimes suggested that Nietzsche is rejecting the correspondence theory of truth, whereby we suppose we can

accurately reflect an independent reality, and replacing it with a pragmatist theory of truth, whereby what is true is determined by the effects holding a conception has on the practical conduct of one's life and whether it thereby works. This, however, is most misleading if one thinks that Nietzsche's criterion for truth is the base utility of our views in the narrow sense of being practically useful. This would be greatly at variance with the whole spirit of Nietzsche's philosophical outlook. Nietzsche defends common sense because it has been shown to be motivated by serving specific values effectively—mainly practical values connected with survival—but that does not mean that a view has to serve *those* values, even if any view must serve some set of values or other. He is in fact arguing against the delusion that what promotes life guarantees truth in the sense of truths which must be agreed to by all.

It has been said that while Nietzsche ostensibly rejects the whole notion of views and theories of reality accurately mirroring, or failing to mirror, a world which is an independently ordered objective reality, he tacitly assumes a correspondence theory of truth in saying that common-sense views, and indeed all views, are in that correspondence sense false. Nietzsche is thus accused of inconsistency in that if all views are false in failing to correspond to reality, there must be some absolute standpoint which does correspond accurately to reality, compared to which all existing views are not true; so, in fact, not all views need be false. If, as Nietzsche says, error might well be a condition for life, and views that promote life are not thereby shown to be true, it suggests that there is some sense in which some theory might be true in reflecting reality more accurately. Be that as it may, Nietzsche wishes to undermine and replace the correspondence notion of truth with a notion of "truth" that is open about its being motivated by promoting some specific values or other, rather than claiming disinterestedly to pursue correspondence to an objective reality; and these values, and hence the associated "truths", need not be accepted by everyone. Nietzsche's claim is that we cannot rid ourselves of the values that motivate our "truths", which such "truths" in fact serve and which lead to our deciding what is "true". But it is arguable that because a view is shown to promote certain specific values, this is sufficient to show that the view cannot nevertheless just *be true* in the sense of reflecting reality.

Nietzsche does indeed present to us a theory in the "will-to-power" which is a view of the world; the world is the will-to-power, and nothing else besides. Partly he seems to do this in order to show that the world is such that no view of reality can ever be right if it claims the world has an objective order. But that seems to suppose some kind of correspondence notion of truth. However, he cannot consistently support his assertion that no view can accurately mirror reality by presenting an account of the world which gives just such

an account of reality. The will-to-power must be advocated on grounds other than that it mirrors reality accurately, and this is what Nietzsche does.

Nietzsche's view is that the world is a never-ending flux or becoming with no intrinsic order. The world comprises power-quanta whose entire *being* consists in the drive or tendency to prevail over other power-quanta. Power-quanta differ from one another entirely quantitatively, not qualitatively, and they should not be thought of as things; their entire *being* consists of their *activity,* which is their attempt to overcome and incorporate in themselves other power-quanta. Each power-quantum is the sum of its effects; it *is* what it does. Thus the world is a constant flux of struggle, but it is not a struggle between "things", it merely involves a constant variation of power-quanta. We too are part of this flux. Human beings are nothing more than complex constellations of power-quanta.

In saying that the world is the will-to-power, Nietzsche sees the will-to-power as manifesting itself in multifarious ways. But the will-to-power as such in its general form is fundamental, and manifestations are modes of it. In all sorts of ways in personal and social life we see the will-to-power manifest: in the drive to control, organize and overcome. To control and make manageable does not mean necessarily physical domination, although this is one manifestation of the will-to-power. Any attempt to bring under control our environment is a mode of the will-to-power, and one of the prime examples of this is knowledge itself. Knowledge is a will-to-power because within what we know we have a framework in which what we deal with is manageable by being organized, so increasing our power. By organizing under concepts of things and kinds of things we have something that we call the world under which we transform nature into something that is, in the broadest sense, mastered, its disorder overcome and under control.

Nietzsche is advocating a view of reality in which his perspectivism and his belief in the value of that freedom resulting from the creative capacity to give various interpretations are supported, he is not claiming a disinterested motivation. These new interpretations are not easily achieved, nor can they be gratuitously adopted, since they involve the adoption of values which fundamentally guide our lives and characterize who we are.

Nietzsche's view of the world has an affinity to that of the Presocratic philosopher Heraclitus, whom he admired. In such a world of universal flux it is certainly extremely difficult to see how any theory of reality which identifies as real certain permanent "things" which behave in certain ways could be anything but false and a gross simplification of a flux so complex and ever-changing that it defies any theoretical description at all. It is a world without objective order, so there is nothing for putative objective truths concerning reality to be

true of. Except in so far as it is trivially described as a world of constant change, it is a world in which no description can be objectively true at all. All views of reality which aim to be universally true presuppose some objective fixity, so any view which purports to be universally true of reality must be false if there is no such fixity. And it might be argued that a view like Nietzsche's, which merely asserts that there is no objective order, is no view of reality at all. Reality has no ultimate nature; that the world has a character is denied. Nietzsche is asserting that the world has no objective order; the denial that we can assert this without contradiction seems to amount to the assertion that it is a necessary truth that the world has an objective order— which surely cannot be right. There is nothing fixed for truths to correspond to. This leaves us free, although not frivolously so, to invent our own organizing systems, but not under the pretence that we are reflecting an already existing objective reality.

In rejecting the correspondence theory of truth, it must be emphasized that Nietzsche is not, I believe, giving a new *general* criterion of truth at all; that he is not arguing that one set of considerations is universally valid when deciding upon truth. That idea includes the rejection of both the correspondence theory and a generalized pragmatic theory which would impose one universally binding way of deciding on the truth. There is no universally valid criterion for truth, no single scale along which truth can be graded; but there are different views which serve or promote certain values and modes of life, yet all are "illusions" if they are required to be more than valid from a certain point of view. This is close to relativism, but not equivalent to the notion that one view is as good as any other. Some views are *better* than others from the standpoint of a certain set of values, interests, and attitudes to life, although they are not binding on all; it will certainly not be the case that one view will do as well as another for a specific standpoint; some "truths" will promote it, and some will be inimical to it. The view accepted is inseparably linked to the deepest values in life, the lives themselves, and who one is, and one cannot easily or flippantly swap one view or set of truths for another.

This, however, is not the only interpretation of Nietzsche's view of truth. Some commentators have argued that Nietzsche wishes to replace the correspondence theory of truth with a form of pragmatist theory; this is pragmatic value determined not by base usefulness but in terms of a more general criterion of power and control appropriate for those people of higher "rank-order", those capable of maximal power, control and creativity. Thus truth in the new sense can still be graded along a single scale, but this time not arranged in order of greater correspondence to "the facts" (which Nietzsche says do not exist apart from interpretations or views), but arranged in rank according to effectiveness of power and control.

Nietzsche famously proclaims that "God is dead", not so much because the belief that God exists is false—although Nietzsche thinks this is the case—but because God is a bastion for justifying objective values which must be valid for all. Nietzsche further wants to banish even the shadow of God from the world, that is, he wishes to banish the lingering effects of the belief in God from the world; for even non-believers still often act *as if* somehow there were a transcendent order of values outside the world, and as if this world were not the only world. He claims that it has not sunk deep into our consciousnesses, and our way of living, that this world is the only world—there is no world beyond. If we accept this, it profoundly changes the evaluations we make in and of our lives. It is Nietzsche's aim to present to us a transvaluation of all existing values for the new life, and a suitable world-view, for truly free spirits, for the higher man's potentialities. Thus Nietzsche's views are not advocated because of their more accurate mirroring of reality—because no view does that—or because they are universally valid; but because of their efficacy with respect to certain values and ways of life which Nietzsche believes in and wants us to consider.

Another way of putting Nietzsche's perspectivism is that all truths and knowledge about the world are interpretations: a mode of organizing our experience under concepts which give us a world-view with the condition that no such view can possibly be complete because it is dependent on qualifying reference to a point of view. Nietzsche does not object to any view because it is an interpretation; he objects only to the view being seen as more than an interpretation, whilst there are values it probably deviously and dishonestly promotes under the false banner of being the objective truth. This applies to the various systems of metaphysics, Kantian *a priori* categories, natural science, common sense, and even logic. What Nietzsche objects to is what are in fact interpretations down to their most basic constituents being viewed as other than interpretations and as absolute transcendental objective truths.

What underlies Nietzsche's position is a general attack on the whole notion of separating our theories about the world from the world itself. There are no facts but only interpretations, and no world left over once all interpretations are subtracted. Our theories, when considered in their entirety, cannot be compared with reality because there is no reality outside our interpretation which is not itself part of an interpretation. There is no neutral ground on which to stand whereby our interpretation can be compared with reality because to have a conception of reality with which an interpretation could be compared is itself to articulate an interpretation. So Nietzsche is not saying we always have *mere* interpretations, because the use of the word "mere" here suggests a comparison with something we actually have that is not a mere interpretation, compared with which mere interpretations

are shown to be "mere". Nietzsche denies that there is a view which is not an interpretation; he denies the existence of a non-perspectival, non-interpretative view that would alone make any sense, by contrast, of any view being *merely* or *only* an interpretation.

It might be suggested that there obviously is an interpretation-independent reality. But the response to this is that this view of the world is itself an interpretation. The obviousness of the view that there is an interpretation-independent reality made up of objective "things" of various kinds that behave in certain ways, and our inability to see it as an interpretation, both derive from the way that the view is deeply entrenched in our form of thinking and way of life; and this entrenchment manifests itself chiefly in the structure of our language. Our world-view is inherited in our language, and for this reason we have to use language self-consciously and critically. Deeply embedded in language is the notion of a "subject" to which "predicates" are applied, and we take this to reflect a metaphysical as well as a linguistic distinction. The structure of the language we use to speak about the world implicitly involves a metaphysics: it immediately leads us to talk of the world as containing relatively autonomous "things", which "causally" interact, which are observed by relatively permanent "selves". Indeed, the notion of "things" results from the projection onto the world of the fiction of the "self" (the "I" or "ego"); and the "self" derives from our linguistically requiring an "agent" whenever we speak of actions. We do not just say "think", but grammatically normally require a subject who does the thinking.

Rather like Hume, Nietzsche explains our belief in causally necessary connections through our acquiring it in a way that is rationally unjustifiable; the belief is rather a result of non-rational processes whereby through the observation of constantly conjoined events we acquire habits of association; there are no objective causal connections. The division of the world into recognizable repeatable events and things is the imposition of a fiction by us. No two things are ever really identical, and no two events the same; but we ignore differences in order to establish an order; and we are not refining our experience by this process, but rather coarsening it by making similar what is different. More sensitive creatures who refused to categorize under universal terms would have perished, for a simplified world is required for survival. We treat the world *as if* what is referred to in our concepts is real. But these organizing concepts are only psychologically *a priori*, not transcendentally *a priori* as Kant suggests.

Such concepts are rightly said to be irrefutable by experience; experience already presupposes them and is organized in accordance with them. But that does not mean, particularly with respect to our values, which we have inherited—our whole notion of a single scale for "good" and "evil"—that our entrenched beliefs cannot be *overcome:* they may not be refutable, but they can, perhaps with difficulty, be

*replaced* by something new. Philosophy has spent much of its energy finding a rational justification of existing values without first questioning the value of those values themselves.

We find it difficult to articulate any other interpretation of reality than our usual one because a metaphysics is embedded in the very language in which any other view is to be expressed. The same applies to values. It is not that Nietzsche thinks there is some ideal language which would free us from the common-sense or herd interpretation or metaphysics and give us a true picture of the world: a correct or true metaphysics. Rather we are to be freed from the tyranny of seeing *any views* as true in the sense of mirroring reality in order to release our powers to create new independent interpretations that are fashioned to suit what we value most in life; but we can do this only once we are released from pursuing the chimera of the absolutely true complete view of reality and universally correct system of values.

Another way of putting the point about all views being interpretations is that the old philosophical dichotomy of the appearance / reality distinction is eliminated; the "real world" goes because there is no single universal complete description possible; it cannot be formed from piecing together or summing various different views either. That does not mean we are left with the *merely* apparent world; "appearance" and "reality" are mutually dependent contrasting concepts, and once the "real world" goes, there remains no sense to the supposedly contrasted "apparent world", so that goes too. The apparent world *is* the world; the world as construed under an interpretation *is* the world. To suppose otherwise is merely tacitly to suggest that there is another view which is not an interpretation characterizing "the world" with which our supposedly mere interpretation could be compared; but there is no view that is not an interpretation; any other view would always be an interpretation too.

Nietzsche found it difficult to express his perspectivism because of the way that a certain view is already inherent in the language which we have to use to express ourselves. It seems as though in asserting perspectivism—that there are only interpretations of the world—that we admit that there is a real world which could be described in some way that was not an interpretation. This, it can be argued, is merely a grammatical point: only trivially are our interpretations different perspectives on "the world", because this notion of "the world" is utterly empty until an interpretation is submitted to fill it in; so there is no "world" to compare with all interpretations; take the perspectival interpretations away and "the world" vanishes. Truth and knowledge necessarily involve having a view; without a view involving certain basic concepts there is nothing for propositions to be true of, no world for us to know; but there are no concepts we have to regard as necessary and universally binding.

It is sometimes said that Nietzsche's perspectivist position is plainly self-refuting. For if all views are perspectives—that is, interpretations—then perspectivism must apply to itself, so perspectivism may be false. There are a number of complex discussions of this matter. Some critics are unable to see how self-refutation can be avoided. Others argue that perspectivism does not apply to all views, but only to "first order" views about the world, and it does not therefore apply to itself, which is a "second order" view about views. Still others argue that perspectivism is not self-refuting: perspectivism must admit that it is possibly false, but that is not the same as admitting that it is false; that it is false could be shown only by actually producing a view that was not an interpretation—one that is free from being motivated by, and independent of, specific values— and not merely by suggesting that a view which is not an interpretation is possible. Perspectivism, on this account, cannot claim that it is necessarily true, and that means it cannot claim that views which are not interpretations—which are objectively true—are impossible.

Nietzsche's perspectivism is not equivalent to relativism if relativism is construed as saying the world has more than one character and there is no way of choosing between various complete views of that world; perspectivism denies that the world has any character independent of interpretations, and that any view could possibly be complete or exhaustive. Perspectivism also holds that some views are better than others on the grounds that they are more fitted for certain purposes, promoting the way one wishes to live one's life and the values one holds most deeply about life, but these values are not universally applicable to all individuals of different sorts at all times and places; they are not "better" from all points of view. Nietzsche rejects the positions which suggest that there are views of the world and systems of values that are binding on everyone equally. He also rejects the notion and pretence that truth can be pursued in a disinterested fashion. The view that there is one truth, and one system of values, is itself a view which is intended to promote—although it may do so covertly and even deviously—certain values which involve holding back more creative and courageous spirits who want to counter the idea of universal truths and values themselves. Thus the advocation of universal truths and values binding on all is itself one manifestation of the will-to-power, to control; but it is also a sign of weakness; for the belief in universal objective views and values binding on all itself manifests the lack of power or strength and creativity—unlike the "highest type" or "free spirits"—to transfigure the world with new views and interpretations of one's own and sustain those views and interpretations without the support of a belief in their being universal and absolutely objective.

It can clearly be argued that, far from leading to an advocation of

domination and tyranny, Nietzsche's position that there cannot be objectively true or false values suggests that each person must now go away and find his own way, do his own work—as Zarathustra suggests at one point—and Zarathustra tells of one way which gives new meaning to the world. As Nietzsche writes in *Thus spoke Zarathustra,* at the end of Part I:

> I now go away alone, my disciples! You too now go away and be alone! [...] Truly, I advise you: go away from me and guard yourself against Zarathustra! [...] Perhaps he has deceived you [...] One repays a teacher badly if one remains only a pupil [...] You are my believers: but of what importance are all believers? You had not yet sought yourselves when you found me. Thus do all believers; therefore all belief is of so little account. Now I bid you lose me and find yourselves; and only when you have all denied me will I return to you.

In *Ecce homo,* before quoting from the above passage of Zarathustra, Nietzsche points out that these words are "Precisely the opposite of that which any sort of 'sage', 'saint', 'world-redeemer' and other *décadent* would say in such a case...He does not only speak differently, he *is* different."

However, there is the possibility that pursuing my own way, such as that involved in the way of the *Übermensch* (Superman) depicted by Zarathustra, could involve the subservience of others, in particular that of the "herd", who have a slave mentality in that they need masters to lead them, and who lack the creative power to generate and sustain their own new views. Nietzsche indeed seems to suggest that such subservience is required.

There are two central notions in Nietzsche's world-view: the will-to-power and eternal recurrence.

The doctrine of "eternal recurrence" has its origin in the idea that the world is infinite in time, but finite in space or energy, and therefore states are bound, given sufficient time, to repeat themselves. Thus *this* world is our eternity. Although Nietzsche does seem to have believed in "eternal recurrence" as a scientific cosmological theory, the importance and main grounds of the view lie not there but, rather, in its power as a myth whereby our decisions are concentrated on this world; we had better be authentic and true to ourselves, and not wasteful of our lives, for this is the only life we have and we are destined to repeat what we choose for eternity. We must free ourselves of the attitude carried by the belief that this life is a "waiting room" for something else. There is nothing beyond, no life beyond, which would compensate for, or relieve us of, the weight placed on our choices in this life. To carry this burden is to support the values of strength and independence, and not to view this world as inferior: this is *amor fati,* a yea-saying to life.

These views are *better* because of their fecundity in promoting a certain way of life. But this notion of better does not apply with absolute universality. The life is that of the "Superman" or *Übermensch,* as foretold by Zarathustra. This is the life of the "Beyond-Man" or "Overman" who sees all *views* as interpretations, and is released as a free spirit to transfigure the world according to newly created "truths" and values which are his own, and he has the strength or power to do so. The notion of the *Übermensch* as creator involves the idea of creating one's own self. Now we are, of course, free to accept this view or not. If we wish to embrace the values of strength and enhance our feeling of power and control as free spirits, then Nietzsche commends to us the will-to-power and eternal recurrence as "truths" to live by. Previous interpretations have outlived their usefulness and have become constraining and inimical to the exploration of new interpretations that would transform or transfigure our world-view. Once we see common sense, and indeed any view which seems more than an interpretation, *as* an interpretation, we are liberated to explore, and will feel we should explore, other ways of viewing the world. Nothing could be more stultifying to pursuing other ways of viewing the world than the belief that one has found the final correct, complete, view; the pursuit of other views will in such circumstances, as with much metaphysics, carry no conviction and will be seen as a mere game played away from the only correct view. But once the notion of an absolutely correct view, and even its pursuit, is abandoned, the exploration of alternative modes of interpreting the world cannot in this way be deleteriously compared. This mode of viewing the world— that all views are interpretations from a perspective—commends itself to those who have the strength to break with habit, custom, the belief in absolute standards, and to produce their own views, suited to their own values and purposes, which in turn will fundamentally characterize who they are. One cannot separate the basic beliefs and values one holds, and what one does, from who one is, but thereby who one is can be changed; and Nietzsche praises those who have the strength to give themselves laws and so create themselves.

The will-to-power, both as a view of the world as one of ontological flux with no objective order, and as an account of the drive behind knowledge itself, undermines the idea that knowledge can be a disinterested activity separable from specific values; knowledge is rather a means to support specific values. The doctrine of eternal recurrence emphasizes the weight of the choices we make in our new-found freedom as free spirits who have the strength creatively to transfigure our world with new truths and values in a way that has no end.

# CHAPTER EIGHT

# *Analytical philosophy: Russell, Wittgenstein*

Analytical philosophy refers as much to a method as to a body of philosophical doctrine. It is extremely difficult to give a unifying characterization of analytical philosophy that picks out what is common to all its instances. It was regarded as revolutionary; but it is questionable whether the new philosophy really marks such a discontinuity from what came before.

Analysis is a process which aims to elucidate complexes by reducing them to their simpler elements and the relations between those elements. This can apply to complex concepts, entities, or philosophical problems. In analytical philosophy, the analysis is characteristically linguistic. It is done through analyzing the language in which a complex philosophical problem, say, is expressed; perplexing complex philosophical concepts are dealt with by resolving the complexes into what are logically equivalent related simple constituents, which can be better understood.

The origins of analytical philosophy lie in work done in the latter half of the nineteenth century and the beginning of the twentieth century on logic and the foundations of mathematics. This work involved the construction of a new and powerfully expressive formal logical symbolism. Much of this work was carried out independently by the German logician Gottlob Frege (1848–1925). The culmination of the work in England was *Principia mathematica* (1910–13), written jointly by Bertrand Russell and Alfred North Whitehead (1861–1947). The motivation for this work was the rejection of psychologism, and indeed all forms of naturalism, as providing a foundation of mathematical truth; the new view embraced objective logicism concerning mathematical truths. What this amounted to was the attempt to show that mathematics was reducible in principle to the propositions of logic. The philosophical significance of this is that

mathematical truths were shown to be independent of human thought, such as structural features of our way of thinking, and were absolutely necessary objective truths. This meant that mathematical truths were, contrary to Kant's view, independent of whether they expressed even essential features of human thought. Nor did such mathematical truths express extremely general empirical facts as John Stuart Mill (1806–73) suggested. Mathematical truths were shown to be necessary and objective because they depend only on certain basic rules of logic which hold independently of mind or the empirical world. The new logical language is formal in that the rules governing its terms are known exactly; it is powerful in that, unlike traditional Aristotelian logic, it is able to express an enormously richer range of meanings. Aristotelian logic, which dealt with the relations between classes, is shown to be only a tiny fragment of the new logic, which could deal with whole propositions and the internal structure of propositions.

Analytical philosophers saw in the new symbolism a way of tackling old philosophical problems. The new logic delivered an ideal or perfect language which was at the same time powerful enough for the formulation of propositions and arguments previously only expressible in ordinary everyday language. Ordinary language developed for purposes which mean it is ill-suited for the expression of philosophical concepts and problems. The precision, clarity and unambiguity that were possible in the new logic promised to give a way of reformulating philosophical problems so that their solution would become apparent, or the original problem would simply disappear as a pseudo-problem—this perhaps describes the essence and promise of analytical philosophy. Even those philosophers who did not actually reformulate the propositions of philosophy, and the propositions of science and common sense, into formal symbolism saw that the ordinary language in which the propositions were expressed could be systematically misleading, and that we must logically analyze the propositions into their underlying logically related constituent parts to understand what they really mean, if they are meaningful at all, so better to assess how their truth or falsity might be discovered. This process of analysis chiefly involves revealing the underlying structure, or logical form, of propositions in everyday language so as not to be philosophically misled by the apparent grammatical structure. The apparent linguistic structure can be misleading because it can be taken as mirroring structures in the world; but there is no reason why this is necessarily the case. The *logical form* expresses only what are the essential or common features of apparently different linguistic expressions, thus characterizing all expressions of the same given sort. A simple example is "The flower is red" or "The book is red", which can be expressed as "*a* is *F*" and "*b* is *F*"; the common logical form is "*x* is *F*", or more concisely "*Fx*".

For example, if we take the proposition "I see nobody coming down

the road", we might be tempted to think "nobody" functions grammatically as a proper name and names someone, in the same way that in "I see Alan coming down the road", "Alan" functions as a proper name and names someone. If we take the example of the proposition "Numbers can be both odd and even", we might think that "numbers" functions in the proposition in just the same way as "tables" does in "Tables can be both large and small", and so assume that there must exist things called "numbers" in the same way that there exist things called "tables". Philosophical problems might then arise in deciding in what peculiar sense numbers exist.

Often it is the case that the surface grammatical form is not the same as the underlying logical form. In everyday use this rarely matters; but if we are asking philosophical questions, we can be misled not only by ambiguities of sense but also by what the grammatical form apparently implies; we thus misunderstand the philosophical implications or philosophical meaning of the proposition. This misunderstanding can be brought out by revealing the logical form of the propositions, which is to say that all that is ambiguous and grammatically misleading is removed. We then understand what kind of philosophical problem, if any, we are still really confronted with.

Analytical philosophy is characterized by an awareness of the need for self-consciousness in the use of language as the vehicle of human thought about the world. In its less ambitious moods, analytical philosophy has sought to clarify through pre-emptory analysis philosophical problems, and to show that some were only problems at all because we were misled by language, but some philosophical problems remain genuine. In its more ambitious moods, analytical philosophy has sought to show that all philosophical problems are illusory pseudo-problems which originate in our being misled by the language in which they are expressed, resulting in misunderstanding. The former position is more characteristic of Russell and the latter of Wittgenstein. Russell saw the new logic as an ideal language which in philosophy could sometimes replace the vagaries of ordinary language. Wittgenstein saw the new logic as revealing the essential structure of ordinary language itself; ordinary language was in logical order, but this needed to be shown through logical analysis.

The account so far presents mostly the negative or destructive side of analytical philosophy. For philosophers who think that logical analysis reveals all philosophical problems as pseudo-problems, the negative side is all there is. For others there is also a positive or constructive side. If ordinary language is misleading in philosophy, then it has led, among other things, to bad metaphysics. For example, the subject-predicate structure of ordinary sentences has led to our positing the existence of all kinds of puzzling entities apparently denoted by the subject-terms of propositions. In this way we

misconstrue the true nature of reality by supposing certain things must exist which need not. The positive side of analytical philosophy is that if we display the true logical form of propositions through a full analysis, rather than disposing of metaphysics, we also produce a true metaphysics: in our new language we *do* reveal the true essential nature of reality, that to which we are ontologically committed whatever else we might suppose is real. The displaying of logical form involves making explicit, behind the apparent structure, what is the implicit but true structure.

Ordinary language contains, chiefly inherent in its structure, implicit metaphysical assumptions. We can either clear these assumptions away and conclude that there are no metaphysical problems left, or we can clear the assumptions away to reveal a true metaphysics: a description of the essential structural features of reality. In Russell and Wittgenstein, in rather different forms, this metaphysics is that of logical atomism. It can be supposed that analysis must come to an end somewhere: if complexes depend, in a general sense, upon related simpler elements, we must, if we are not to embark on an infinite regress, reach ultimate elements which cannot and need not be further analyzed.

Generally speaking, Russell's interest in analysis is epistemological: complexes are better understood and our knowledge of them secured by their analysis into better understood elements with which we are most directly acquainted. Sentences with complex meanings, if they are to be understood, must be composed wholly of constituent atomic meanings which are understood through their reference to atomic entities with which we are directly acquainted. The tendency of Wittgenstein's thinking is metaphysical: he thinks that there simply must be such atomic elements in order to make the understanding of everyday language possible, but not that we need to be directly acquainted with such elements.

We can bring to the surface what is implicit under the grammatical structure of ordinary language: by complete analysis we can reach the ultimate logical form or true structure. Complete logical analysis reveals the logical form, not of any particular proposition expressed in ordinary language, but of the essential structure, or the minimal conditions, for any language capable of representing or describing the world at all. Full logical analysis reveals what must be common to any possible language capable of representing reality; in that way the logical analysis also reveals what must be common to any possible world; it displays the essential nature of reality. Logical analysis is required because we cannot assume that the structure of everyday language reveals the essential nature and ultimate constituents of reality as a whole; for that we must look to the essence of language and leave out what is accidental and inessential. The absolutely minimal structure for any language capable of describing the world or reality at

all must also reveal the essential structure of the world or reality itself. It does not reveal contingent features of the world—those are to be discovered by science—but it reveals the logically necessary minimal features of any reality or any world by revealing the necessary minimal features of any language capable of representing any reality or world. Philosophy cannot reveal, for example, what are the facts, but it might reveal that the world is ultimately constituted of independent facts. Language has a structure; the world has a structure; the essential structure of language which is the condition for its being capable of mirroring reality at all must be the same as the essential structure of reality, because without this similarity of structure language could not mirror the world at all. What kind of minimal entities a fully analyzed language requires to function meaningfully are the ultimate entities of the universe. What can be represented or described in language pared down to the logical minimum of descriptive power, beyond which it is logically impossible to go, is what must be part of reality; much else may be a reality, but need not be. If language derives its meaning from its relation to the world, then what must be the case about reality, if language descriptive of reality is possible at all, is what is essential or common to all possible real worlds, however else they may differ. But this conclusion can be interpreted variously: it is unclear whether we have revealed the structure of any possible reality or only any reality that is describable.

## Russell

Bertrand Russell (1872–1970) was born into an aristocratic family; his father was the son of the first Earl Russell. His life was eventful and often controversial, and he is notable among philosophers, mainly because of his public activities and his social and ethical views, in being extremely well known even outside philosophical circles. He was noted for the analytic sharpness of his intellect and wit. He was a passionate advocate of reason and debunker of superstition; we should seek out evidence for beliefs no matter how much this might mean abandoning beliefs we may wish to be true. He came to recognize the limits of human certainty and the limits on attaining timeless impartial objective knowledge of the world. After his early years Russell was an atheist, and regarded the existence of God and personal immortality as at best mere logical possibility, and belief in God as generally harmful as well as false. The evidence for a belief in the existence of God was totally insufficient and must therefore be regarded as false. As a boy he was educated privately at home. He took an early interest in mathematics, and in 1890 he went up to Trinity College, Cambridge, to study mathematics. He soon became interested in philosophical matters through dissatisfaction with the

foundations of mathematics. He became a Fellow of Trinity College in 1895.

In 1912 Wittgenstein came to Cambridge from the University of Manchester to study with Russell the foundations of mathematics. Russell was impressed by Wittgenstein, and was greatly influenced by his early work. Russell was briefly imprisoned for his pacifist activities during the First World War. In 1931 Russell became Lord Russell when he succeeded to the peerage. In 1938 he moved to America, teaching at the University of Chicago and the University of California in Los Angeles. In 1944 he returned to be re-elected Fellow of Trinity College, Cambridge. In 1950 he was awarded the Nobel Prize for Literature. His last substantial philosophical work, *Human knowledge: its scope and limits,* appeared in 1948; but he was disappointed by the poor attention it received; this he put down to the rise of ordinary language philosophy and to Wittgenstein's later approach to philosophy, which differed sharply from Russell's; he regarded both as largely misconceived. In the last part of his life Russell had an increasingly high public profile by becoming embroiled in social and political issues. His outspoken opinions on private and public morality caused considerable opprobrium to be heaped on him. Russell died at the great age of ninety-eight.

In his early thought Russell swiftly moved through two diametrically opposed philosophical positions: Hegelian absolute or monistic idealism and extravagant pluralistic realism. He then moved to a third view that was supported by a belief in analysis and the process of logical construction: parsimonious pluralistic realism—this he held in various forms from then on.

Russell started with Hegelian monistic idealism, which holds that the world is essentially mental and apparently independent facts are really imposed abstractions which cannot really be characterized or understood in isolation, but can be properly understood only in relation to the whole of reality. Initially Russell was a convinced advocate of Hegelianism. But the Hegelian denial of external relations made mathematics impossible, since the terms of mathematics could not then be characterized in isolation. The denial of external relations, and the consequent doctrine of internal relations, amount to a rejection of ultimately independent facts and entities in the universe; any relation between facts is reducible to properties of each fact concerned and ultimately the whole which they form; in this way no fact can be fully conceptually characterized in isolation and the characterization must eventually expand to the only independent and therefore fully real entity: the universe as a whole. It followed from this doctrine that no proposition concerning less than the whole universe could ever be wholly true. Russell rejected monistic idealism, not only because it undermined mathematics, but also because he thought it was plain that propositions were true because they

corresponded to individual facts alone by expressing the structure of the relation of the constituent elements of the facts. Monistic idealism also makes any philosophical analysis into intelligible simple or atomic entities impossible, because one cannot understand the constituent elements in isolation but only after one sees how they fit into the whole.

The rejection of monistic idealism moved Russell to a form of extravagant realism where all the apparent references of propositions have being in some extralinguistic way. It involved adopting a form of Platonic realism. This applied to mathematical truths and concepts: the necessary truth of mathematical propositions derived from their describing the timeless relations between immutable entities which do not exist in physical space. But that such things as numbers existed in some Platonic heaven eventually offended Russell's intuitive sense of reality.

This leads to the final position which in various forms Russell held for the rest of his life: parsimonious pluralistic realism. It amounts to the view that the world consists of a plurality of independent elements, but that many apparent entities are "logical fictions" that are really constructs of other simpler elements. Through the notion of logical construction, entities whose existence is doubtful or problematic can be replaced by entities whose existence is more certainly known and better understood. The view applies a version of Ockham's razor: "Whenever possible, substitute constructions out of known entities for inferences to unknown entities." The three important areas to which Russell applies this principle are mathematics, physical objects, and mind. The purpose of this is in part metaphysical and in part epistemological, and it is sometimes difficult to disentangle the two; the former concerns what there is, the latter our knowledge of what there is—and these matters are, however, distinct.

As far as knowledge of entities, as opposed to knowledge of truths, is concerned, Russell holds that we can know with greatest certainty the nature and existence of those entities with which we are most directly acquainted; knowledge of the nature and existence of all other entities, where a reduction to entities with which we are directly acquainted is not possible, will involve some kind of inference from those entities with which we are directly acquainted. This inference will involve various degrees of certainty, and our aim should be to see how certain this inference is in various cases. The way of making the belief in certain entities most secure is logically to reduce everything we wish to say about the doubtful entities to propositions concerning entities about which we have less or no doubt. On the one hand this has the epistemological purpose of revealing what justification, if any, we have for asserting the existence of entities with which we are not directly acquainted; on the other hand it might have the metaphysical

purpose of suggesting that if statements about entities with which we are not directly acquainted can be reduced without loss of meaning to propositions about entities with which we are directly acquainted, it is the entities with which we are directly acquainted which are the basic elements of the universe. Thus among knowledge of things we must distinguish between "knowledge by acquaintance", where we have knowledge of things by direct awareness of the things concerned, without any intermediary inference or knowledge of truths being involved, and "knowledge by description", where we have no direct awareness of the things concerned, but have knowledge only by inference from direct awareness of intermediary things and knowledge of truths. There is no state of mind in which we are directly aware of the things known by description; all knowledge of such things is really knowledge of truths concerning those things; we never know the actual things themselves. Russell's considered position is that what we can justifiably claim to know about posited entities irreducible to objects of immediate acquaintance is inferred from entities with which we are immediately, non-inferentially, acquainted. Thus we have knowledge by description of such physical objects as tables, which it is possible to doubt exist, through our direct acquaintance with sense-perceptions, which it is not possible to doubt exist. The logical reduction to objects of direct acquaintance does not show necessarily that such reduced entities do not exist; it shows merely that we are not committed to their existence; we can say everything we want to say without mentioning them. If we honestly examine our experience, the objects with which we are directly acquainted are not continuous invariable physical objects but the discontinuous variable immediate data of sense-perceptions and introspection. At one time Russell included ourselves and universals as objects of direct acquaintance. With universals included as objects of acquaintance it is easy to see how propositions could be made up of elements with which we are acquainted. The key general point is that understanding and knowledge of propositions describing entities or states of affairs with which we are not directly acquainted must be composed wholly of elements with which we are directly acquainted.

The following general characterization can be given of Russell's mature philosophy. There are two kinds of truths: logical and mathematical truths, and factual truths. Logical truths are necessary and can be known to be true *a priori,* since the truth of such propositions is independent of any facts about the world; such truths are tautologies; tautologies are true because of their intrinsic logical form and regardless of content. A proposition is a tautology if it always comes out true regardless of the truth or falsity of its constituent parts; because of this it can tell us nothing about the world; it is devoid of factual content, since it remains true regardless of the truth or falsity of any propositions stating facts about the world; such a proposition is "*p*

or not-*p*". There is no *a priori* way of proving the existence of anything. The world consists of a plurality of logically independent facts. Factual truths are contingent and can be known to be true only *a posteriori*, through experience, since the truth of such propositions depends on their corresponding to non-necessary facts about the world; such a proposition is "*p* or *q*". If facts are complex, then sentences are true if they express the relation of the constituent parts of the complex facts. All non-logical truths are true in virtue of their accurate correspondence with some independent extralinguistic fact about the world, and are false otherwise; and such facts can logically stand in complete isolation from any other facts and the universe as a whole. Some facts about the world we know directly, without inference, and some only by inference from facts we do directly know. Our knowledge of facts that we do not know directly, if they cannot be logically reduced without loss of meaning to facts that we do know directly, depends on inferences from facts that we do know directly by principles of inference that are non-demonstrative. No deductive or demonstrative relation exists between ultimate matters of fact, since it is logically possible—it implies no contradiction—that an isolated fact could be the case although the rest of the universe has been extinguished. If deductive relations existed between matters of fact they would be necessarily connected; but, properly analyzed, facts are never necessarily connected. That facts can appear to be logically dependent arises from our putting together two facts as if they were one fact. From "*A* and *B* are men" it logically follows that *B* is a man; but from the truth "*A* is a man" alone we cannot deduce anything whatever about *B*. Russell sharply differentiates between truth and knowledge: between a truth and verification or proof of that truth. Primarily, beliefs, and derivatively propositions, are true in virtue of objectively and correctly corresponding to the facts. A belief or proposition just *is* true if it corresponds to the facts, regardless of whether anyone knows or could know it to be true by its actual verification, and regardless of any other beliefs or propositions thought to be true. The fact in virtue of which a belief or sentence is true is called its verifier. Russell is adamant that there are many true beliefs that no one will ever know to be true; what is true is not limited by our capacity for knowledge of truths and powers of verification. Increasingly he was forced to admit the perspectival nature of our knowledge, and our inability to attain complete certainty, impartiality, and objectivity divorced from our point of view; nevertheless, such an objective point of view should be our aim so we can mirror the world with as little distortion as possible.

Russell clearly rejects both the pragmatist theory of truth, where a proposition is held to be true in virtue of the satisfactory practical consequences in relation to our experiences of its being accepted, and the coherence theory of truth, where the truth of a proposition is

dependent on its consistency with other propositions which form a complex system. Truth, apart from in logic and mathematics, consists of a relation to non-linguistic facts that are in general non-human.

In the philosophy of logical atomism Russell argues for a metaphysics in which the world consists ultimately of logically atomic objects or particulars qualified by properties or standing in relation; these are atomic facts; logical relations between atomic facts form complex facts. Particulars are logically independent; there is no logical impossibility involved in saying the universe might consist in one particular. Thus the truth of any complex proposition concerning a complex fact depends on whether it correctly describes the relation of the elements of the complex fact. Complex propositions are compounds which depend for their truth or falsity on the truth or falsity of their constituent parts: they are truth-functional compounds of atomic propositions. So there must be ultimately simple objects whereby analysis comes to an end. The ideal logical language would clearly show what was simple and what complex. The simplest objects are those that can only be denoted by logically proper names; that is, names that have no hidden descriptive content which would imply the objects named have parts. The meaning of a proper name is fully given by an acquaintance with the particular named. Either a logically proper name names a particular or it has no meaning. The simplest of atomic facts would be stated as *"Fa"*, where *"a"* is a logically proper name qualified by a predicate *"F"*, or *"aRb"*, which expresses the relation between atomic objects *a* and *b* which have the logically proper names *"a"* and *"b"*. This gives a logical definition of what particulars would be; whether there are any is another matter.

The only logically proper names which are guaranteed meaning, because they cannot fail to have a reference, seem to be the demonstratives "this" and "that", which refer to the smallest perceptibly distinguishable part of a sense-datum (a minimum sensible); that is, they must refer to an absolutely simple part of the immediate present content of our sense-experience; thus we might have the atomic fact "This is white" if this means the minimal sensible sense-datum of my immediate sense-experience. But a consequence of this would be a vocabulary private to the speaker and shifting in meaning, for "this" and "that" would mean different things for different speakers, and different things for the same speaker at different times, since "this" and "that" refer only to the minimal content of experience at a moment. A molecular proposition is a truth-functional compound of atomic propositions, such as *"Fa* and *Gb"*. Such qualified proper names as *"a"* and *"b"* either name an object or are not meaningful at all. Logically proper names do not name physical objects, since they are complex. The names of physical objects might cease to be meaningful if the complex physical object named ceased to exist through its disintegrating; such names can be replaced

ultimately by descriptions of atomic facts that describe sense-experience.

Later Russell came to see problems with logical atomism and to think that whether there are atomic facts and objects which are unanalyzable was a question which did not need answering, and the lack of an answer did not detract from the value of analyzing complexes into constituent parts.

Russell maintained a deep respect for the findings of science; whatever doubt we may have about the details of the discoveries of science, he thought that the scientific view of the universe, particularly as derived from the most basic science of physics, was essentially true. The existence and nature of the world or reality are almost entirely non-human, and are quite independent of mind, modes of cognition, or capacity for knowledge. Fundamental features of the world are not in any way dependent on concepts contributed by mind. Most of the universe is governed by laws in which the mind plays no part, and in which mind—in particular the human mind—occupies only a tiny fragment of space and time. How we know is itself only a small part of what we know; otherwise, Russell says, we would be inclined to think that the mind in some way determined the nature of the world. Russell accepts that there might be things we cannot know. These views fit with Russell's rejection of idealism, including the philosophy of Kant, and also of some tendencies of empiricism.

This connects with Russell's attitude to extreme scepticism, as practised by Descartes. Russell, although initially sympathetic to scepticism because he saw it as a way of discovering certainty, came to think no progress can be made from the starting point of extreme scepticism. He is not an insincere sceptic who would reject beliefs that no one acquainted with the current state of knowledge could seriously doubt; we should accept the best current knowledge of the time unless we have specific reasons for rejecting it. Scepticism can, however, be useful as a methodological device to see how many assumptions can be eliminated as unnecessary, so making our knowledge more secure by eliminating the number of assumptions required to be accepted. This attitude to scepticism amounts to an admission that extreme scepticism cannot ultimately be refuted; but Russell also denies there are any grounds for thinking it true. It is logically possible that the whole universe came into existence five minutes ago with our having false memories apparently of a time before that; everything now is as it would be if the universe had existed before that time—there is no way of showing such a hypothesis to be impossible. There would be no way of proving that it did not exist earlier; indeed all the evidence would point the other way. That scepticism cannot be ultimately refuted does not mean that its grounds cannot be minimized; it is just that it is logically possible that it is true. The only way of giving an absolute

refutation of any position, including extreme scepticism, is by showing that it involves a logical contradiction and is hence logically impossible; this often cannot be done. But that does not mean any view that cannot be shown to be logically contradictory must be equally believed to be true. Intellectual honesty demands that reasons or evidence for and against should be the overriding consideration in deciding what we do and do not believe. Russell reduces, in his later work, his expectations as to how much certainty is possible. Essentially his view is that absolute certainty of the sort that would satisfy exaggerated scepticism exists only with respect to logical truths (and only then because they are contentless tautologies) and with respect to our awareness of the immediate content of our minds; elsewhere absolute certainty is impossible and doubt logically possible.

Russell was convinced that much bad philosophy was a product of a naive acceptance of the structure or syntax of ordinary language as reflecting the structure of the world. The ambiguity of the vocabulary of ordinary language produces additional but less profound difficulties. Language could display the metaphysical structure of reality—the logically basic, or essential, features of the world—but only if the language in question were purified of the accidental accretions which lead to unwarranted metaphysical commitments. The purification of ordinary language is carried out by displaying the logical form buried in the grammatical form of ordinary language. Otherwise we find ourselves ontologically committed to some entities having some kind of being which both is problematic and which leads to paradox. The purpose of constructing such an ideal language is to eliminate unnecessary assumptions as to the existence of certain entities by paraphrasing expressions which denote those kinds of entities and seem to presuppose their existence in expressions which do not contain such a presupposition. The question of whether such entities actually exist is not a matter that can be settled by logic alone; but we are not committed by our language to supposing that such entities must exist.

An application of this idea, and of logical analysis, can be seen in Russell's theory of descriptions. Russell assumes that the meaning of a name is to be identified with the object that it denotes; he also assumes that if we have a meaningful declarative sentence, it must be either true or false. Take the proposition "The present King of France is bald", when there is no King of France. This obviously seems to be a meaningful declarative sentence. By a denoting phrase Russell means an expression of the form of "the so-and-so". If a denoting phrase such as "The King of France" functions as a name, and expressions in which the phrase occurs are to be meaningful, we seem to be committed to the existence, in some sense, of an object named by the denoting phrase. Moreover, any proposition in which a predicate is ascribed to a subject would seem to involve the implication that there is an object

which the subject term denotes. Indeed decidedly paradoxical results arise where we wish to deny the existence of objects; if "X does not exist" is to be meaningful, "X" must denote an object, so we seem to have to suppose that X after all has being in some way. The way Russell deals with this problem is with his theory of descriptions. He denies that definite descriptions function as names; so for them to contribute to the meanings of propositions in which they occur there need not be objects that they denote. The temptation to assume that there must be an object which a definite description denotes is removed by making explicit the implicit assumption and paraphrasing the propositions so that the definite description does not occur.

Thus the full and correct analysis of "The present King of France is bald" is a conjunction of three propositions:

(a) There is a King of France
&
(b) There is not more than one King of France
&
(c) There is nothing which is both King of France and is not bald.

More formally this can be stated as follows:

There is an $x$ such that

(a') $x$ is now King of France
&
(b') For all $y$, if $y$ is now King of France, $y$ is identical with $x$
&
(c') $x$ is bald.

This shows that although the whole original proposition, "The present King of France is bald", is meaningful, there is thereby no need to find oneself committed to assuming the existence of any object denoted by the subject term of the proposition. The analysis enables us to affirm or deny what was merely assumed, that there exists an object denoted by the subject term of the original proposition. It also maintains the principle that all meaningful declarative sentences must be determinately true or false, because the whole original proposition is false. The whole original proposition is false because (a) is false, that is, (a') is false for every value of $x$, and if one of a set of conjuncts is false, then the whole set is false. If the King of France did exist but was not bald, then the whole original proposition would be false because (c) is false, that is, the conjunction (a') & (b') & (c') would be false for every value of $x$, while (a') & (b') was true for some $x$.

Russell's logical constructionism involves the construction wherever possible of the world from those items with which we are directly acquainted, unless we are forced to do otherwise. This means that entities $X$ can be constructed out of entities $Y$. The principle of this *logical* construction proceeds through showing that all sentences about

*X*s can be translated without loss of meaning to sentences about *Y*s; the direction of the construction always involves the construction of those entities of whose existence and nature we are most doubtful out of those entities about which our knowledge is least doubtful and most secure. This attempts to give greater security against doubt to beliefs concerning the nature and existence of entities.

Russell applies this idea to mathematical truths; here the aim is to minimize the number of truths that have to be accepted without proof, and the number of entities that need to be postulated. The aim is to show that all mathematical truths can, in principle, be stated in terms derived from logic alone. Mathematics seems to refer to various problematic entities—for example, numbers; but numbers are not empirical entities and do not seem to be in space or time at all. It is extremely unclear, in that case, what sort of being such entities can have. The strategy here is to define numbers in terms of classes: the number one is the class of all classes in which any member is identical with any other member; the number two is the class of all classes of couples, and so on. We must note that the number of members a class has is defined in a non-circular manner using the notion of "similarity" of classes where there is a one-to-one relation which correlates the members of the one class each with one member of the other class. Thus the need to posit problematic entities outside space and time is avoided, and we can think of numbers as classes of classes of unproblematic entities. In the end Russell came to accept reluctantly Wittgenstein's view that mathematics consisted of tautologies; he was reluctant to do this because it destroyed the idea that mathematics was a system of certain discoverable eternal truths about a non-human world beyond the uncertainty concerning the world revealed by the senses. The conclusion is that the interest of mathematics for us derives entirely from our limited intellectual power, and its truths would to a mind of sufficient power be as trivial as 2+2=4.

The same logical constructionism is applied to our knowledge of physical objects and mind. Russell's convictions with respect to our knowledge of the world are basically empiricist, but he accepts certain limitations to empiricism; experience alone is not sufficient to justify many of our non-logical knowledge claims. He accepts that our knowledge of the world must be through experience, while at the same time he holds that certain of the suppositions required for such knowledge, given the range of what we wish to claim to know, cannot be justified by experience. If strict empiricism were followed, we would seriously have to limit our claims to know by being unable justifiably to go beyond the information we strictly immediately experience. Either what we normally claim to know we do not really know, or we must accept certain principles not justifiable by experience in order to claim such knowledge.

Russell accepts the traditional view that we do not directly experience physical objects; rather, we directly and indubitably experience private objects, actual sense-data and possible sense-data—sensibilia—which are not thereby necessarily something mental, and it is from these that physical objects are to be either constructed or inferred. This is because when we say we are perceiving a table, we and other people perceive different things depending on things about us (our position, for example); since there is no reason to show favouritism and say that any one of the perceptions *is* the "real" table (its real shape or colour, for example), what we actually perceive cannot be the real table itself, but must be something else.

Initially Russell adopted a dualism of mind and matter and a triadic structure for our sense-perception. In any act of sense-perception there are said to be three elements: act, content, object. By "act" is meant the subject's act of awareness; by "content" is meant the private sense-data of which the subject is aware; by "object" is meant whatever is the cause of the sense-data. The problem that immediately arises is how one is to justify the belief in the existence of public physical objects if one is never directly aware of them. This problem, along with the fact that the supposed act of awareness, as distinct from what one is aware of, is also never a datum of experience, led Russell to adopt a form of neutral monism. This view accorded, Russell believed, more exactly with modern science. According to this view, neither matter nor mind constitutes the ultimate stuff of the universe (neither are substances); both are logical constructs out of something more fundamental: events. Events are analyzable into qualities in some space-time region, space and time being constructs out of relations between qualities. These events, in so far as knowledge rather than truth is concerned, are identified by Russell with "percepts", which are the immediate data of our experience, but which as possible objects of experience can exist unperceived. In this way both matter (physical objects) and mind can be logically constructed out of percepts, and the only difference between matter and mind consists in the way in which they are collected into related bundles. Objects are constructed out of the class of all actual and possible appearances or aspects; subjects are the class of percepts which constitute a perspective bound together by memory. Roughly we can think of this as "act" and "object" being collapsed into "content".

What I am immediately aware of is a percept in my private perceptual space, which is an event in my brain; but my brain, for me, does not form part of my private perceptual space, although my brain is an object in public neutral space. In saying "I see *X*" I am directly aware of percepts in private perceptual space, the necessary and sufficient conditions for which are brain events in public neutral space, and such events are causally linked in some way to events constituting *X* in public space. Particular percepts which I experience are associated

with two places: the place associated with the group of particulars, which is my biography, and the place associated with the group of particulars, which is the "thing" *X;* these are two ways of grouping the same percepts.

With respect to knowledge of the world we are acquainted indubitably without inference only with present private experiences; the problem then arises as to the principles by which we are justified in claiming knowledge beyond the evidence of our immediate experience. We claim to know truths about the past, and the future, and universally valid laws of science. Russell holds that whatever the required principles might be, they cannot be deductive, because no deductive connections hold between matters of fact. The inference from matters of fact with which we are immediately acquainted, if they cannot be reduced without loss of meaning to propositions about immediate experience, must depend on a non-demonstrative principle of inference. Russell is asking what logical justification there can be for beliefs beyond what we immediately experience; he is not asking in what circumstances we are in fact caused to make such inferences and have such beliefs.

We can ask, for example, what is the justification for the belief in material objects that continue to exist unperceived? There is also the problem that inference from "Some *A*s are *B*s" to "All *A*s are *B*s" is never deductively valid, for there is no logical contradiction in supposing that the next observed *A* will not be a *B*. The principle we are seeking to justify such an inference is one that somehow validates the move from things that we have observed to things that we have not observed. Russell ultimately rejects the view that this principle is one of simple enumerative inductive inference: that the more observed *A*s have been *B*s, the more probable it is that the next *A* will be a *B*. He rejects it because it is more likely, if unlimited by common sense, to lead to false beliefs than to true beliefs. Given any finite set of facts, there is, logically speaking, an infinite number of possible theories which will fit the facts, all of which are equally probable. If, however, we start with certain assumptions about the world antecedent to our empirical investigation, then some outcomes, following the empirical gathering of facts, will be more probable than others. These Russell outlines as five "postulates" in *Human knowledge.* These postulates are indemonstrable; if they were logical *a priori* principles, then they would, through being tautologies devoid of content, be unable to fulfil their function of factually describing the world by ruling out certain factual possibilities, going beyond mere logical non-contradiction. On the other hand, such postulates cannot be verified by experience, for they are being presupposed in all empirical reasoning. Although the postulates cannot be proved, Russell's valuing of them is justified by his claim that they distil from obvious cases of scientific practice the details of what is actually assumed in such empirical inquiry. This fits

with Russell's general notion of philosophical analysis: the aim is not to speak obscurely about science, and empirical inferences, being a valid practice; the aim is to make clear by analysis exactly what that practice logically assumes. Although the ensuing postulates cannot be proved, we at least know where we stand, and what exactly is being assumed. These postulates in turn mark the limits of empiricism, but limits which Russell in one sense does not overstep because he does not think that the postulates could have other than an empirical justification; the limitation arises from the fact that no empirical justification is possible. He does not suggest that they can be known to be objectively valid by being Kantian *a priori* principles because he does not think the mind can legislate for facts about the world; mind cannot dictate facts to the world.

The problem with empiricism as a theory of knowledge is its inability to justify our knowledge of things which we clearly wish to claim to know; it is unable to do this because it would require, but cannot justify empirically, principles of inference which take us beyond what is justified by private present immediate experiences. Empiricism as a theory of knowledge must have limits, since it will involve some general proposition about the dependence of knowledge on experience, such as "All knowledge is based on experience", which is not itself knowable by experience; so, if true, empiricism cannot be known to be so.

## Wittgenstein

Ludwig Wittgenstein (1889–1951) was born in Vienna into a wealthy merchant family; he was the youngest of eight children. Wittgenstein's paternal grandfather had been a wealthy Jewish merchant who had converted to Protestantism. Wittgenstein's mother was a Roman Catholic, and he was brought up in that faith. The house was one of great cultural sophistication, particularly with regard to music, Brahms and Mahler being regular visitors. The attempt was made to tutor the children at home; but this proved a failure academically. At an early age, Wittgenstein showed great aptitude for practical engineering, and constructed a small sewing machine. His poor academic performance meant that he failed to enter Vienna University, and instead went to a technical college in Berlin. He left the college in 1908 and went to the University of Manchester as a student of aeronautical engineering. Naturally his work involved the application of mathematics; this led him to be interested in the foundations of mathematics itself. He asked who had done work in this area and was directed to Bertrand Russell's *Principles of mathematics*. This proved a revelation to Wittgenstein, and he was advised by Frege to study with Russell in Cambridge,

which he did in 1912. Although the personalities of Russell and Wittgenstein were frequently at odds, Russell soon developed a deep respect for Wittgenstein's early philosophical and mathematical ideas.

Wittgenstein went to Norway in 1913 and built himself a hut in a remote location in which to continue his work on logic. When the First World War broke out, Wittgenstein enlisted in the Austrian army. He survived the war and was taken prisoner by the Italians. One result of the war was that a new austerity or asceticism characterized his life. Throughout his time in the army he had been completing his first great book, the *Tractatus logico-philosophicus*; this was eventually published in 1921. Since he thought that the *Tractatus* disposed of all the problems of philosophy, he quite consistently gave up the subject. From 1920 to 1926 he was a primary school teacher in rural Austria. Under the influence of discussions with other philosophers, and through dissatisfaction with the *Tractatus*, Wittgenstein resumed his philosophical activity. In 1929 he returned to Cambridge and received a PhD for his *Tractatus*. Around this time Wittgenstein began the transition from his early philosophy to his later ideas.

After returning to Cambridge Wittgenstein was, with Russell's recommendation, awarded a Fellowship at Trinity College. During this time the second, and in many ways quite different, phase of his philosophy in the *Philosophical investigations* developed, although there are connections with his earlier thought. After another year in the hut in Norway Wittgenstein was in 1939 made Professor of Philosophy at Cambridge. As he had always done, he continued to travel restlessly. In 1949 he discovered he had cancer, and he lived with friends in Oxford and Cambridge until his death at the age of sixty-two.

Wittgenstein was in many ways an extraordinary person. He was a man of lacerating self-criticism, troubled about his own life. He could be extremely difficult, but he elicited great loyalty from his friends. Although cultured, he was relatively unread in the philosophical classics. It is difficult to identify philosophical influences on Wittgenstein; some known influences are Spinoza, Schopenhauer, Kierkegaard (1813–55), William James (1842–1910) and also Frege and Russell. He also admired writers such as Dostoyevsky and Tolstoy. He was driven by his character to think about philosophical problems; good philosophy was not seen by him as something that could be compartmentalized as a professional job distinct from the rest of one's life and the deepest considerations as to how we ought to live; philosophy and wisdom were, or ought to be, interlinked. His thought was profound, and yet he had doubts about the nature, function and value of philosophical thought. He had a deep desire to solve philosophical problems, and not use them as a field for mental exercise.

In order to understand the *Tractatus* it is necessary to give an account of its overall aim, motivation and method. The aim of the book is to draw the limits of the thinkable; and this is the same as drawing the limits of language; beyond those limits the attempt to say things can only produce nonsense. This brings us to the motivation for the book; this can be seen as ethical, or perhaps aesthetic. In the face of that which is "higher", matters concerning ethics, religion, aesthetics and profound questions about the meaning of life, we should stand in silence; the attempt to say things about such subjects offends not only against the logic of what language is capable of saying, but also against a cultured sensibility which refuses to babble futilely in the presence of what is awesome and mystical. The attempt to say things about what cannot be said is worse than silence, not only because it is a waste of time, but also because it leads us to corrupt and destroy the true nature of that of which we speak. This idea accords with the intuition of many that words are somehow inadequate in the face of the things that really matter most—the most profound aspects of the human condition—and that silence is the only proper response; the attempt to speak only sounds gauche, shallow and tactless.

Much of philosophy has been concerned to tackle philosophical problems head-on by trying to develop answers to the problems as stated. The notion that there are limits to thought and language can be applied to the problems and questions of philosophy itself. Wittgenstein rigorously develops the critical tradition in philosophy. There is some similarity with Kant's assault on transcendent metaphysics. To give a philosophical critique is to describe the logical limits of something, such as knowledge, thought or language. In the *Tractatus* the aim of the critique is to show that the problems of philosophy do not need to be addressed because they are pseudo-problems which arise from illegitimately going beyond logical limits. Thus we should try not to tackle philosophical problems head-on but rather to show that they are not genuine problems; they are necessarily nonsense, and no more require to be answered than "How many goals have been scored in this cricket match?" requires an answer in terms of the number of goals. Philosophical problems are not solved but dissolved.

In Wittgenstein the method used to carry through this critique is deceptively simple: how every and any language acquires its meaning determines the limits of what is meaningful in language. These limits are determined by discovering the essence of language: what all meaningful language must have in common, that without which it would not be meaningful language. Wittgenstein regards the limits of language as the limits of thought; beyond those limits we not only lack any possibility of knowledge, we also reach what is unthinkable. It is vital to realize that Wittgenstein assumes that language at bottom has an essence, a single or unified logic; there is a single universal form of

language. There are features common to all and only languages that
make them language. Anything that has these features is a language,
and anything that is a language has these features. In short, it is
possible to define language by a set of features that are together
necessary and sufficient for anything to count as language.

Language is considered as the totality of propositions. Propositions
are linguistic expressions that can be determinately true or false. What
we have to show is the way that words and propositions, the basic
units of our language, acquire their meaning. We analyze the essential
way that propositions—such as "The cat is black"—acquire their
meaning or sense; all that can be meaningfully said can be expressed in
propositions; it follows that we cannot speak, or can speak only
nonsense, if we try to use propositions to talk about subjects in which
they cannot have a meaning. In short, we must study the way
language essentially acquires its meaning in order to show that there
are limits to what can be meaningfully expressed in language. That is,
the discovery of the necessary and sufficient conditions—the essential
features—in virtue of which any linguistic expression is meaningful
entails that anything that fails to satisfy those conditions must be
meaningless. The limits of the meaningful mark the limits of genuine
propositions, and thus of language.

It must be pointed out that, generally speaking, the propositions
in which philosophical problems are stated appear meaningful. But
this appearance is an illusion; once we understand the logic of our
language, that is, how ultimately and necessarily language becomes
meaningful, we will see that such propositions do not accord with
what can be meaningful. Russell in the theory of descriptions had
shown that certain philosophical problems disappear once we see
the underlying logical form beneath the apparent surface grammar.
Such insight into the nonsense of the apparent propositions of
philosophy reveals itself not immediately, but only after analysis.
According to Wittgenstein, it is unnecessary to do this analysis
piecemeal; one can show the limits of meaningful language, and that
philosophy lies outside those limits, all at once. The aim is to
indicate what cannot be said by clearly presenting what can be said;
we thus indicate what cannot be said from inside the boundary of
what can be said.

Wittgenstein's inquiry is not an empirical one; it is a matter of pure
logic; it is a matter of showing how any propositions of any language
acquire their meaning by showing in what that meaning essentially
consists or must consist when all superficial differences are removed.
There is just *one* way all language is meaningful. This involves
showing what *must* be the case in the deep structure of language and
the nature of the world if meaningful language is to be possible—as it
obviously is—at all. The key to this is to understand that ultimately
language gets its meaning from its having a certain relation to the

world; apparently meaningful expressions which cannot have that relation are not really meaningful.

If we are able to determine the essential conditions required for meaningful descriptive language, and these derive from something about the world, we have also displayed the essential nature of reality; that is, how any possible world logically must be if any world exists at all. There will of course be all sorts of contingent features about the world which we cannot determine by logic alone; but there must be some essential features that are common to all possible worlds regardless of their contingent differences. The minimal conditions for having a meaningful descriptive language at all reveal the minimal nature of any possible world—the substance of the world. Basically this will come down to what is common between the essential structure of meaningful language and the essential structure of the world.

In giving an account of how language gets its meaning, it must be understood that we are looking below the surface structure of language to the hidden deep structure on which its meaningfulness depends. Wittgenstein is saying: if language has meaning, then, as a matter of logical necessity, this, at its deepest level, is how language must be.

Language gets its meaning in virtue of a relation between it and the world. So language that cannot have this relation is meaningless. The starting-point of Wittgenstein's view of language is roughly outlined as follows. The meaning of a word is the object for which it stands; the meaning of a word is the object to which the word refers. Words are basically names. The world is made up of objects, and the relations between objects form facts. Propositions describe the facts by describing how the objects stand in relation to each other. If the relation of the objects expressed in the proposition is the same as the relation of the objects themselves, then the proposition is true, otherwise it is false. What the facts are is quite independent of language or thought; we do not make the facts.

As an account of ordinary language the above seems obviously inadequate. If the meaning of names is their objects, then names referring to objects that cease to exist, or never did exist (such as "Excalibur"), become, or are, meaningless. This means that any proposition containing such names will also be meaningless. Also there are various components of ordinary language that do not seem to be names at all—such as "is", "or", "must"—so their meaningfulness is unexplained. The answer to this is that ordinary language hides a complexity that can be revealed by analysis.

Suppose we have a proposition "$p$" asserting "$x$ is $F$", but $x$ does not exist. If "$x$ is $F$" is false just because $x$ does not exist, then "$x$ is not-$F$" is also false; but it is a principle of logic that propositions "$p$" and "not-$p$" cannot both be false or both true. So what the

proposition "*p*" really asserts is that some related complex combination of objects constituting *x* in fact obtains. But although the elements of the complex exist, the described relation between them concealed in the name "*x*" does not hold; "*x*" covertly describes a fact rather than names an object. So "*x* is *F*" is false because part of what it describes, under the guise of the term "*x*", is false; the complex combination of objects constituting *x* does not obtain, although the constituent objects exist.

We might say "*x* is *F*" is not false but meaningless if *x* does not exist. On Wittgenstein's view of language, if we find a complex expression that contains a name referring to an object that does not exist, then it would seem that the whole expression must be meaningless. If the expression is to be meaningful, then the terms referring to the object that does not exist must really be a description using terms referring to more fundamental objects that do exist and to the relation between them. Then the original whole expression is not meaningless, but simply false, because one of its constituent parts describes a relation between fundamental objects that does not hold, although those objects themselves exist. Because those objects exist, the whole expression referring to them is meaningful, although the relation it describes as holding between them is incorrect.

The implication of this is that proper or *real* names ("simple signs") should refer to simples—atomic objects that are logically without parts and so cannot break up—if expressions which include names are not to run the risk of being meaningless or nonsense when the object named does not, or ceases to, exist. "Excalibur has a sharp blade" is meaningful whether Excalibur exists or not; so the word "Excalibur" is really a description which must by analysis be eliminated and replaced by names of simple parts, which, if they are not combined in a certain way, means that Excalibur does not exist, but to which the names cannot fail to refer and so have meaning.

If we are not to embark on a regress in which we are unable to guarantee that propositions have a determinate sense, we must reach real names that cannot fail to refer to objects; that is, absolutely simple objects that cannot be described. If the terms of propositions did not ultimately name objects that are not complexes, then any proposition could always fail to have meaning, since it might be constituted of terms that had no reference, and hence no meaning. The only way to guarantee that terms have meaning is that they are ultimately constituted of terms that cannot fail to refer to objects that exist if the world exists at all. This means the objects cannot be complexes, but must be without parts. If they are without parts, they cannot be described but can only be named, for a description is an analysis into constituent parts. This is the only way of guaranteeing that propositions have meaning; otherwise any proposition could fail to have a meaning by containing terms that are ultimately words

referring to non-existent entities. Wittgenstein calls these ultimate terms simple or atomic names and their references simple or atomic objects. Thus Wittgenstein gives an account of what must be the case if language is to be guaranteed as meaningful.

This emphasizes the requirement that sense be determinate; propositions must have a definite sense, for a proposition without definite sense could not be said to have a sense at all, and could not be determinately true or false.

Wittgenstein's aim is to produce a theory of language whereby propositions have meaning even when they appear to refer to non-existent objects. If the meaning of words consists in the objects for which they stand, and propositions are made up of words, then, for it to be the case that propositions are guaranteed a sense even when they apparently name non-existent objects, at a deep level it must be the case that language as the totality of propositions consists of names that cannot fail to have meaning by having objects for which the names cannot fail to stand. At the deepest level language, as the totality of propositions, must consist of names of logically simple indestructible objects.

When completely analyzed, the structure of language mirrors the structure of the world. The most basic constituents of language are atomic names which mean their atomic objects; the meaning *(Bedeutung)* of a name is the object to which it refers. Atomic names and objects are, respectively, the simplest constituents of language and of the world. Atomic objects are the substance or form of the world in that they are common to any possible world. These objects are logically atomic: they can only be named and not described, for if they could be described they would consist of a complex combination of elements which would mean they were not simple; but atomic objects are indestructible, permanent and unchanging. Atomic objects are the constant elements of all change and enter into combination with other atomic objects to form a state of affairs or atomic fact *(Sachverhalt)*. The possible ways in which atomic objects can enter into combination with other objects fix the form of such objects, the sum of which ways is the possible states of affairs in which such an object can be an element. This form is the timeless order determining all the possible states of affairs into which it can enter. When we know *(kennen)* an atomic object, it is "given"; we then know all the possible states of affairs into which it can enter; in that sense we then know all other objects and all possibilities. Possible and actual states of affairs, which are arrangements of atomic objects, are depicted by elementary propositions, which are concatenations of atomic names. In elementary propositions atomic names substitute for, or stand proxy for, objects. The totality of existent and non-existent states of affairs is the totality of possible arrangements of atomic objects. Understanding the essence of a proposition means understanding its constituent atomic names

which means knowing their atomic objects, and that is to know all possible combinations of those objects: all possible states of affairs or the whole of logical space. An elementary proposition is meaningful or has sense *(Sinn)* in virtue of its describing a possible state of affairs in logical space; it is true if it describes an actual state of affairs and false otherwise. Thus an elementary proposition will be meaningful even when it is false in virtue of its being wholly a concatenation of names which cannot fail to have meaning because they cannot fail to stand for their atomic objects.

The meaning of a name is its reference; but a name does not have a *sense;* a name does not say anything about the world; it does not describe the world, but stands for objects in it; names cannot be true or false. Propositions are true or false; they describe how things stand in the world. Propositions have a sense in that they each describe possible facts in the world; the sense of a proposition is what would be the case if it were true.

The world is the totality of facts. When complex facts *(Tatsachen)* are broken down this ultimately means the totality of states of affairs as described by elementary propositions. The facts are always constituted by rearrangements of the same constant atomic objects. Every proposition which is not an elementary proposition can be analyzed into one, and only one, compound of elementary propositions.

Such elementary propositions consist entirely of concatenations of names. An atomic fact might be that object *a* is to the left of b; we might write this as *"aRb"* where *"R"* stands for the relation between *a* and *b*. But ultimately *"R"*, if it is not a name standing for an object, must be eliminated so we have only atomic names. Indeed, *"ab"* does show the relation of the named objects *a* and *b*. The arrangement of names within the proposition, if it is true, directly *shows* how things are in the world. This is the picture theory of language, whereby the way that language depicts facts in the world ultimately derives from a common logical form: a structural isomorphism between language and the world. Language models or maps the world. How this picturing takes place in propositions is unclear. Even allowing for the spatial *ab* relation, there are more kinds of relations than spatial relation to be depicted. Nevertheless, it can be pointed out that a variety of relations is depicted in other areas, such as that which occurs between a musical score and the music itself. This picturing relation is not apparent for the sentences of ordinary language but holds at a deep level. The idea is that to represent something there must be a one-to-one correlation between elements in the picture and elements in the state of affairs represented; some kind of arrangement or ordering of the elements in the picture shows how the corresponding elements in the world stand to each other. The nature of the ordering of the elements depicted and the nature of the ordering in that which depicts may be different, but the ordering itself is in

both as their common *logical form:* the minimum required for picturing to occur at all. It is in virtue of their logical form that propositions are able to depict facts. This minimum universal logical form cannot itself be depicted, since it is what is common to all pictures; to picture logical form alone one would need to stand outside all ways of picturing; but then one could not picture at all.

This picturing theory applies to thoughts; a thought is a proposition; for a thought to be of a possible fact in the world it must, like the proposition, be constituted from an arrangement of psychical elements that correspond to the elements making up the fact in the world. What cannot be stated in a proposition cannot be thought. That which does the representing of a fact is itself a fact, not something other than a fact.

Wittgenstein makes an important distinction between *showing* and *saying*. The thinking here is that ultimately we must reach propositions that simply *show* their sense; their sense is manifest. Proposition *"p"* *says* that things are so-and-so. We might attempt to explain the sense of proposition *"p"* by proposition *"q"*; but if *"p"* is to have a sense, we must ultimately reach elementary propositions whose sense simply *shows* itself. In a sense one cannot say what the meaning of a proposition is. If *"q"* does its job of explaining the sense of *"p"* properly, then we have got no further, but have merely re-expressed the same sense. The sense must show itself, and what can be shown cannot be said. Wittgenstein is convinced that the cardinal problem of philosophy has been the attempt to *say* what can only be *shown;* that is, the attempt to explain by saying things which can only be shown; and that can only produce nonsense.

Propositions compounded of elementary propositions are called molecular propositions. Molecular propositions are truth-functions of their elementary propositions: that is, the truth or falsity of whole molecular propositions depends entirely on the truth or falsity of their constituent elementary propositions. Molecular propositions have logical structures which are compounded from elementary propositions by truth-functional logical constants. These truth-functional constants are defined by the way in which they determine the truth or falsity of complex propositions in which they occur. These truth-functional constants, "or" (v), "and" (&), "not" (−), "if...then... " (→), "...if and only if..." (=), are now a standard part of prepositional logic. In addition there is the apparatus of predicate logic, which includes within it prepositional logic, and which takes us "inside" propositions, which involves as logical constants the universal quantifier "all" (∀) and the existential quantifier "some" (∃). A particular proposition "p", "The chair is red", might be expanded and symbolized as *"a is F"* or *"Fa"*, where *"a"* names an individual thing (the chair), and *"F"* is a predicate term (is red). The common structure or general logical form of all propositions like *"p"* can be symbolized

as "*Fx*", where "*x*" is an individual variable (for which constant terms denoting individual things can be substituted) and "*F*" a predicate term. The logical form of the conclusion we can draw, given any one proposition such as "*p*", that is "*Fa*", is expressed in the propositional function "There is some (at least one) *x* such that *x* is *F*" which is symbolized as "$(\exists x)(Fx)$".

Take "and" (&) as an example of a truth-functional constant: it is clear that a molecular proposition "*p* & *q*" is true just in that case where both "*p*" is true and "*q*" is true, and is false otherwise. With "not" (–) or negation, for example, we can see that if "*p*" is true, then "*–p*" must be false, and vice versa. The way that truth-functional connectives operate is displayed in truth-tables. For example:
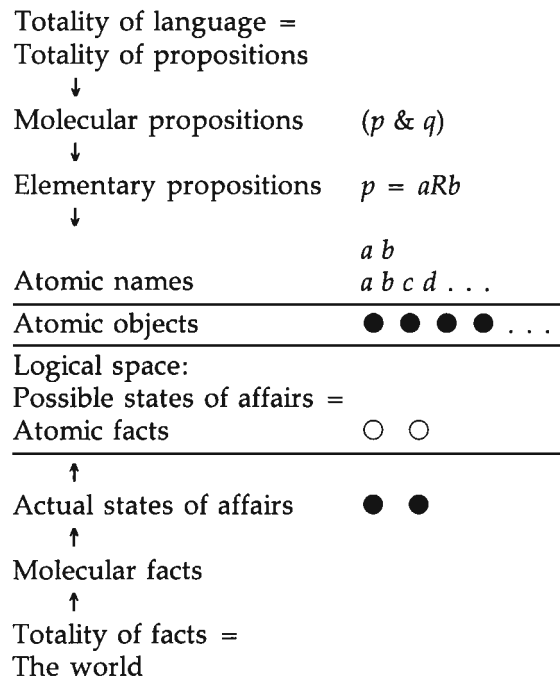
| $p$ | $-p$ |
|-----|------|
| T   | F    |
| F   | T    |

| $p$ | $q$ | $p \mathbin{\&} q$ |
|-----|-----|-----|
| T   | T   | T   |
| T   | F   | F   |
| F   | T   | F   |
| F   | F   | F   |

The most important point is that all molecular propositions can be analyzed into elementary propositions by truth-functional analysis and that the truth or falsity of the whole original molecular proposition is a function of the truth or falsity of its constituent atomic propositions related by truth-functional connectives.

The essential structure of language, at its various levels of simplicity and complexity derived from analysis and synthesis, mirrors the world. This can be displayed in the diagram opposite, in which the arrows show the direction of analysis. That a proposition describes a possible fact gives the proposition its sense; it describes an arrangement of objects in the world; that the fact is actual or not actual determines the truth or falsity of the proposition. Propositions have a sense even when they are false because they are ultimately a concatenation of atomic names that cannot fail to have meaning because they cannot fail to stand for atomic objects.

The truth of all elementary propositions is logically independent: it is impossible from one elementary proposition to deduce the truth or falsity of any other and impossible for any elementary proposition to contradict another. From the existence of one state of affairs it is impossible to deduce any other state of affairs. If one proposition can be deduced from another, then the proposition from which it is deduced cannot be elementary, but must be a truth-functional compound. One proposition can be deduced from another only if the deduced proposition is contained in the original proposition. For example, "*p*" is deducible from "*p* and *q*", because "*p*" is already

Totality of language =
Totality of propositions
↓

| | |
|---|---|
| Molecular propositions | (*p* & *q*) |

↓

| | |
|---|---|
| Elementary propositions | *p* = *aRb* |

↓

|  |  |
|---|---|
| | *a b* |
| Atomic names | *a b c d . . .* |
| Atomic objects | ● ● ● ● . . . |

Logical space:
Possible states of affairs =

| | |
|---|---|
| Atomic facts | ○  ○ |

↑

| | |
|---|---|
| Actual states of affairs | ●  ● |

↑

Molecular facts
↑

Totality of facts =
The world

contained in the complex proposition "*p* and *q*". A deducible proposition is contained in the proposition from which it is deduced by being a truth-functional component of the complex proposition from which it is deduced. If the individual propositions "*p*" and "*q*" are really elementary propositions, and are not compounds of simpler propositions, then there is no complex for any other proposition to be contained in. This logical independence should show itself clearly in the ideal notation; we can see that if "*p*" and "*q*" are elementary propositions, "*q*" cannot be deduced from "*p*", and vice versa; "*p* and not-*q*" is never a contradiction and "not-(*p* and not-*q*)" is never a tautology.

This brings us to logically necessary truths, and contradictions. No elementary proposition can be necessarily true or necessarily false; such propositions are essentially bipolar: true-false, that is, contingent. The only necessarily true propositions are logically necessary truths or tautologies; the only necessary false propositions are contradictions. Necessary truths are necessary because they are truth-functional compounds formed of simpler propositions in such a way that, whatever the truth or falsity of their component parts, the whole proposition is always true. Necessary falsehoods or contradictions are truth-functional compounds formed of simpler propositions in such a way that whatever the truth or falsity of their component parts, the whole proposition is always false. Tautologies say nothing about the

world precisely because they are true independently of whatever the facts are about the world which give a truth-value (true or false) to the components of the tautology. Contradictions are false regardless of any facts about the world. Wittgenstein suggests that both tautologies and contradictions are in fact called true or false "propositions" only by courtesy of genuine propositions which are contingently true or false. Tautologies and contradictions are thus senseless *(sinnlos)*, but not nonsense *(Unsinn)*. Although tautologies and contradictions say nothing factual about the world, they show the logical structure of the world and language, and show the boundaries within which all propositions which can say anything about the world must fall. They mark the boundaries of factual discourse, and only factual discourse has sense; language gets its meaning from the world, the totality of facts, it cannot therefore say anything about matters outside the world; ethics, values, religion, the meaning of life lie outside the world of facts; they make themselves manifest to us; they show themselves, but we cannot say anything about them. Genuine propositions state possible facts, and can have sense only by doing so, or are tautologies or contradictions. Beyond those boundaries there is only nonsense which does not say anything, but merely shows itself to be nonsense. In short, language gets its entire meaning *from* the world—ultimately from names of objects—and so language is meaningful only when it states facts *about* the world. The following diagram summarizes this view.

| nonsense ← | Propositions | → nonsense |
|---|---|---|
| ↓ | Sense | ↓ |
| Tautologies (Senseless) | | Contradictions (Senseless) |
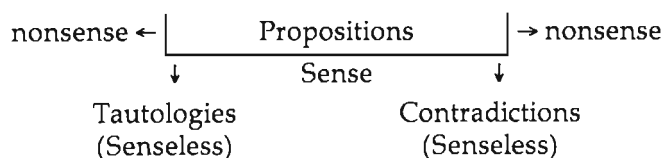
Many problems arise from the *Tractatus*, some of which led to Wittgenstein's later thought. One is the absence of any examples of atomic objects and atomic names. An atomic object must be such that it cannot be described, but only named, and the name is guaranteed to have a reference, and hence a meaning. Russell suggested such real or proper names might refer to the present content of our sense-experience (sense-data): that is, demonstratives such as "this" and "that" are the only logically proper names, which cannot fail to point to the present content of our sense-experience and hence to their reference. But the fleeting nature of such objects of experience means they are not what Wittgenstein wants. A real name should not only have a guaranteed reference, but must also refer to the *same* enduring and unchanging object if its meaning is to be fixed and determinate. But "this" and "that" will mean different things depending on the present content of experience which will vary within the same person

and between different people. So Wittgenstein could not share Russell's view. Indeed it seems inevitable that atomic objects are ineffable in that we cannot say anything about them because to say anything about them would be to describe them, and in that case they could not be simple. Wittgenstein's view seems to be that as a logician it is not his job to decide what are atomic objects, atomic names, and the ultimate psychical constituents of thoughts; but it is a matter of logic that there *must be* such things if the propositions of language are to have a sense. We cannot even say of a simple object *a*, that "*a* exists", for the assertion is either meaningless in the case where *a* does not exist, or trivially redundant.

An important problem is the status of the propositions of the *Tractatus* itself. It is not uncommon in philosophy for a philosophical theory or system to cut off the branch on which it is sitting. The attempt to assert and show that some ways are the only ways of being intelligible or knowing things turns out to go beyond those ways and involve just those ways which are said to be unintelligible or unknowable. The point of the *Tractatus* is to put an end to philosophy, or at least all metaphysics, by revealing its propositions to be nonsensical *(unsinnig)*. More generally it reveals what can and what cannot be said; what can be said are the propositions of natural science which are factual: they state facts about the world. This means that about important matters, such as ethics, religion and the meaning of life, nothing can be said, since they are not concerned with facts about the world. It is not that ethics, religion, and the meaning of life are nonsense; what produces nonsense is the attempt to say things about them. But in attempting to make its point it would seem that by its own criteria the propositions of the *Tractatus* itself are just such nonsense. They do not state facts about the world, but say things about the necessary structure of all fact-stating and the necessary structure of the world, which are not themselves further facts about the world. Wittgenstein is aware of this, and declares that one must transcend the propositions of the *Tractatus:* one uses it like a ladder up which one climbs, and which, once used to make clear that metaphysics and the propositions of the *Tractatus* are nonsense, can be thrown away.

# CHAPTER NINE

# *Phenomenology and existentialism: Husserl, Sartre*

Historically and intellectually there are complex connections between phenomenology and the later manifestations of existentialism. The phenomenology of Husserl was one of the major influences on Sartre, although Sartre came to reject some of Husserl's most distinctive doctrines. Some of the connecting and discussed doctrines are: that the defining feature of consciousness is intentionality so that every and only acts of consciousness are directed to a meant or intended object; the nature of the ego or I; the question of which is logically prior, essence or existence; and the possibility and adequacy of a disinterested or pure transcendental conceptualization of reality or being.

## *Husserl*

Edmund Husserl (1859–1938) was born in Prossnitz, a village in Czechoslovakian Moravia, at that time part of the Austrian Empire. His early university studies at Leipzig and Berlin were in mathematics, and he received his PhD in mathematics in 1881. He also attended the philosophy lectures of Wilhelm Wundt at the University of Leipzig. Husserl decided to devote himself entirely to philosophy and he moved to Vienna, where he attended philosophy lectures by Franz Brentano (1838–1917), at which students were acquainted with the philosophy of David Hume and John Stuart Mill. Husserl taught at the universities of Halle and Göttingen, and from 1916 to 1929 at Freiburg, where he spent the rest of his life. Husserl was an important influence on Martin Heidegger (1889–1976), who became Rector of

Freiburg University in 1933. Husserl had a dedicated attitude to philosophy and saw it as a calling rather than merely a job. During the thirties, following the rise of Nazism, life became increasingly difficult for Husserl because of his Jewishness. If he had not died in 1938, he might well have gone the way of multitudes of other European Jews. At his death his unpublished manuscripts were under threat of being lost. High drama accompanied their removal to safety; following some failed attempts to transport the manuscripts over the Swiss border, they were eventually taken in the diplomatic baggage of the Belgian Embassy to Louvain, where the Husserl Archives were established.

The chief concern of the philosophy of Husserl is that philosophy should develop as a truly universal "rigorous science". Philosophy must be a science that begins right at the beginning, taking nothing for granted; that is to say, it must be a presuppositionless science of sciences. All deductive or inductive reasoning depends for its validity on the immediate, intuitive apprehension of truths for which further justification neither can be given nor is required; such apodictic (necessary) evident truths require no further foundation. If there is not to be an infinite regress of justification, so that nothing is in fact ever categorically justifiable, there must be such apodictic truths; not everything can be justified. In this sense Husserl's project of establishing a unified certain foundation for all knowledge is close to that of Descartes.

Husserl's first major work in philosophy was closely connected with mathematics. In the *Philosophy of arithmetic* he sought an epistemological account of the origin of our ideas, understanding and knowledge of the central concepts of arithmetic: numbers, functions, arithmetical truths and the like. For example, the foundation of the possession of the concept of number derives from intuitions of aggregates as such. This was construed by the mathematician and logician Gottlob Frege (1824–1925) as an attempt to set out a naturalistic, and specifically a psychologistic or subjective, account of arithmetical objects and truths themselves, and Husserl consequently encountered Frege's fierce criticism. The conventional opinion is that, partly as a result of Frege's criticism, Husserl did a complete intellectual turnabout in his early philosophical studies from a view supporting psychologism to a view rejecting it which resulted in the philosophy of phenomenology. However, it can be argued that Frege's view of the *Philosophy of arithmetic* has spawned misinterpretation, and that Husserl was concerned to study the nature and origin of our ideas of arithmetical concepts and truths, and that that inquiry is neutral with regard to the objectivity or otherwise of those concepts and truths themselves. Indeed, it seems clear that Husserl was fully aware of the need to distinguish our ideas of numbers from numbers themselves.

Whatever is the truth of the matter, Husserl's later work does involve an attack on psychologism. The psychologistic account of deductive reasoning suggests that the justification of deductive reasoning and of logical or mathematical truths such as 2+2=4 rests upon their displaying certain very fundamental facts about the way we think, even if such logical truths are not dependent on facts about the physical world. This position, however, rests on a confusion; such a view both removes the absolute necessity of logical truths and is also question-begging. If logical truths did rest on any kind of facts—even universally true facts about the way human beings think—then they would rest upon facts that might have been otherwise since such facts are always contingent. If we take the deductive inference involving any two propositions "*p*" and "*q*", "If *p* then *q*, *p*, therefore *q*", it is tempting to regard this as receiving its justification as a valid inference from its describing a psychological fact about the way people must think: if someone thinks "If *p* then *q*," and thinks "*p*", then they must think "*q*", or must see that "*q*" follows. This, however, confuses a factual causal psychological compulsion, which is contingent even if universal, with a logical inference which is necessary regardless of whether anyone in fact makes the inference or not. Now the inference may describe the way all people think—although that is extremely doubtful—but that is not what the validity of the inference rests on. The validity of the deduction does not depend on any general facts about psychological processes; and, indeed, a rejection of all forms of naturalism holds that logical truths do not depend on any facts at all. Logic is prescriptive, not descriptive. Moreover, any such naturalistic attempt to give logic a psychological justification would be viciously circular, since all reasoning, including that required to do psychology and produce arguments in psychology, already assumes the validity of logical rules of inference. In short, the natural sciences presuppose the validity of the rules of logic and so arguments using the propositions of natural science cannot be used to justify the rules of logic. Such naturalism would encourage various forms of relativism: if logical rules describe psychological laws of thought, then these laws might for us, or other beings, in another time or place, be different. The connections in logic between premises and conclusions, between evidence and conclusions—reasons and their logical consequences generally—are not mechanical or causal but are conceptual and concern meanings. Husserl rejects, in the *Logical investigations,* psychologism and the universalization of naturalism, and the misplacing of naturalistic explanation.

One of the initial motivations of Husserl's philosophy can, then, be seen as a reaction against scientism: the belief that everything is explicable in naturalistic scientific terms. Husserl is not hostile to science, he merely wants to point to its limitations: it makes presuppositions about the nature and existence of reality which it does

not question, and so cannot give fundamental explanations in the required sense of an ultimate starting-point for a rational explanation of the world. Naturalism has its place: in natural science. Natural science is too underpinned by unquestioned presuppositions, which cannot be questioned within naturalism, to be a certain foundation for all knowledge. For philosophy to be a rigorous science it must return to what is *given* in experience in its generality prior to all theorizing and interpretation, and approach what is given with an attitude shorn of preconceptions or assumptions both apparent and hidden. Philosophy must aim to reach apodictic certain truths: absolutely necessary and certain truths which are devoid of the presuppositions that would undermine their absoluteness. Philosophy seeks what remains and self-evidently must be the case once all that need not be the case—the contingent—is set aside: we are left with that which must be presupposed in every form of rational inquiry.

Husserl speaks of the "crisis of European man", by which he means that the inability to establish rationalism on firm foundations has led to irrationalism and barbarism; however, it is not the essence of rationalism that is at fault, but the misconception that rationalism and scientific naturalism are one, and that scientific naturalism can provide ultimate rational explanations. When this is seen to fail, rationalism itself is in danger of abandonment, whereas it is the false identification of rationalism with naturalism that should be rejected. That naturalistic science fails to deliver ultimate certain truths about the universe should not be seen as a failure of that rationalist project itself.

The historical starting-point of Husserl's phenomenology is Brentano. Brentano believed he had discovered the essence of the mental or consciousness: that which is common to all and only the mental. This common defining feature is *intentionality:* what the mental *is*—what its existence consists in—is uniquely characterized by its being intentional. Each mental act (or mental attitude) is directed towards an object, an *intentional object*. Consciousness in its various modes (thinking, believing, desiring, loving, hating, remembering etc.) always has an object or content. In the different mental acts, intentional objects will be related to consciousness in different ways. But in all cases consciousness is consciousness *of* something: it always has an object, and it is moreover directed upon or towards—it "intends"—some object. The intentional object is the object of one's attention in a mental act. The notion of intentionality developed when it was realized that consciousness is distinguished by its directedness towards an intended object regardless of whether that object actually exists in the world or not. The objects of mental acts may be "intentionally inexistent" in being neither physical nor mind-dependent. Thus if I am scared of the spider in the room, the intentional object is the spider of which I am scared; the intentional

object is the content of that mental act of being afraid, regardless of whether there is actually a spider or not. I might believe I see a man walking towards me in the fog: the intentional object of what I believe I see is the man I believe I see, although the extensional object in the world may turn out to be a tree. It is always indisputably true that my mental act has such-and-such an object; my consciousness, and its acts (recognizing, believing, remembering, etc.) are not accidently associated with their intentional objects which are a necessary part of the mental act whether the object turns out to exist or not: the intentional object is *immanent* in the act. By contrast, any physical (non-mental) act always requires an existent object on which to perform the act: kicking a chair requires a chair that exists which is kicked, but thinking of a chair does not require any chair to exist.

The view that intentionality is the essence of the mental seems to work well as a defining feature of some mental acts, such as believing, judging, and remembering, but it seems less applicable to other mental occurrences, such as general moods like anxiety or well being, which appear to be objectless. Brentano's answer to this, which maintains intentionality as the essence of the mental, is that in the cases of occurrences such as moods the mood itself is its own object. The notion that the mental is essentially intentional undermines the dualism of Descartes' view of mind as an autonomous mental substance which might exist independently of all objects of consciousness; for, according to the thesis of intentionality, thought (the *cogito*) and the object of thought (the *cogitatum*) are inextricably linked: there is no consciousness without consciousness of objects—there is no such thing as bare consciousness devoid of an object—there can be no objects with meanings without consciousness.

Husserl's acceptance of the role played by intentionality in defining consciousness further expresses the limitations of causal naturalism; the realm of conscious acts and of their meant or intended objects gives a field where the connections are understood only through the notion of a connection of meanings and rational justification, which is irreducible to merely causal or associationist psychological explanations. The intelligibility of the sequences of mental acts and their objects as meanings (believing *x* because of believing *y*) is one where the connections require an account in terms of concepts, reasons and purposes, not in terms of the causal or mechanical association of mental events. "What justifies your certain belief that 1,574×6,266 =9,862,684?" or "Why do you hate the man who sold you the cat?" require not causal answers or explanations, but reasons or evidence: rational or logical justification. There are, on the one hand, situations where someone as a matter of causal psychological fact holds a belief or draws a certain conclusion, even though it does not rationally or logically follow; and, on the other hand, there are cases where a belief or conclusion does rationally or logically follow, but as a matter of

causal psychological fact people do not hold that belief or draw that conclusion. So the question of the causal circumstances in which someone as a matter of psychological fact *does* hold a certain belief or draw a certain conclusion is distinct from the question of whether he is rationally or logically *justified* in doing so.

Husserl is not really so concerned to argue for the conclusion that intentionality is the distinguishing feature of the mental; what is important for Husserl is that the realm of intentional objects or meanings gives philosophy an autonomous guaranteed subject for study independent of, and irreducible to, any wider naturalistic causal assumptions concerning the nature or existence of those objects: we have in any case objects as meanings of which we are conscious if we are conscious at all. Whatever assumptions we make about the nature of reality, it is nevertheless the case that our mental acts will be possessed of certain contents or *meant* objects in virtue of their intentionality: things appear to us a certain way. The mental always involves reference to an object or content which in any sense other than as the object intended in our mental act need not exist. The subject matter of phenomenology is the essential nature of these contents taken or viewed purely as the intentional objects of mental acts. It is important to note that "object of consciousness" does not just denote the sensuous objects of empirical experience. Anything that can be an object of consciousness—colours, physical objects, mathematical equations, love, time, comradeship, etc.—is a potential subject for phenomenological study: it can be studied as it is as a phenomenon. What underpins phenomenology is the idea that in coming to view objects (in the most general sense) just as appearances to consciousness we can see certain and necessary truths concerning the essential features of those objects, for we can then see those features of things which cannot, without self-contradiction as to what they are, be thought away; we thereby understand objects as they are in themselves stripped of all presuppositions and added-on interpretation of any sort. The essential—necessary and sufficient—invariable features of objects, of which we can be certain, are those features which, if they appear to us at all, cannot be thought away if those objects are to appear to us as objects of such-and-such a sort. The way objects *must be* if they are to appear to us at all *as those* objects constitutes their essence.

The word "phenomenology" derives from the Greek *phainomenon* meaning an appearance, and *logos* meaning a reason or law. The ultimate objects of presuppositionless science are phenomena: the word "phenomenon" designates that which *is* what it appears to be, which is therefore something seen as it is in itself. Phenomenology is in fact the science of the intentional objects of consciousness; it consists of laws based on meanings which describe the necessary structural or formal features of appearances of various sorts. In the case of

phenomenal objects there can be no appearance/reality distinction: what they are is what they appear to be, for we are concerned with them only as they appear. One cannot be mistaken that things *appear* in a certain way: and as long as one does not go beyond (transcend) things as appearances, one has a realm of objects about which one can form necessary and certain descriptive truths. Appearances themselves cannot present themselves in varying perspectives, although we can have various different appearances. The force of the slogan of phenomenology "To the things themselves" *(Zu den Sachen selbst)* is that we must confront things *just as experienced by consciousness,* independently of any theoretical or metaphysical presuppositions, rather than as objects in any other sense—as physical objects for example. We must return to experiences themselves, to "transcendental experience": a realm of "pure consciousness" or "pure subjectivity". That there is subjectivity or consciousness as such Husserl called "the wonder of all wonders". The wonder resides not in being or existence itself but in that there is a being that is aware of being.

Beneath the various natural sciences and the common-sense view of the world there is a network of presuppositions as to the nature of reality which are trans-phenomenal or "transcendent": we make assumptions about objects which go beyond what the objects are when considered as pure phenomena. These assumptions go beyond what is essential to those objects as phenomena. The pre-philosophical view of the world Husserl calls the "natural attitude". Even logic and mathematics do not have the required presuppositionlessness, for they do not within their subject question all the grounds of their basic concepts and rules of inference. Indeed, it became apparent by the end of the nineteenth century that it was possible to set up a variety of equally consistent but mutually contradictory formal systems. There are for example several different geometries.

The means of achieving the lowest level of presuppositionless awareness which is required for a truly philosophical attitude is through what Husserl calls the phenomenological reduction, "bracketing", or *"epoché"* (from the Greek word *"epoche⁻"* referring to a "suspension", in this case of belief or judgement). The phenomenological *epoché* is the heart of the phenomenological method. What we are left with when all presuppositions concerning objects are set aside is only what is certain and necessary about those objects. In fact the phenomenological reduction has two stages:

(I)     That in which we suspend judgement as to the existence or non-existence of the objects of consciousness so we can concentrate on them as pure phenomena: that is, as they are as appearances.

(II)    That in which we view the objects reduced to pure phenomena not in their particularity, but in their generality and essence: we

are to concern ourselves with phenomena only as samples or examples of types or sorts of phenomena, not with what makes them particular "thises"; we thus bracket off the particularities of phenomena. This is termed the "eidetic reduction" because it reduces phenomena to the residue of whatever makes them the type or sort of phenomena they are, without which they could not appear at all. "Eidetic" derives from the Greek *"eidos"* for "form", which alludes to Platonic Forms which are essences.

In order to concentrate on objects merely as they are given to consciousness as such, we bracket off all our normal everyday and scientific theories and presuppositions as to the nature and existence of those objects. In this way we set aside the presuppositions which are unquestioned in both the common-sense and the natural scientific views of the world in order to study the contents of pure "reduced" consciousness as such. Whatever assumptions we previously made about the contents of consciousness—concerning their cause, their existence, their nature, their representing or not representing objects in the external world—are suspended. Independently of all these assumptions, everything that can come before the mind can be studied as purely phenomenal objects: as they appear to consciousness. This *epoché* involves neither denying nor affirming the existence or being of the external world; the reality of the external world is not eliminated but simply set aside from consideration, as are judgements concerning the truth or falsity of the claim. In this way one attains the proper philosophical attitude.

Philosophy, once it has attained the required phenomenological attitude to the "reduced" objects of consciousness, is not concerned with them as the contents of particular mental events, rather it is concerned with them in their significance or meaning. The *epoché* detaches the pure phenomenal objects of consciousness from both their existence or non-existence and all that is inessential for them to be what they are: we then see them as they are in themselves: as they *must* be from any point of view in order for them to be whatever kind of phenomenal object they are. Phenomenology is concerned with phenomenal objects in themselves and as *essences:* the "whatness" whereby the phenomenal object is an object of the kind it is. Husserl uses *"eidos"* to mean "essence" or "pure essence". We are concerned with objects as appearances to consciousness in their universal or essential aspects, whereby all and only objects of that sort must possess such-and-such a set of characteristics if they are to be that kind of object at all. Phenomenology, and indeed true philosophy, aims in Husserl's view to be nothing less than a "science of essences" or "eidetic science".

These essences are independent of any individual consciousness, and are absolutely objective and universally valid, for they reveal to us

what, if a certain object or content is present to consciousness at all, must be part of the consciousness of that object. Indeed, knowledge of essences is independent of all questions or knowledge of existence or fact: the "whatness" of an object is totally independent of whether any instances of that object actually exist.

Husserl is further convinced that such essences are *intuited:* there is an immediate intellectual vision or grasping of essences *(Wesensschau).* In a sense we confusedly apprehend essence all the time. When a certain object is present to consciousness, it is always present *as* such-and-such an appearance, not as mere appearance: that is, it has a significance or meaning. That significance or meaning is captured by its essence. Without these essences or significances, objects would be nothing to us at all. But objects have a significance, and whatever the accidental circumstances or features of their presentation, their essential features deliver the significance or meaning of that experience. Essences—giving significances *as...*—are the ultimate phenomena of consciousness. In the Cartesian manner Husserl argues that the essences of a thing are those features which it has beyond doubt, for without them it would not be presented *as that sort* of thing at all. It is this common meaning that is invariant in all our varying perspectival presentations of a thing (for example as we move round an object), that unites those varying presentations in referring to the same object. Thus the consciousness-of-house means house only in virtue of its including the essence of house: in this way the various acts of consciousness are related and directed towards a *house,* rather than something else.

This is related to an idea in Frege. Expressions can have meaning or sense *(Sinn)* even though no object or reference *(Bedeutung)* exists that satisfies that sense: the sense has a reference only if something satisfies the sense, otherwise it has no existing meant object or reference. Thus sense is independent of whether anything satisfies that sense, that is, whether the meant or intended object exists or not. In addition different singular naming expressions or signs and definite descriptions can designate the same object either through their having the same sense or through their different senses being different senses for—modes of presenting—one and the same object: as with "the Morning Star" and "the Evening Star" picking out Venus, or "1+1" and "5–3" designating the number 2. If the meaning of an expression were identified with its reference, then if I understood two expressions I would as a consequence know whether they referred to the same object or to different objects. If understanding the meaning of an expression is knowing its reference, it is impossible, if I understand what is meant by "the Morning Star" and "the Evening Star", not to realize that the two expressions refer to the same object: Venus. For to understand the meaning of the expressions would involve in each case being acquainted with their common reference. Such a consequence is

clearly false. It is obviously the case that the statement "the Morning Star=the Evening Star" is an informative discovery of astronomy and is not equivalent to the trivial logical statement *"a=a"*. The upshot of this is to make it clear that there can be meaningful expressions which may or may not have references; so the meanings are not to be identified with their references and are independent of them. There is no need to postulate the mysterious "subsistence" of Pegasus in order for the expression "Pegasus" to have a sense and hence be meaningful.

Husserl accepts that we will need to experience individual cases of white in order to grasp the essence "whiteness"; but one then immediately grasps the essence of whiteness, since one sees the object *as* white. Seeing an object *as* white implies that one already understands what whiteness is. Objects are perceived *with* a certain significance. It is a mistake to think that our grasp of the essence or concept "whiteness" derives from inductively abstracting from a series of particular white objects some feature they all and only they have in common, for this process already involves the ability to pick out white objects; we are already picking out some objects, and rejecting other objects, as white objects. It is rather that in seeing something as white we do, in that very mental act of seeing *as,* intuitively "see" the essence of white. We already have the *ability* to pick out white objects: phenomenology articulates the awareness of the essence implicit in that ability. An analogy might be the way in which we could recognize the man who robbed the bank ("I would know him if I saw him"—which gives the point to identity parades) although we are quite incapable of giving any defining description of the man. Phenomenology aims to produce a state of mind where such an intuitive descriptive articulation of essence is possible by setting aside all that is neither necessary nor sufficient for a phenomenal object to be the phenomenal object it is; we are left with an essential residue of necessary and sufficient features which will give us certain and necessary truths.

Particular objects of consciousness may be used as examples in order to identify essences, rather in the way that a particular geometric drawing of a triangle may be used to illustrate some theorem of geometry such as Pythagoras' theorem; but the truth concerning the nature of the essence in no way depends upon the existence of the particular item used as an example or on any other item existing. In using examples, we describe what Husserl terms the "horizon" of a thing; by the free play of the imagination—"free variation"—we determine the limits within which a thing can vary while still remaining the kind of thing it is. Thus we transform our experience of an individual entity into experience of essence: we have then a non-sensuous *eidetic intuition.*

Another way of looking at this is to say that in intuiting essences, we are aware of pure possibilities independent of actual being: that

which is essential to any actualization of that sort of object. Without its essence no concrete actualization of the object whose essence it is could occur, whatever else may be true of the object. It must therefore be present in any possible experience of that object. For example, the essence of any physical object, or a man, or a colour, is not identical with any individual physical object, man or colour; the essence is what is common to all and only things of those kinds, which describes what is required for them to be things of those kinds, and without which they would not be those things at all.

Through intuitions we describe the essential structure of our experiences viewed as pure phenomena. The phenomena include reflexively mental acts and the phenomenal objects of those acts: the thought and the object of thought. Phenomenology, and hence philosophy, is the foundation of any science whatsoever because any intelligible awareness of the world at all must begin with this fundamental grasping of essences: without these essences the world would have no significance for us at all. In this sense Husserl regards phenomenology as *a priori*: the apprehension of fundamental essential meanings, significances, and "whatnesses" is logically prior to all theorizing and independent of all contingent facts; phenomenology is concerned with the characteristics known to be necessarily connected with kinds of phenomena. Phenomenology aims to produce absolutely certain objective necessary truths that are pure in having no relativity to cognitive, spatial or temporal perspective. Such truths are in this sense absolutely categorical: they are directly intuited from experience and do not depend for their acceptance on the acceptance of any other truths. Thus such truths cannot be argued for, inferred, or derived, for then their truth would not be guaranteed as absolute because we would not have to accept them until we had accepted other truths. Such basic truths concerning the structure of phenomenal objects must be seen immediately or not seen at all. They cannot be argued for because any argument would presuppose the most basic level at which intelligibility or significance arises. Such intuitions of essences are self-given because there is nothing else from which the essence could be inferred which does not itself assume an intuitive grasp of categories of meaning or concepts. So, unlike in Kant, the preconditions for any significant experience are not deduced, but intuited directly. Any attempt at deduction, since the deduction itself is also a phenomenon with significance *as a deduction*, already assumes the lowest level of classificatory categories of consciousness without which no experience would have any significance at all, and an experience without any significance at all—not of an object of a certain sort—would be no experience at all. To construct any argument presupposes that we can understand what an argument is; so understanding what an argument is cannot itself be derived from an argument. We cannot in any way derive the essences of phenomena from anything more fundamental.

We may need through experience to acquaint ourselves with the various kinds of intentional objects and mental acts there are: but the essence, in virtue of which any mental act is aware *of* a certain kind of object, is utterly independent of whether there is such an object or anyone in particular experiencing that object as a content of consciousness. If phenomena were utterly neutral with no significance or meaning at all, there would be no hope of getting any science off the ground; the absence of the basic meanings or significances of the objects of consciousness would destroy any possibility of a science connecting items in our experience into any intelligible repeatable patterns whatsoever. The aim of phenomenology is to return to the ultimate original or primordial significances of experiences shorn of the baggage of accumulated significances embodied in the theories of science and everyday assumptions. We then view the world with new wonder and freshness.

The philosophy of Husserl involves a further radical application of the *epoché*. The phenomenological reduction brackets the natural external world, and all of the assumptions associated with belief in such a world. But something still remains to be subject to *epoché:* the individual ego or consciousness. Any act of consciousness presupposes an ego: but the particularity of the ego is unimportant; what is important is what is essential to the ego. The individual ego too must be bracketed in order to intuit the essence of the thinking individual itself. As with other essences, the existence of any particular ego is irrelevant to the identification of the universal "whatness" of ego in general which is pure intentionality. That which is engaged in the process of bracketing the natural world, including the empirical ego itself, must be something, and Husserl calls it the *transcendental ego,* which stands outside the world. The essence of this transcendental ego is that it stands as a precondition of any mental act or experience whatsoever, including all acts of phenomenological reduction. We now have a triadic structure for consciousness, *ego-cogito-cogitatum;* these are the three logically linked elements of: pure ego (the "I", what it is that thinks), mental act (thought), and content (the object of thought). This gives us full transcendental phenomenology, the ultimate objects of which are a vast variety of sorts of meaning or significance (*noema,* adjective *noematic*) which are correlated with meaningful acts (*noesis,* adjective *noetic*) of the transcendental ego. The ultimate phenomenological *noetic-noematic* relation is not between psychic elements and empirical objects, but between their essential meanings. The transcendental ego is, ultimately, the only absolute, for it remains after all bracketing: it is presupposed in every act of consciousness or experience whatsoever, even the activity of bracketing itself. The transcendental ego is the precondition of all meaning: it alone cannot be thought away because it is presupposed in all thinking.

The later philosophy of Husserl led him to give an active role to the transcendental ego; the conclusion is that not the individual ego, but the transcendental ego, actively constitutes or constructs the significance or meaning of the objects of consciousness. Pure ego gives objects their meaning or significance which makes them objects for consciousness. This does not necessarily lead to idealism—that reality is existentially dependent on consciousness—because it might be the case that the transcendental ego simply places an existentially independent reality under intelligible categories or concepts and so makes that reality an object for consciousness. If, however, the only reality an object can be said to have is that significance actively given to it by the transcendental ego, then reality or the world is existentially dependent on the transcendental ego, and that is idealism. If a world without significance for consciousness is existentially impossible, and all significance is a product of the transcendental ego, it follows that the world is existentially dependent on the transcendental ego. This suggests that the transcendental ego is the only absolute because everything is existentially dependent on it, and it is not existentially dependent on anything else.

Husserl's view points towards a form of subjective idealism—reality is existentially dependent on the subject—where existence is exhausted by and tied to the meaning given to objects by the transcendental subject or the subject as such. It might still be argued that such significances in the form of essences are objective by being independent of the existence of any particular consciousness and are common to all consciousness as such: that objects present themselves with the meanings or essences that they do is not an accidental feature of any empirical ego but a product of consciousness as such. Husserl's later views tend towards idealism because he holds that to speak of the world really existing, independently of the categories of significance which are dependent on pure consciousness, is senseless and absurd. Still, it might be said that the world would continue to exist independently of pure consciousness. If this were granted, then it can be replied that the world so characterized would be without significance in the same way that a written sentence would be without significance if there were no minds to grasp its sense; it would be a "world" that is literally inconceivable. Husserl moves from the view that nothing can be conceived except as an object for consciousness to the view that nothing can exist except as an object of consciousness. His answer to scepticism about the nature and existence of the external world is to say that the world that appears with meaning just *is* the real world and the positing of some other world which might exist or fail to exist is senseless.

Husserl also became concerned with a phenomenological analysis of time: the experience of duration itself as it appears to consciousness. Time is particularly fundamental to the constitution of experiences.

The phenomenological analysis of time concerns the essence of time as it appears: that is, what is necessarily and invariably involved in an appearance which is temporal. He says that every real experience is one that endures, and this duration takes place within the stream of an endless filled continuum of durations which forms an infinite unity; every present moment of experience—every now—is fringed by a before and after as limits.

In the last part of Husserl's life he introduced the concept of *Lebenswelt:* the "lived-world". Before any theorizing, including philosophizing, one is confronted with the world as it appears in life. The *Lebenswelt* is in some sense primary: the theoretical sciences are derivative of, or parasitic on, its meanings. Objects already appear to us loaded with a significance that points beyond themselves: their meaning points to their own horizon, which is not currently present in the experience, and defines them as the objects they are and indicates the context in which the objects occur. The meaning of experiencing the front of a house includes, among many other things, the presently unseen back of the house. Husserl also became concerned with avoiding solipsism by discussing the dependence of intentional objects on the intersubjectivity of a community of individual egos. The essence or meaning of objects as experienced often points beyond my subjective awareness and depends on the awareness of others. This is obvious if we think of the meaning to us of a great work of art. On the face of it this seems like a rejection of eidetic phenomenology. Some commentators have taken it that way, but Husserl seems to have seen no discontinuity between his earlier and later work. Others have viewed the later *Lebenswelt* as an indication that the eidetic intuitions—the essences—we seek are to be found in the objects of the world as lived.

## Sartre

Jean-Paul Sartre (1905–80) was born in Paris. In 1924 he went to the École Normale Supérieure where he studied philosophy, and in 1929 he began teaching philosophy. From 1933 to 1935 he studied in Berlin and Freiburg. While still a student Sartre met Simone de Beauvoir with whom he had lifelong connections. In 1939 he joined the French Army; because of his poor eyesight his duties were non-combatant; in 1940 he was taken prisoner by the Germans. His experience of captivity was to hone his views on the true nature of human freedom. The war also aroused his interest in politics. In 1941 he was repatriated; he returned to Paris where he taught philosophy and took an active part in the Resistance.

There is a strong German influence on Sartre's philosophy, which started with his Protestant Calvinist upbringing. Many of the

philosophers most influential on Sartre are from the German intellectual tradition, such as Kant, Hegel, Husserl, and Heidegger (1889–1976). But an ever present influence for a French thinker such as Sartre is Descartes. Talk of influence does not necessarily entail agreement, of course. At one time Sartre was also in close contact with philosopher and contemporary Maurice Merleau-Ponty (1908–61). After the war Sartre became one of the founders of the literary and political journal *Les temps modernes*. He was increasingly involved in contemporary political and ideological controversy; he was part of an unsuccessful attempt to found a socialist, but non-communist, political party. His later political writing espouses a form of Marxism which he attempts to reconcile with his underlying philosophy of existentialism.

It is difficult to give any general characterization of existentialism. Existentialism has been characterized as a form of anti-intellectualism, or irrationalism or subjectivism; but the view of existentialism put forward here accepts none of these accounts. The view advocated here is that existentialism is a philosophy concerned to go back to what it regards as the logically prior description of what it is like to be a human being in the world before the accretion of a world-view based on supposedly detached or disinterested theorizing. The philosophical significance of this is the existentialist's view that the-world-as-it-is-for-human-beings, the human-world, the humanness of the world, before metaphysical and scientific speculation, is logically presupposed by any such speculation. The reason for this is that our possessing any concepts and categories, some of which must be involved in all possible talk about the world, logically depends on our practices and interests as human beings without which concepts and categories—more generally meanings and significances—would not arise at all. The significance of the world and its objects arising from practice and action is presupposed by the distilled categories of a disinterested intellectual observer or spectator. Being a detached spectator is not the logically primary way of our being-in-the-world. That there is "a world", objects with various significances and meanings, depends upon and cannot be separated from the significances and meanings that they have for human beings as a result of human interests and agency.

The existentialist position requires us to shake off the grip of various ingrained metaphysical assumptions about the world and ourselves. One of the most profound of these is the view that we could, logically speaking, exist as pure autonomous consciousness or thought regardless of whether any external world existed at all. Another metaphysical speculation is that reality can be reduced to either mental or material substance. The existentialist's contention is that we must be reminded that such metaphysical speculations use concepts whose meanings are parasitic on our concrete engagement as human beings through practices, actions and interests; metaphysical speculations

logically depend for their possible intelligible articulation on terms whose meanings only arise at all out of our *not* having a disinterested or detached point of view. There are useful comparisons to be made here between existentialism and the philosophy of the later Wittgenstein in which he says the "form of life" is what is given. The meanings and significances of objects as such-and-such, which are logically necessary for any "view" of the world—any intelligible description and theorizing about the world—would not arise as they do but for specifically human partisan characteristics, concerns, and activities or for being sufficiently like human beings; and objects with meanings and significances would not arise at all but for some form of active engagement with the world.

The general aim of Western thought in metaphysics and science has been quite other than that of existentialism. The aim of science, for example, is to evolve what is regarded as a superior "objective" description of the world abstracted from specific perspectives: to generate a body of truths about the world whose validity holds across the contingencies of spatial, temporal or cognitive perspectives and which mirror the world independently of the practical or instrumental uses of objects in the world. The most obvious examples of such non-perspectival truths are those of mathematics and logic such as $2+2=4$, which is true however you look at it, so to speak; such a truth is a necessary truth. Literally perspectival truths such as "The tower is very small" (from the hill overlooking it) or "The bath water is hot" (to my cold right hand) are true only relative to a perspective and would be false if the conditions determining the perspective changed—if I came down the hill, or inserted in the water my warm left hand. What existentialism argues is that the concepts used to describe a world as such-and-such a sort, a world said to contain certain kinds of objects, would not arise at all except for some practical mode of relating to the world, which in our case arises from our humanness. True or false descriptions of the world depend for their articulation on meanings which arise only because of practical human projects. The concept of a "desk" and a world containing desks would not arise if no one ever wrote anything and did the usual things which lead us to call a certain object a "desk"; without a certain sort of behaviour the concept "desk" would never emerge. Existentialism undermines the aspiration of there being, and our possessing, the one true systematic description of everything, for existentialism denies that any kind of description would arise at all if in the cause of a universally valid account, the attempt were made to describe the world from an utterly detached spectatorial standpoint. Such a standpoint would be a "view from nowhere", a phrase which perhaps only thinly disguises the fact that it would be no view at all.

All this does not mean that science and abstraction are wrong in some way, rather it is to argue that our ordinary view of the world, in

which objects, events, and ourselves have various meanings or significances, cannot be thought away as quirks of the merely contingent way we happen to encounter the world in favour of, and possibly to be replaced by, a supposedly superior system of descriptive categories that are more universally valid through being detached from the contingency of our situation as human beings concretely dealing with the world. For meanings and significances, and hence the possibility of description whether true or false, would not arise in the world without our engaged perspectival interests, practices, projects, and actions. Objects—for example hammers—have the meanings they have for us because of their function as obstacles to, or instruments in, human projects. Existentialism regards it as a mistake to propound either a subjectivist or an objectivist philosophy: both positions are based on the misconception that reality can be completely separated from all conceptions; that somehow we can have direct access to reality apart from all descriptions.

Many of these points are brought out by examining the reaction of Sartre to the phenomenology of Husserl. In *Being and nothingness* Sartre requires a phenomenology that is existential. It is important to note in this matter the significant influence on Sartre of Heidegger's monumental work *Being and time* (1927). The seeds of Sartre's existential phenomenology are found in his short work *The transcendence of the ego*. Husserl's philosophy of pure phenomenology derives much of its inspiration from Descartes. Husserl contends that consciousness is essentially intentional; that is, consciousness is defined and uniquely distinguished by its "aboutness"; if we are conscious at all we are always conscious *of* something with such-and-such a significance or meaning. With this point Sartre agrees completely. But the meanings to which Husserl's phenomenology aspires are the pure, essential, or defining features of the objects of which we are aware. In Husserl's account, to get at the pure essences of objects of consciousness it is necessary first to think away all those characteristics which are unnecessary for the thing of which we are aware to be just what it is. The immediate result of this "bracketing" is the suspension of judgement concerning the existence or non-existence of that of which we are conscious. The aim is to seek the features something must have from any "point of view" if it is to remain that kind of thing. The thought here is again the Cartesian one that what is true of an object from any point of view whatsoever—and so is non-perspectivally true and not true merely from a certain perspective—describes how things really are in themselves with the contingencies of what is added by our point of view, in its most general sense, subtracted. This gives the possibility of a transcendental perspective on the world and a science of essences. Husserl supposes that the bracketing process suspends judgement not only on the existence of the physical world but also on

the contingent individual empirical ego; what remains is what Husserl calls the transcendental ego, which is the common essence of consciousness or consciousness as such. The picture that remains is one of a transcendental or pure spectatorial ego which intuits pure essences or meanings that are present or immanent in consciousness and experience, which are devoid of any contingent assumptions about the existence of the world or individual selves or the practical use we make of objects in specifically human projects.

The two notions of the transcendental perspective and the transcendental ego are interrelated and fall together as the chief targets of Sartre's attack on Husserl. Sartre's position is that there is no such transcendental pure disinterested perspective and no transcendental ego. The transcendental ego betrays the doctrine of the essential intentionality of consciousness for it posits a pure consciousness of objects which are themselves modes of consciousness, disengaged from concrete acts of awareness of particular intentional objects *in the world*. Sartre rejects the subjectivization of the doctrine of intentionality. His view is that there is no transcendental perspective and no pure or transcendental consciousness detached from the world, for consciousness makes sense only in relation to an awareness of objects in the world which are not modes of consciousness. A disinterested, passive and pure view of the world is impossible, in Sartre's view, because without particular intentional acts arising from our existence as beings-in-the-world engaged with what concretely concerns human beings, consciousness would not arise at all, since the being of consciousness is defined by its "aboutness" of something other than consciousness itself: something that is not-consciousness. Consciousness is not a *thing* at all, not even a transcendental thing "outside" the world. If all actual intentional acts, directed to something other than consciousness—in sum, all awarenesses *of*—are removed, then consciousness simply evaporates; so there can be no disinterested transcendental ego "outside" the world.

Phenomenology becomes existential when it is realized that consciousness and the world are logically interlinked: that is, no sense can be given to consciousness in the form of a transcendental ego if it is separated from its intentional awareness of objects which are not themselves modes of consciousness. The converse is also true: that no sense can be given to "the world" if separated from the sense of what the world is that arises from an actual engagement of human beings with the world in pursuit of their human concerns. One of the consequences of this view is the collapse of the mind-body dualism which supposes we could still make sense of consciousness if all the world was destroyed, and still make sense of "the world" devoid of the sense that arises from consciousness engaged in the embodied pursuit of human interests, purposes and aims. The world for us is a world of significances and meanings which it would not have without

us. There are no pure meanings or essences of things waiting to be discovered by a disinterested pure consciousness; that there are recognizable separate things with certain significances only arises from our practical contact with the world in pursuit of various human purposes and interests. No sense can be given to what a hammer is— what is meant by a "hammer"—independently of a network of other objects and what embodied humans *do*. The significance of an object such as a hammer would not arise as it does if no one ever made anything; a *hammer* emerges as an object of the kind it is because of the sorts of things human beings do. In the case of a being which was merely spectatorial or contemplative, totally detached from the world, the meanings and significances of objects, whereby a particular object is a such-and-such, would not arise at all. Consciousness consists strictly of intentional acts—we are conscious as an awareness *of* objects *as* such-and-such a sort—but such intentional or meant objects would not arise if we were purely passive spectators. Human beings exist as active beings-in-the-world, not as pure egos; we are consciousnesses "thrown" into the world, and have to cope with it, and it is only as coping agents that the vast and intricate network of meanings and significances of objects we encounter arises. Any abstract theorizing about the world is logically dependent on our initial natural active engagement with the world. Phenomenology becomes existential in not dealing with the structure of a supposed realm of abstract pure essences which remain after we put ourselves in the transcendental position separated from practical involvement with the world: instead existential phenomenology examines the structure of the meanings and significances the world has as it appears to us everyday in life as a lived-world. We are embedded *in* the world: the-world-as-it-is-for-human-beings.

The world does not cease to exist with our ceasing to exist; but in so far as the world is a system of meanings and significances it is a human world because significances and meanings are a product of our human activities and interests. In this sense when a man dies a world dies with him.

We find the same existentialist points in Heidegger's *Being and time*. Again there is the emphasis on our "thrownness" into the world of significances-for-human-beings. The significance the world has as an instrument, through our active concrete engagement with the world in pursuit of human purposes and interests, is the world as "ready-to-hand" *(zuhanden)*, which is logically presupposed by the passive detached description of the world "present-at-hand" *(vorhanden)* which is found in natural science.

In this way existentialism undermines the picture of man alienated or estranged from the world. The world is not primarily a place from which we stand apart, which is not amenable to human values and significances. The world is first a place which has human

significance—it is our world—and there is no reason to denigrate the world as a network of significant objects for human beings in order to replace it by a detached view of the world "as it really is" rendered alien and devoid of human significance. Human reality is a *Dasein* (being-there): that is, we always exist as beings-in-the-world, not detached from it. As Heidegger points out, we are "cast" or "thrown" *(geworfen)* into the world to which the primary relation of our *Dasein* is one of "concern" or "care" *(Sorge)* where some objects are more important than others; the world is not neutral or flat with all significances being on the same level. The significance that things have is inextricably linked to the kind of being we are; we do not relate to the world as disembodied disinterested consciousnesses but as embodied agents.

In Sartre's novel *Nausea* we find him beginning to deal with the issues outlined above. In *Nausea* Sartre's protagonist Roquentin is a disappointed rationalist. We can begin by distinguishing between the notions of existence and essence: the existence of a thing refers to the fact *that* it is, the essence of a thing refers to *what* it is. Particular, actually existing, things like trees are always inadequately captured or explained in rational systems of concepts designed to render the world ordered and intelligible. Sartre seems to have in mind here a stringent notion of explanation which involves relations of deduction or entailment between concepts. We find such relationships in a field such as geometry: all the properties of a triangle follow necessarily from its initial definition, that is, from its essence or "whatness"; nothing about a triangle as such is "superfluous"; everything about it is explained as a necessity that follows from what it is; there is nothing about a triangle that is left over from what is entailed by its essence. In other words, all the properties of a triangle follow from its essence, so nothing is left unexplained. However, neither the existence of objects in the world, nor the nature of their existence in their full particularity can be explained by any conceptual system of essences. The "thatness" of an object—*that* it exists—and the features in virtue of which it exists as that particular object are not explained by being deducible from any system of universal concepts. Only in the realm of essences which do not exist do we have full explanations for why things are as they are, for in the realm of essences the properties a thing has are all and only those logically entailed by its essence: its "whatness".

The relations between different essences also produce necessary connections. But there are no such necessary connections between objects in the world, for the objects in both their individual existence and nature transcend and are not exhausted by universal concepts purporting to reveal their essence. In so far as objects in the world are brought under universal concepts, necessary relations can exist between them; but no existing particular object can, just in virtue of its existence and particularity, ever be fully explained or described by

universal concepts; so the causal relations we aim to describe as existing between existing particular objects are contingent and have no logical necessity. Essences are necessarily inadequate in fully describing all that can be said about particular objects in the world, for they cannot capture their particularity and their "thatness". There is a logically necessary connection between $X$ being what it is, a triangle, and $X$ having internal angles equal to 180 degrees; but no such necessary, deductive connection exists between events in the world. There is no logical entailment between putting the kettle on the heat and the kettle boiling, no matter how often we have observed the conjunction of those events in the past; the one event cannot be deduced from the other. In this sense Sartre expresses a position in *Nausea* that is very close to that of Hume. By its very universality a concept considers and explains an object—gives a reason for why an object is as it is—only in so far as it falls into some general class not in its concrete particularity. We may consider an object, for example, in so far as it falls into the class of trees; but that does not explain the existence of, or all the features of, *that* thing over there we have called a "tree". Its existence—its "thatness"—does not follow from its description as a tree, nor do most of its features peculiar to *that individual* tree—its roughness, its colour, its hardness—these are all left out of the concept of "treeness". They are contingent, unexplained, excessive, accidental; they are "absurd" in being without sufficient explanation or reason; there is no sufficient reason as to why they are one way rather than another.

In *Nausea* Sartre mentions other things besides geometry that have the characteristic of complete intelligibility, such as music and stories; there is a sufficient reason for their being one way rather than another, for these have a complete internal logic that can be distinguished from any manifest individual existence. One can smash or damage a record of Beethoven's Fifth Symphony, but not smash or damage the Fifth Symphony itself, for it consists, as a symphony, of abstract relations between idealized non-actual musical events. Nothing is superfluous about a work of art: it is *what* it is.

One way of looking at *Nausea* is to think of it as the realization of the Humean nightmare or the collapse of all the supposedly necessary Kantian concepts: we are reminded in the book of the brute contingency of relations between objects and events in the world by the depiction of a world in which the causal order we take for granted does actually break down. In the extreme case our ability to bring objects under any intelligible categories also breaks down. *That* particular root over there has features not exhausted by its description as a kind of pump. There is a central scene in *Nausea* in a park when the root of a tree manifests itself as a bare individual unclassified "thatness"—its pure existence is manifest devoid of its identification as a neatly pigeon-holed sort of thing. The world is experienced as failing

to behave according to our ordering conceptualization of it, in virtue of which we render what happens intelligible and explicable; that and the rationally inexplicable excess both of the particular features of things and existence itself generally induces the disorientating "nausea" of which Sartre speaks. The picture we have of the world is that this object, because it is of a specific kind, will do such-and-such; but in *Nausea* Sartre depicts a world in which individual objects cease to act according to their kind, because as individual objects they are not exhausted by essences.

There is something else of importance that emerges in *Nausea:* that we are free. We are free, and in Sartre's sense "absurd", in that, even more than physical objects such as trees, we are not determined by an essence; indeed we have no essence. Our existence ("thatness") precedes our essence ("whatness"): we first *are,* and it is then through what we *do* that we give ourselves any "whatness" or defining identity. We do not have a predetermined essence or nature that assigns to us a place in the world and a given character: we are forced to be free and make ourselves through our actions. We cannot pass the responsibility for what we are to any objective standards that lie outside ourselves: we must take responsibility for our choices, which determine what we are. Awareness of the responsibility arising out of the truth that there is no pre-existing self which is the "real I", and that the self is identifiable only through what we do following an initial, ultimately groundless, choice, gives rise to *Angst.* The passing of responsibility for what we do to something other than ourselves is what Sartre calls "inauthentic" or living in "bad faith" *(mauvaise foi);* the abdication of our responsibility for what we are and do Sartre sees as a kind of self-deception; it is as if really we know we are responsible for what we are through what we choose to do, but we often fail to face that uncomfortable truth. Freedom is not something we can avoid, but is an inseparable part of being human. For example, by not killing ourselves we choose to live. We cannot, of course, divorce ourselves from the situations in which choices are made, but there is always some room for free choice—even if it only consists of dissent and saying "no". Living with consciousness of the truth of my freedom is to live with "authenticity".

A person is never simply identifiable with any label applied to him which aims to define his essence. Thus a waiter is a waiter in the predicative sense of "is", but that is not what he is in the identity sense of "is"; being a waiter is not his essence—"person *X*=waiter" is false— so what a person does is not logically determined by an essence. Indeed, there is nothing that I am in the identity sense of "is". What I *am* is constantly remade through my actions: only in death is there the possibility of final judgements being passed upon what kind of man I am which I can no longer confute. The most blatantly "inauthentic" life would be one in which I negate my own freedom altogether by

regarding my self as being as fixed as an object; this may be because that is how others regard me. An act of "bad faith" involves my simply giving up any attempt to determine and take reponsibility for my future because I regard a label I have given myself as binding on, and sufficient to determine, what I will do; but such facts about me are never sufficient to determine my actions, for I can always try to revolt against the facts of my situation.

Nothing about the existentialist belief that we are free implies that we should act wildly or capriciously, as is sometimes suggested, for to choose to act wildly or capriciously is only one of the choices we can make. What is important is that whatever choice we make is accepted as *our* choice; we must take responsibility for it and its consequences. It is in this way that our lives are said by the existentialist to be "authentic". Existentialism does not argue, as is again sometimes suggested, that the aim should be to return to some inner "real self", for there is no sense to self other than the sum of what one does; rather than there being a persistent self existing over time independently of what one does, the self is constantly remade through action. The notion of a self independent of actions would indeed be another route to "bad faith", for it suggests that I can do one thing but be another in some inner sanctum of the "real self". I cannot betray my friend, but refuse to accept the kind of person that makes me, by saying that in my "inner self" I was loyal to him, for the self—what I am—is constructed out of the choices I make.

The attempt fully to rationalize the existing world of particular concrete things in a system of abstract universal concepts or "whatnesses" fails. Although any language which can function descriptively cannot do without some degree of abstraction, we can maximize the concrete and particular and not regard it as an inferior view of the world to be "reduced" to something more universalizable. The attempt to impose such a universally valid intelligible structure in fact falsifies the world: it falsifies the uniqueness and particularity of our experiences of, and our encounters with, the world. Even if we merely say $x$ and $y$ are both red, we ignore the differences—perhaps the shade of red—that make $x$ and $y$ distinct concrete particulars, and so distort reality in the attempt to fit $x$ and $y$ into a scheme of descriptive categories. The uniqueness and particularity of our experiences are not to be rejected as worthless in favour of considering the experiences as merely examples of certain general classes or types.

The connected but distinct nature of consciousness and the world is reflected in the ontology described in Sartre's *Being and nothingness*. The fundamental kinds of being there are underpin the notion that consciousness cannot be an autonomous, isolated, "inner" realm unrelated to the awareness *of* an existent objective world that is not a part of consciousness, and the world has significance primarily as it

figures in human projects and actions. Sartre identifies two basic categories or sorts of being.

(a)   *être-en-soi:* being-in-itself. Things or non-human being.
(b)   *être-pour-soi:* being-for-itself. Conscious or self-aware being.

However, he identifies an additional important category of being:

(c)   *être-pour-autrui:* being-for-others. Being, especially of persons, which arises from relations to others.

Together these are Sartre's complete irreducible, uneliminable list of sorts of being or ontological categories; these are what we are committed to saying there must be, whatever else there may be, given the nature or structure of consciousness.

   Being-in-itself is the kind of being that inanimate, inert, non-human objects have. In contrast being-for-itself is the kind of being that consciousness has. The two are brought together as being-in- the-world. Consciousness, the for-itself, arises only through its intentional awareness of something other than itself; that is, it is awareness of the in-itself, of not-consciousness, and that it is not the in-itself of which it is aware. Sartre is anxious to maintain that consciousness is not any kind of thing; consciousness is a negativity, a lack, or a no-thing-ness. Consciousness is not-a-thing which arises as a negation of objects of awareness. The primary nature of consciousness is its intentionality: it depends for its existence on things other than itself of which it is aware. Consciousness comes into being as an awareness of not being— as a separateness from—the objects of which it is conscious. We are conscious *of* an object *X,* and the being of consciousness is a negation through a simultaneous awareness of not-being-*X*. Consciousness is not an absolute nothingness, but is the awareness of itself as not being—as not being absorbed into—whatever objects are objects of consciousness. If I am aware of a table, the being of consciousness consists in my self-awareness of not- being-a-table. In our awareness of objects of consciousness we are at the same time pre-reflectively aware of our being aware. Awareness of our own awareness or consciousness cannot be a relation of subject and object or we would embark on an infinite regress of awarenesses, and awareness of ourselves as aware would never arise at all. To be conscious of *X* at all is to be conscious that we are not-*X*, because the *being* of consciousness in our consciousness of *X* is the consciousness of not-being-*X*. The logical dependence of the existence of consciousness on something other than itself ensures that it does not exist as an in-itself. Consciousness is not some thing that can be separated from the world as a pure ego; rather, consciousness and ego arise only in *acts* of awareness of objects and awareness of the separateness from those objects. Consciousness arises as a self-awareness of being not-the-objects-of-awareness; in this way consciousness is a kind of nothingness or negation. Consciousness is

not what it is and is what it is not, since it has yet unfulfilled potential as to what it can be.

Sartre's concept of the nature of consciousness ties in with his concept of freedom. It is the nature of consciousness, the for-itself, that it is not an object or thing. That our being is as not-a-thing frees us from the causal nexus that determines the realm of the in-itself. There is no fixed ego or self in the Cartesian sense and consciousness is not to be identified with ego. The ego or self is our view of the sum of free intentional choices consciousness has made in the past, so that what the ego is can change in the future through its as yet unfulfilled or potential free choices. We create our own essence—what we are—through our choices and are therefore totally responsible for what we are. We are our freedom; our "whatness" is our choice. "Bad faith" arises when we treat the predicative "is" as to what we are—we are a waiter, a soldier, a coward, a liar, a Frenchman—as if it were the "is" of identity defining an essence, and abdicate our responsibility as to what we do by virtue of an explanation following from our supposedly fixed essential nature which, we might argue, is imposed upon us. The overarching exemplification of "bad faith" is thus to see ourselves as an object, as fixed: as a being-in-itself. Similarly it is "bad faith" to live as though values and attitudes were derived from the world and not derived from us. To overcome the *Angst* involved in our awareness of our freedom we tend to retreat to the pretence that we have no choice by adopting roles, characters, values and attitudes, as if they were imposed upon us. I do not choose the condition or situation that is forced on me from the outside, which is my "facticity", but I am always free in what I make of it. We try to fill our nothingness with actions to define what we are, but what we are is always, unto death, incomplete, since future choices characterizing the kind of persons we are always remain open to us. Our incom-pleteness as a for-itself means we can be free because we have the power, unlike the in-itself which is just what it is, to be not what we are and to be what we are not.

With respect to being-for-others, Sartre first rejects the dualistic presuppositions of the "problem of other minds". The problem is said to arise from the problematic inference from the bodily behaviour of others to the hypothesis that they are conscious like ourselves. Sartre's dissolution of the problem denies that the bifurcation of other people into body and mind in our experience is possible in the first place. We immediately recognize important modes of our being—such as shame and guilt—which are a result of existing in relation to other people and depend on there being other people aware of us. In perceiving others we immediately perceive them as *persons,* and this is a primitive feature of our experience. There is no inference to "other minds" to justify because such an inference does not occur at all.

Many of the most fundamental meanings of the human world, the world-as-it-is-for-us, involve an intersubjectivity that depends on the

existence of other persons. The meanings that the world has for us depend on the recognition of there being others. My experience of the world as a public world, and of myself, in various important ways depends on my acceptance of the existence of others. To deny the existence of others would, among other things, be to abandon some of the most fundamental ways in which the world and myself have significance for me.

One of the basic ways in which I relate to others is through my consciousness of being looked at by another person, which Sartre calls "The Look" *(Le Regard)*. My relation with others is a struggle not to be fixed by The Look as an *object* for the other. The struggle is to maintain my freedom when The Look of others fixes me as an identifiable object. To preserve my freedom I may attempt to turn others into objects for me and so attempt to destroy others as a source of The Look. Thus each person is apparently a threat to the other's freedom. At the same time, however, my reflective (as opposed to pre-reflective) self-consciousness arises only from my awareness of how others see me. That I am ashamed of myself, for example, is necessarily connected to my seeing myself as being seen by others doing disreputable things. My self-consciousness derives from my taking another's view of my behaviour.

The mutual recognition of freedom is constantly compromised as people fix others as objects. To fix another as someone who loves me, for example, involves the paradox that, on the one hand, we wish the love of the other to be unconditionally given, while on the other hand, if it is to have its value as the love of another, it must be given freely.

The ethical implications of Sartre's philosophy are complex, but central is existential freedom. Existentialism does not imply that one should simply do what one likes and there are no moral considerations guiding us; rather, it implies that what moral considerations we choose to guide us are our responsibility. But that does not mean that what is morally good or bad is itself dependent on mere individual subjective appraisal or whim. Existentialism does not entail accepting that there are no reasons or justifications for actions independently of subjective predilections. If this were the case, then no moral dilemmas would ever arise in my free choices; that such dilemmas do arise is clearly something existentialism accepts and through which freedom to choose is given its importance.

Since the notion of freedom and living an "authentic" life in the awareness of that freedom are central to existentialist philosophy in general, and values in particular, it is important to see whether any fairly specific moral "directives" emerge from the notion of "authenticity". One point that emerges is that the notion of an "authentic" life—one lived in awareness of freedom—is increased in proportion as we are not aware of ourselves fixed as objects by others.

But the strategy of evading the fixity ensuing from The Look of others by in turn objectifying others is in the end self-defeating. For as I regard others as objects, so I come to regard myself as an object like them, which is the paradigm of "bad faith" or "inauthenticity". This seems to imply a moral directive on action concerning the treatment of others whereby both we ourselves and others can collaborate in maximizing the awareness of the freedom of our lives—their "authenticity"—by increasing the extent to which we refuse to fix each other as objects. We thereby move in the opposite direction from the downward spiral of mutual objectification by trying not to start the fixing of each other as objects in the first place. Whether actual human relations with others can allow, or easily allow, such reciprocal support of freedom, and if so what such relations would be like, are further problems.

# CHAPTER TEN

# *Logical positivism and falsificationism: Ayer, Popper*

It is perhaps unnecessary to make any connection between A.J.Ayer
and Karl R.Popper other than to point out that they both had great
influence on Western philosophy during the middle part of this
century, an influence that has continued to this day. However, a
common historical and intellectual connection is the Vienna Circle;
this was a group that met in Vienna during the 1920s and 1930s and
developed the philosophy of logical positivism, which was intent on
setting philosophy on a sure footing so that the scope of its tasks was
clear. Logical positivism, by way of a theory of meaning, involves the
elimination of much of traditional philosophy, in particular
metaphysics and also theology, as literally meaningless. What this
amounted to was the view that the investigation of any substantial
facts about the world was the province of science alone, not
philosophy, which could be concerned only with conceptual
elucidation and the linguistic task of precise definition. Both Ayer
and Popper attended the meetings of the Vienna Circle, but whereas
Ayer initially became a powerful advocate of its views, Popper,
although deeply interested, like the Vienna Circle, in the philosophy
and methodology of science, was critical of logical positivism.
Popper aims to demarcate science from non-science so as to
understand better the nature of scientific knowledge. Non-science
includes pseudo-science: areas which are not scientific but claim to
be so. It does not follow from this that what is non-science, including
pseudo-science, is thereby literally meaningless, as logical positivism
supposed, or even that it is untrue. Ayer has always had a great
interest in the problem of meaning, which Popper regards as a
largely fruitless field of philosophical investigation if regarded as an
end in itself. What perhaps unites Ayer and Popper, although they

are by no means alone in this, is their view that the heart of philosophy is epistemology, and in particular the nature of empirical knowledge.

## Ayer

Alfred Jules Ayer (1910–89) was educated at Eton and Christ Church, Oxford; his tutor in philosophy at Oxford was Gilbert Ryle (1900–76). After graduating, he thought of going to Cambridge to study with Wittgenstein; instead he went to study in Vienna in 1932 in order to find out more about the logical positivist philosophy of the Vienna Circle. After a short period in Vienna he returned to Oxford and became a lecturer in philosophy at Christ Church. In 1936 he published *Language, truth and logic*. While we must allow for differences within the logical positivist movement, *Language, truth and logic* states clearly what is essential to the doctrine of logical positivism. In 1940 he joined the Welsh Guards and worked for most of the war in military intelligence. He returned to Oxford in 1945 to become Dean of Wadham College. From 1946 to 1959 he was Grote Professor of the Philosophy of Mind and Logic at University College London. From 1959 until his retirement in 1978 he was Wykeham Professor of Logic in the University of Oxford. In 1970 he was knighted. Although he came to reject the most radical proposals of logical positivism, Ayer remained a close follower of the British tradition of empiricism and logical analysis. It was Wittgenstein's *Tractatus* that set Ayer on the course which led to *Language, truth and logic*. However, the greatest influences on Ayer were Russell and Hume. He continued to admire Bertrand Russell, regarding him as probably the greatest philosopher of the twentieth century; and, like Russell, he was an enthusiastic atheist. Ayer also became interested in the American pragmatists, such as William James (1842–1910). Again, like Russell, Ayer was a passionate advocate of reason, and thought that intellectual honesty demanded that we seek sufficient evidence for any beliefs that might be proposed for acceptance.

  The motivation for logical positivism stems from two connected lines of thought: (I) the unity of science, and (II) the elimination of metaphysics. In short, this amounts to the view that really all science forms a single system; it alone is able to give true characterizations of the nature of the world which can in the end be exhaustive. The unity of science means that all branches of scientific inquiry have a common epistemological basis: it is that determining the truth or falsity of scientific theories about the nature of the world depends entirely on an appeal to the evidence of experience and observation. The elimination of metaphysics complements this, because

metaphysics commonly supposes there is some way of determining the nature of the world—perhaps its real or essential nature beyond appearances—other than by an appeal to experience and observation. The apparent assertions by metaphysics about the nature of the world are, according to logical positivism, not true or false, but nonsense—literally meaningless. With the elimination of metaphysics as a source of knowledge about the world, science is unified as a system of factual propositions, that is, statements whose truth or falsity and, indeed, meaning depend on their being open to the test of the facts of experience.

Propositions are what is determinately true or false: that is, they are *literally meaningful*. Propositions are what literally meaningful indicative sentences (sentences which grammatically appear to state things) of any particular language express; this is important because sentences of different languages can express the same proposition, as in *it is raining* and *il pleut*. The criterion for a sentence is that it is grammatically well formed, that is a necessary condition for it to be meaningful, otherwise it is mere gibberish, such as "foot a fight will". The logical positivists argue that many grammatically well formed sentences do not express genuine propositions, although being grammatically well formed sentences they may appear to do so. Sentences that appear to express a proposition, whether they do so or not, Ayer calls putative propositions or statements. The logical positivists argue that all genuine propositions are either analytic/ tautologies or verifiable by experience; statements—that is, indicative sentences which appear to express propositions—which are neither analytic nor verifiable by experience are literally meaningless or nonsense. Sentences and statements that do not express genuine propositions may be meaningful in some other way—they may have poetic or emotive significance—but they are not *literally* meaningful. If a statement is literally meaningless, then the question of its truth or falsity cannot arise.

It has to be the case that a distinction is made between sentences being meaningful in some broader sense than *literally* meaningful because otherwise the criterion of literal meaningfulness would have no possible application; in order to discover if a statement is analytic or empirically verifiable, we already have to understand what it means.

A sentence expresses an *analytic proposition* if, and only if, its truth or falsity follows solely from the definition of the terms it contains. Thus "All bachelors are unmarried" is analytic, since the predicate "unmarried" is part of the definition of "bachelor"; establishing the truth or falsity of the proposition consists in merely unpacking the definition of its terms. The truth or falsity of analytic propositions depends entirely on the meaning of the symbols in the sentence the proposition expresses. Analytic propositions are true or false, and can

be known to be so, *a priori*, that is, independently of the evidence of experience; they are also devoid of factual content as they make no claim about the world; their truth or falsity is compatible with any evidence of experience whatsoever. That which is necessary is that which must be and cannot be otherwise. If an analytic proposition is true, it is *necessarily* true—it must be true and cannot be false. If an analytic proposition is false, it is *necessarily* false—it must be false and cannot be true. The denial of a true analytic proposition implies a logical contradiction.

A sentence expresses an *empirically verifiable proposition* if, and only if, some possible experience is relevant to determining its truth or falsity. The truth or falsity of such empirically verifiable or factually significant propositions cannot be determined merely by examination of the definition or meaning of the symbols in the sentence the proposition expresses. Thus "The cat is on the mat" is a factually significant proposition; its truth or falsity does not follow from the meaning of the terms it contains—it is not an analytic but a synthetic proposition; its truth or falsity can only be determined *a posteriori* by consulting experience. That which is contingent is that which may or may not be: that which could be otherwise. If an empirically verifiable proposition is true, then it is *contingently* true—it is true, but could have been false. If an empirically verifiable proposition is *contingently* false, it is false, but could have been true. The denial of an empirically verifiable proposition never implies a logical contradiction.

The two classes of analytic and empirically verifiable statements are mutually exclusive and collectively exhaustive of all literally meaningful statements: they are the totality of genuine propositions. That is, it is a necessary and sufficient condition for a statement to be literally meaningful, and so capable of being true or false—a proposition—that it be either analytic or empirically verifiable. Put another way, a statement is a genuine proposition if and only if it is either analytic or empirically verifiable, otherwise it is nonsense.

Metaphysics generally attempts to describe the essential structure of reality: what the real world *must* ultimately be like according to intellectual argument, although it may appear otherwise. Plato speaks of fixed "Forms" beyond the flux of experience and space and time, but accessible to the intellect, defining the "whatness" of things; Leibniz speaks of non-spatial "monads" as the indivisible, indestructible substance of the world which remain the same through all natural change; Hegel speaks of the fully real as "The Absolute", the universe as ultimately a self-thinking totality. There are also theological statements asserting the existence and nature of an eternal transcendent God outside space and time.

Metaphysics, with theology, is eliminated as literally meaningless because what it characteristically proffers as propositions are not genuine propositions at all. The need to be clear about what are

genuine propositions arises from the fact that we are misled by the surface appearance of statements in metaphysics into thinking they express propositions; but we know they do not express propositions because they do not say anything whose truth or falsity can be determined in the only two ways possible: by their being analytic or by their being empirically verifiable. Metaphysics is disposed of not because it is false, but because it is composed of statements which are largely nonsense; it may appear to be composed of propositions— statements that can be true or false—but really it is composed of statements incapable of being either true or false because their truth or falsity cannot be established even in principle by the only two ways possible. If we are to say that any of the statements of metaphysics is literally meaningful, then it must be translatable into statements that are analytic or empirically verifiable. However, if a statement is analytic, it tells us nothing about the world, and if it is empirically verifiable, then it ceases to be a metaphysical statement at all, but merely becomes part of the body of scientific theory testable by observation. Neither translation is congenial to the metaphysician who wishes to contend that his statements both say something about the world—are factually significant—and cannot be settled by empirical verification; but it is impossible, Ayer argues, that both these conditions can be simultaneously satisfied. Indeed, metaphysics often claims to speak of the world behind or beyond the world as it appears. Either a statement says something about the world, in which case it is empirically verifiable, or a statement says nothing about the world; no statement can be about the world and not be empirically verifiable. Therefore metaphysics, which purports to produce truths and refutations of falsehoods about the nature of the world or reality in statements which are empirically unverifiable, is impossible; it produces only literal nonsense. Metaphysics makes only literally meaningless assertions and raises spurious questions; it is, in short, composed of meaningless pseudo-propositions which have the appearances of genuine propositions. It follows that there can in reality be no genuine disputes between metaphysicians: if "*p*" is a metaphysical statement, it is literally meaningless, but then "not-*p*" is also meaningless.

Logical positivism holds that all *a priori* propositions are analytic and, although necessary, are necessary only because they are factually empty: they say nothing about the world, but reveal only the conventional meanings of words. All *a posteriori* propositions are synthetic and contingent, but they are, whether true or false, factually informative: they say something about the world. Contrary to the view of a philosopher such as Kant, there can be no *a priori,* necessary propositions that are synthetic. These considerations can be summarized in the following diagram:

| | Analytic/tautological /necessary | Synthetic/contingent |
|---|---|---|
| *a priori* | *A* | *B* |
| *a posteriori* | *C* | *D* |

All genuine propositions—that is to say, all propositions—fall into either, but not both, of the shaded areas: *A* and *D*. No propositions fall into the unshaded areas: *B* and *C*. There are therefore only two classes of genuine propositions:

*A: a priori*/analytic/necessary.
*D: a posteriori*/synthetic/contingent.

All statements that fail to fall into the classes *A* or *D* are not propositions at all; they are incapable of being true or false—they are not literally meaningful—although they may be meaningful in some other way.

Thus, in so far as metaphysics does contain literally meaningful propositions, it consists either of analytic propositions, which tell us nothing about the world, whose truth or falsity can be determined *a priori*, or synthetic propositions, which do purport to tell us something about the world, whose truth or falsity can be determined only *a posteriori*. There is no special class of metaphysical propositions which are at once *a priori* and tell us something about the world: no facts can be known *a priori*.

All the statements of logic, mathematics and geometry express non-empirical, non-factual, propositions, that are *a priori* valid and necessary in virtue of their being analytic or tautologies: their truth depends solely on the meaning of the symbols of which their statements are composed. They are also devoid of factual content; the reason such truths are necessary is just that they do not make any assertions about the world that could be confuted or confirmed by the evidence of experience. We do not have to suppose, in order to explain our *a priori* knowledge of necessary truths, that the truths refer to some realm of entities transcending experience. All *a priori* analytic truths—including those of logic, mathematics and geometry—are not *about* anything at all, but simply reflect the meaning we have chosen to give to linguistic signs.

Philosophers such as Kant have argued that there is a special class of propositions which are *a priori* synthetic and necessary. Kant accepted that propositions such as "All bachelors are unmarried" are analytic, necessary, their denial implying a contradiction; the concept of the predicate is implicity contained in the concept or definition of the subject, so to assert that someone is a bachelor, but not unmarried, is a logical contradiction. Such propositions, Kant agreed, tell us nothing about the world. However, Kant thought that the propositions

of arithmetic and geometry were at once *a priori* and synthetic. He then felt obliged to construct an elaborate philosophical system in order to explain how this was possible. How could a proposition which is synthetic, so that its denial does not entail a logical contradiction, be true, and be known to be true, *a priori!* It appeared to Kant that arithmetical propositions such as 7+5=12 were known *a priori,* and were necessary truths, and yet were *synthetic* because it was possible to think of 7+5 without thinking of 12. Ayer argues that this is a purely psychological point. Kant's explanation for our knowledge of synthetic *a priori* truths is that they characterize the form we impose on the matter of sensation and so are valid for the world only as it appears. Ayer thinks such an explanation quite unnecessary: the truth of 7+5=12 and the *a priori* knowledge of that truth depend entirely on the conventional definition of the terms in it, and it is thus quite independent of empirical evidence or, *a priori.* The same argument applies to geometrical truths; such truths are not a description of physical space, they merely unravel whatever definition of the terms we started off with. Logical propositions such as "Either *p* or not-*p*" are true regardless of any facts of experience and depend for their truth entirely on the meaning of the signs composing them; they are tautologies because they always come out true regardless of what propositions are substituted in them provided the substitution is done uniformly. It follows that such analytic propositions, although necessary, are trivially true or devoid of factual content. The proposition "either it is raining or it is not raining" tells us nothing whatsoever about the weather, and is true independently of whatever the facts about the weather are; its truth excludes nothing at all.

If it is the case that all *a priori* propositions are analytic, how do we explain the usefulness of logic, mathematics and geometry, and their ability to surprise us? The explanation lies entirely in the limitations of our intellect. In the case of complex analytic propositions we are, as a matter of fact, intellectually incapable of seeing at once all the consequences of the definitions we adopt. To an intellect of sufficient power, the complex prepositional theorems of logic, mathematics and geometry would be of no more interest than *"A=A"* is to us. The interest for us of analytic propositions is that we cannot always see immediately everything that our definitions imply.

This brings us to what for Ayer is the function of philosophy. Philosophy cannot determine the nature of reality, as metaphysics would suggest. Any proposition concerning the nature of reality would be a factual scientific or common-sense proposition whose truth or falsity could be established only by the test of experience and not by philosophy as such. The function of philosophy, once it is demonstrated that metaphysics is literally meaningless, is analysis and clarification. Analysis is a branch of logic and consists of giving precise definitions of concepts, or presenting the logical consequences of definitions, of terms

used in science and common sense; thus all the propositions of philosophy are analytic. The function of philosophy is to translate talk of one sort into logically equivalent talk of another sort, an activity which has purely linguistic significance. Philosophy itself can produce no new factual knowledge about the world but can only deduce the logical consequences of propositions whose truth or falsity, if they are not analytic—and so devoid of factual content—is determined by the facts.

It is important to establish more exactly what is meant by empirical verifiability in order to determine which non-analytic statements are propositions. Such propositions must in all cases be capable of being verified or falsified by experience. It is necessary, however, to make two sets of distinctions here:

(a)    verification in practice
(a′)   verification in principle
(b)    "strong" or conclusive verification
(b′)   "weak" or probabilistic verification.

In both cases Ayer says he adopts the more liberal of the two alternatives, (a′) and (b′). The reason for this is that (a) would entail denying as literally meaningful all sorts of empirical propositions because we could not in fact verify them. Thus the proposition "There are mountains on a particular planet on the other side of the galaxy" is not a proposition which I could in fact verify; perhaps it never will be verified; nevertheless we know what *would* verify the proposition; we can conceive of certain logically possible observations which could *in principle* be made which would verify or falsify the proposition. There would be an inevitable tendency for (a) to lead to solipsism whereby my possible knowledge extended only as far as propositions describing my actual private experiences. Adopting (b) would also prove or exclude too much, for no empirical proposition can be *conclusively* verified or falsified; empirical observations can only render the truth or falsity of a proposition more or less probable. One reason for this is that, whatever empirical proposition we take, the conclusion or import we draw from observations relevant to determining the truth or falsity of the proposition will always depend on assuming the truth of certain other propositions describing the circumstances of the observation. But then the truth or falsity of these other propositions describing the initial conditions of the empirical test could themselves, if they are factually significant, be tested by experience, and so on. Also most of the propositions of natural science of the form "All *A* is *B*" would be rendered literally meaningless if we adopted (b) because we could not even in principle examine what is an open infinite class of cases; there may always be cases we have not examined, and there is no way of demonstrating that there are not such cases. In short, Ayer thinks all empirical propositions are *hypotheses* because there is no way of absolutely confirming or refuting such propositions.

Ayer admits that empirical hypotheses do not confront experience singly, but only as part of a system of propositions. Thus if an observation appears to verify or refute a given hypothesis, it is always logically possible for us to refuse to admit to the significance of the observation by modifying the other hypotheses that gave the observation its significance as evidence of a particular sort. Take the proposition "All trees have leaves"; suppose we test the truth or falsity of this proposition by making observations; whatever observations we make, they always depend on certain other empirical hypotheses connecting the observation and the proposition under test; for example, that we are not suffering from an illusion, or we have correctly identified something as a leaf. Some of the logical positivists argued that there is a class of isolated "basic propositions" about which it is impossible for us to be mistaken, and which can be conclusively confirmed or refuted by experience because they refer only to immediate experience. Ayer initially thought that any factually significant proposition involves using general classificatory terms (such as "red") which it is always possible to misapply, and so no factual proposition can be conclusively verified or refuted, since we can always find out we have made a mistake in the light of further evidence.

Thus, according to "weak" verifiability (b'), a genuine proposition— a statement capable of being true or false—if it is not analytic, is an empirical hypothesis the truth or falsity of which experiences could, in principle, render more or less probable. The purpose of formulating scientific theories is essentially predictive and pragmatic: it is therefore the very meaning of rational behaviour that we adopt those theories and methods which function to enable us to anticipate and control the course of our experiences. The function of theories, and the purpose of testing them, is to produce theories which are more efficient instruments for describing and anticipating experiences. Whether a theory will be successful in this way can be revealed not by *a priori* argument but only by its success in practice, but it is always logically possible that it may fail in cases we have not observed.

The "weak" verification principle thus states that all literally meaningful non-analytic statements are in principle verifiable by being rendered more or less probable by propositions which describe specific experiences; all other statements, apart from analytic ones, are literally meaningless. So all statements which are not analytic propositions and cannot be verified by experience are literally meaningless: they do not express a proposition at all. The verification principle gives a criterion for distinguishing the literally meaningless from the literally meaningful.

The attempt to give a precise formulation of empirical verifiability leads Ayer into difficulty. Ayer's initial version of the "weak" verifiability principle is: a non-analytic statement is a genuine factual

proposition—and thus not literally meaningless—if we can deduce from it, along with certain other statements describing the conditions under which relevant observation could take place, some experiential proposition which refers to actual or possible experience (sense-contents), which cannot be deduced from those other statements alone. This formulation is, however, faulty as it excludes nothing as a literally meaningful proposition. If $N$ is any statement you like, even one that is meaningless or metaphysical, and $O$ is an experiential proposition, then $O$ is deducible from [(if $N$ then $O$) and $N$], without being deducible from $O$ alone. This means that $N$ would, by the criterion, be verifiable and hence a literally meaningful proposition even though it can be any statement at all. If we say that the "other statements" must be themselves factually significant, then we have got no further, since distinguishing factually significant statements was the point of the criterion, and we cannot assume we can distinguish which statements are factual. Ayer tries to rectify this fault, but he does not succeed in discovering a precise formulation that includes and excludes just what he wants.

One way of avoiding such problems would be to adopt the "strong" verification principle (b). In this case it is not just a matter of some empirical evidence being deducible which would be favourable or unfavourable to the truth of a proposition. "Strong" verification demands that the whole content of empirical or factual propositions, when fully analyzed, be expressible in wholly experiential propositions or observation-statements. Indeed, sometimes Ayer does seem to be working with the "strong" verifiability principle, whereby any genuine non-analytic proposition must, if we are to understand it, be translatable into propositions which describe only actual or possible experiences: sense-contents. A statement is then a factually significant proposition if and only if it can be completely defined as a logically equivalent set of purely experiential propositions which entails the original proposition and is entailed by it; the two statements are thus identical. The literal meaning of any factual proposition is then no more or less than a set of propositions describing some actual (categorical) or possible (hypothetical) experiences. The thinking behind this is that understanding the meaning of factually significant statements involves having, at least in principle, access to experiencing the factual conditions under which the proposition which expresses the statement would be true; that is, experience in principle of the truth-conditions of a proposition is required to understand the literal meaning of the statement it expresses. All factually significant propositions, such as "I am now sitting in front of a table", are abbreviations for a complex of propositions describing sense-contents alone. If any part of a statement appears to refer to something that is not even in principle a feature of actual or possible experience, then we can be sure that that part of the statement is without factual

significance, and is meaningless unless it is analytic: that part is literal nonsense, what we say is literally "sense-less". Only by expressing a non-analytic statement using symbols which wholly stand for sense-contents are we able to make literally intelligible *what* it is we are talking about.

It is surely this "strong" notion of verifiability that leads Ayer to various forms of philosophical analysis and reductionism. Such analyses are epistemological and are ontologically neutral. We find this reduction at work, for example, in his analysis of the concepts of a material object and of causation. In the case of material objects Ayer is led to phenomenalism: statements about material objects, if they are meaningful at all, must be wholly translatable into experiential propositions which do not mention material objects; what we mean when we talk about "material objects" is nothing more than some set of actual or possible sense-experiences. Such a translation defines "material object". This disposes of the problem of the existence of the external world arising from our making inferences from propositions concerning our experiences to propositions referring to material objects, because there is no gap in the end between experiences and material objects: to talk of material objects is just to talk of certain ordered collections of actual or possible experiences, and the set of propositions describing particular sense-contents is identical to a proposition describing a material object. The same analysis applies to causation. Ayer agrees with Hume that "*C* causes *E*" is not a logical relation: if "*C* causes *E*" is a non-analytic, factual, proposition then to assert *C* occurs but deny *E* occurs is never a logical contradiction. To say that "*C* causes *E*" is to say no more than that "whenever *C*, then, under certain circumstances, *E*"; there is nothing further in our experience, and indeed nothing further at all, to which the concept of the "necessary connection" of *C* and *E* could correspond. Causality amounts to no more than the definition "invariable association in a potentially infinite number of possible cases". Generally, to avoid talking literal nonsense one must specify what feature of actual or possible experience the talk describes.

The "self" is also not meaningfully identifiable with any non-experiential soul or mental substance, but is, like a material object logically constructed out of sense-contents. The way in which we think of the minds of others presents problems, however, because we have in principle no access to their sense-contents, but only to their behaviour. This produces an incoherent asymmetry whereby the ascription of mental states to myself is phrased in "mental" sense-contents, whereas its ascription to others is phrased in "physical" or "behavioural" sense-contents.

Logical positivism has a dilemma. The problem with adopting "strong" verifiability is that although it excludes statements that Ayer wishes to regard as literally meaningless, it also excludes statements he

would wish to regard as meaningful. Ayer came to think later that the complete reduction of propositions about material objects to sense-contents was not possible, because no finite set of propositions referring to sensory experience was ever logically equivalent to a statement referring to a physical object. No finite set of observation-statements can give the necessary and sufficient conditions which would constitute the truth that $X$ is a physical object, since further, logically possible evidence—further experiences—may show we must have been mistaken. So no finite set of propositions referring to sense-experiences can conclusively verify the proposition that $X$ is a material object. Hence the problem with "strong" verifiability is that it implies that most, perhaps all, of the statements of natural science are meaningless. The problem with "weak" verifiability is that although plausibly it permits the statements of science and common sense as literally meaningful, factual, propositions, it fails to exclude those statements which Ayer wishes to regard as metaphysical and meaningless.

Take, for example, the statement "God exists": the same considerations apply to "God does not exist". Ayer wants to say that such an assertion is literally meaningless rather than false. But it is not excluded by the "weak" verification principle, for someone might admit that a particular experience was evidence for or against the existence of God—thereby qualifying "God exists" as a literally meaningful proposition—without thereby having to admit that what is meant by "God" and "His existing" is wholly exhausted by those evidential experiential propositions. Only by adopting the "strong" verification principle is there hope of identifying "God exists" as literally meaningless and so eliminating it. However, no sophisticated religious believer is likely to admit that what he means by God existing is nothing more than some actual or possible sense-experiences—for example, the observed intricateness and orderliness of nature—even if he might admit it as evidence of God's existence.

Ayer's analysis of apparent ethical and aesthetic statements—"statements of value"—concludes they are not genuine propositions at all; they are without literal meaning. They are not factual synthetic statements, but rather *expressions* of feelings of approval or disapproval, which may affect others so they feel the same way. Value statements are not about anything—they do not even describe the fact that there is a subjective psychological state which constitutes a feeling—rather, they are an expression *of* feeling, akin to a cry of pain or grunt of satisfaction. Expressions of value are therefore neither rational nor irrational: they are just a piece of non-rational behaviour. Since value statements are incapable of truth or falsity, then no two value statements can conflict. If we argue with someone over value, it must be over what are the facts concerning the situation which prompted our feeling.

A further problem that arises with the "verification principle" which lies at the heart of logical positivism is the logical status of the principle itself. For the statement "Every genuine proposition must be either analytic or empirically verifiable" appears itself to be neither analytic nor empirically verifiable, in which case it is self-defeating and the "verification principle" is literally meaningless and incapable of truth or falsity. Logical positivism is not the first or the last philosophy to saw off the branch on which it is sitting. One response to this is to say that the principle is not a statement, but a prescriptive rule which we ought to adopt. But the problem with that is there is no way of showing why the rule should be adopted.

## Popper

Karl Raimund Popper was born in Vienna in 1902. Although his parents were Jewish, they were baptized into the Protestant Lutheran Church before their children were born. The circumstances in which he was brought up were bookish and intellectual. His father was doctor of law of the University of Vienna and, as well as practising as a lawyer, he was also a scholar. With this background Popper began reading early about philosophical, scientific and political matters. In 1918 he enrolled at the University of Vienna and sampled a wide range of lecture courses, but concentrated his attention on mathematics and physics. After university he taught mathematics and physics in secondary schools. During this time he took a keen interest in left-wing politics, although his later work was greatly concerned with the totalitarian dangers of socialist and Marxist mass collectivization and of the belief in inevitable laws of historical development. His resistance to doctrines claiming access to final truths and dogmatism led him to favour individualism and piecemeal evolutionary social change rather than grand revolutionary change, also tentative solutions to social problems against a background of the greatest possible freedom for the expression of opinion and criticism which is characteristic of an open society. The chief culprits attacked by Popper are Plato, Hegel and Marx.

Popper had contacts with the logical positivism of the Vienna Circle, but he was never a logical positivist, and instead became one of its critics, despite a common interest in the methods of science. The root of Popper's criticism was that questions of meaning were of relatively little importance; what concerned him was the status of theories and their testing. The logical positivists held that, apart from the propositions of logic and mathematics, all literally meaningful statements were empirical and scientific. Popper never held that all non-logical statements that were not scientific were meaningless. Popper's "criterion of demarcation" was, unlike the logical positivists'

criterion, concerned with the distinction not between the meaningful and the meaningless but between science and non-science. Non-science includes pseudo-science, which consists in intellectual activities that claim to be scientific, but are not.

Before the Second World War, Popper left Austria, and from 1937 to 1945 he taught philosophy at the University of New Zealand. He came to England in 1946. He remained on the outside of philosophical activities as practised in both Oxford and Cambridge, and received greatest intellectual sustenance from those who were not primarily philosophers such as the art historian E.H.Gombrich and the economist and political theorist F.A.Hayek. In 1949 Popper was made Professor of Logic and Scientific Method at the London School of Economics; and this position he held for the rest of his university career. He was knighted in 1965. Popper's work has been enormously influential in the philosophy of science, and on the methodology of the social sciences.

It is possible to identify three important connected strands of thought in Popper's philosophy: (a) the solution of the problem of induction, (b) the problem of demarcating science from non-science, (c) the importance of maximizing criticism and maintaining a "critical attitude" as essential for rationality and vital for the growth of knowledge.

The essential nature of philosophy involves the critical questioning of fundamental assumptions that we might otherwise take for granted; this is obviously connected with point (c). Points (a) and (b) are also connected with this because it has been thought that what distinguishes science from non-science is the inductive method: the extent to which the truth of its propositions is derived from and justified by their origin in the facts of experience. The ideal picture that this inductive model of science evokes is its beginning by collecting pure or presuppositionless observations which give the facts, in a passive, unprejudiced, neutral manner; then from the repetition of these observations certain patterns begin to emerge which lead to the framing of universal hypotheses connecting particular observed phenomena; these hypotheses are then, by further experimental tests, proved true, or at least confirmed as highly probable. The aim is to pick out, from the many features repeatedly observed, the necessary and sufficient conditions for the event to be explained; that is, the aim is to identify the cause of the event by identifying that feature of the situation that is always present when the event to be explained occurs and is never present when the event to be explained does not occur.

Popper argues, with others, that there are at least two major problems that such a view of science encounters,

(i)     The first problem is that there are no presuppositionless, neutral, raw observations free of theoretical content. All observation

involves some identifying, and therefore theory-loaded, idea of the nature of the thing observed that already determines and presupposes the kind of thing observed, which therefore necessarily pre-empts any conclusion derived from observation. To observe at all necessarily involves theoretical presuppositions about what we are observing. We always when observing observe something *as* a so-and-so which carries with it theoretical implications which often take us beyond the bare content of the observation. For example, the assertion "Here is a glass of water" carries with it theoretical assumptions about the behaviour of entities denoted by "glass" and "water", assumptions with implications beyond the evidence of present observations; indeed, Popper says that such a statement is unverifiable, because the universal law-like behaviour implicit in denoting terms such as "glass" and "water" is not reducible to any finite class of experiences. Another point is that when we identify two events as a repetition of the same event, we are necessarily picking out some respect in which they are similar, and ignoring other respects in which they differ; they must differ or they would not be two distinct events. Observations, to be possible at all, always involve the selection, implicitly or explicitly, of certain of the features of our environment and the rejection of others; the possible range of things we could make note of is infinite, so we are forced to be selective. What we choose to observe is guided by theoretical interests.

(ii)   The second problem is that of inductive inference; Popper characterizes this as "Hume's problem". In valid deductive reasoning it is not possible for the premises of the argument to be true and the conclusion false; necessarily if the premises of a valid deductive argument are true, then the conclusion is true. To assert the premises and deny the conclusion of a valid deduction is to contradict oneself. A deductive argument involves the claim that the premises present conclusive grounds for its conclusion. Thus if it is the case that "All men are mortal" and "Socrates is a man", then "Socrates is mortal". Inductive arguments are not conclusive in this way: the premises can be true, yet the conclusion false.

The theories of science are characteristically universal propositions of the form "All *A*s are *B*s" which go beyond the evidence of experience; the proposition does not follow from any finite number of observations of *A*s and *B*s—which give propositions of the form "Some *A*s are *B*s"—for there is no logical contradiction involved in the assertion that the next observed *A* will not be a *B*. From this it follows that no universal scientific proposition can be proved to be true. Scientific laws always transcend experience. The inference from experience to universal

laws, or more generally to unobserved instances, is neither a logically valid deductive argument nor an inference that could be justified by experience, for the argument from "inductive inferences have worked in the past" to therefore "inductive inferences will work in the future" is itself an inductive inference, so any such attempted justification would be circular. An inductive inference could be made valid on the assumption that regularities or uniformities observed in the cases we have observed hold in cases we have not observed. But this assumption is not a logical *a priori* truth such that its denial implies a contradiction or such that it can be justified by experience. We might say that uniformities have been found to hold in all cases we have observed, therefore uniformities will hold in cases we have not observed; but that evidence from cases we have observed can be evidence for cases we have not observed is exactly what the uniformity principle justifies, so such evidence cannot be used to justify the uniformity principle itself.

It will not help to fall back on probability, for we can still ask why we think the observation of certain cases should even make more probable events we have not observed. We can say further that no finite number of observations can make a universal statement of the form "All *A*s are *B*s" more probable by the frequency theory of probability; the class of examined cases is always finite, and the class of unexamined cases is potentially infinite, so that the probability of the universal statement "All *A*s are *B*s" will always approach zero. Even if we restricted the range of our general statement, we could still not be sure that the next, ninety-ninth out of a hundred, *A* will be a *B*, on the basis of observing past *A*s and *B*s, since "*A* and not-*B*" is never a logical contradiction.

Popper rejects induction both as a fruitful method of formulating scientific theories, and as a logic for justifying theories. He claims to have solved the problem of induction, but he does not so much solve it as sidestep the problem; he does not give or seek a justification for induction, rather he substitutes a different scientific methodology that is independent of induction, but does the same job as induction in allowing us rationally to prefer one theory to another on empirical grounds. Popper maintains the empiricist principle that it is only by observation and experiment that we may rationally decide to accept or reject scientific theories. Such decisions cannot be justified *a priori*. This leads on to the heart of Popper's philosophy, and the idea that what distinguishes science from non-science is not induction as a method or a justificatory logic, but that science consists of theories which are both logically self-consistent and such that they can *in principle be falsified or refuted*. Popper uses the terms "hypotheses", "conjecture", "theory"

and "scientific law" interchangeably. The logical basis for this is quite simple, and derives from the deductive principle of *modus tollens:*

> If $p$ then $q$,
>
> not-$q$
> _____
> therefore, not-$p$.

Roughly this says that if asserting $p$ entails asserting $q$, and $q$ is false, then $p$ is also false. We can substitute in this formula, $H$, standing for some universal scientific hypothesis, for $p$, and $e$, standing for an observation-statement, for $q$. The observation-statement $e$ is *deduced* from $H$. We then have the following.

> If $H$ then $e$,
>
> not-$e$
> _____
> therefore, not-$H$.

The essential point to notice is that this indicates a logical asymmetry between verification and falsification: while it is the case that no finite number of observations can ever prove the truth of a universal scientific theory, logically only one case is required to contradict a theory's universal assertion in order for it to be falsified or refuted. What is distinctive about scientific theories is not that they can be proved true, or even made more probable, but that they are testable, that is, they can be falsified. So from the universal proposition "All *As* are *Bs*" *(H)*, we can deduce the proposition that "It is not the case that some (even one) *A* is not a *B*" *(e)*; if we observe "Some (at least one) *A* is not a *B*" (not-$e$), then it follows purely as a matter of deductive logic that "All *As* are *Bs*" is false (not-$H$). The assertion "All swans are white" is falsified by the observation of a single non-white swan which entails that "Not all swans are white". Thus a theory is falsifiable if and only if there is some observation-statement deducible from it, which, if false, would falsify the theory. A genuine scientific theory must exclude some logically possible state of affairs by specifying more or less exactly what the state of affairs will be: it must not be compatible with all logically possible evidence. More exactly what is deducible from a scientific theory is at least one "basic statement" which is a potential falsifier; such a statement will be a singular observation-statement that refers to some publicly observable event. This excludes pure existential statements of the form "Some *A* is a *B*" from being scientific because they are untestable; no possible evidence can ever refute them as there is, so to speak, always somewhere we have not looked.

Popper was impressed by the contrast between the theories of Marxism and Freudian psychoanalysis on the one hand, and Einstein's theories on the other. According to Popper, Marxists and Freudians saw everywhere confirmation for their theories, whereas Einstein made an effort to formulate a very specific observable prediction which followed

from his theory concerning the bending of light, which, if it failed to be upheld by observation, would have refuted the theory. What is at issue here is not the psychological fact, if it is one, of the reluctance of Marxist and Freudian defenders to admit evidence refuting their theories, but rather the nature or logical structure of Marxist and Freudian theories themselves which rendered them immune from falsification. Popper's suspicion was that Marxist and psychoanalytic theories were only "confirmed", and seemed to explain everything, because they were, through reasons of vagueness or devices designed to explain away counter-evidence, irrefutable. Such theories are anathema to the proper critical scientific attitude. That is not to say that Marxist and Freudian theories were meaningless, or even that what they said was untrue, rather the theories were not scientific in that they were highly untestable, that is, difficult, if not impossible, to falsify. The theories were constantly hedged around with caveats or qualifications, so that apparent counter-evidence was no longer a deducible consequence of the theories. For Popper this indicates that the holders of these theories were not adopting the proper critical scientific attitude. But far from pre-scientific myths being meaningless, Popper says they can often be modified to form the basis of later scientific theories and so become testable by experience.

A further point concerns a comparison of Newton's and Einstein's theories. Popper argues that despite the fact that Newton's theory can be massively confirmed by observation, this is not enough to establish its truth. He holds the view that discrepancies emerged in Newton's theory, between its predictions and observations, which led to the development of Einstein's competing theory despite the enormous confirmation of Newton's theory.

Having explained the *logic* of Popper's philosophy of science, it is necessary to distinguish this from the *methodology* or practice of falsificationism. While the logic of falsification is quite simple, the methodology is a good deal more complex. This arises because, although it is clear what would, logically speaking, constitute the refutation of a scientific theory, determining whether a theory is in fact refuted is quite a different matter. Not only is it the case that there are various reasons why it is difficult to determine if a refutation has taken place, but Popper also acknowledges that there are various ways in which an apparent refutation can always be avoided. These considerations require that we adopt certain *methodological rules* so as to maximize the possibility of scientific progress, although there is no method that can guarantee it.

There are various problems that arise in attempting the actual falsification of a theory by critical discussion, observation and experiment,

(i)  It is always possible to doubt that the observation we have made is correct—we may have made an observational error. This introduces the problem of the empirical base: if we cannot

be certain of the truth of the observation-statements we use to test our theories, we cannot be certain our theories are refuted by them. Popper admits that there are no indubitable observation-statements; all observation-statements themselves have some theoretical content and are open to further testing. But this does not lead to a vicious infinite regress, because although all empirical statements are potentially testable, they can be provisionally or conventionally held as true, and so used to test or falsify theories for which they are potential falsifiers. If they are doubted, further tests can always be carried out. There are no ultimate empirical foundations,

(ii) This problem concerns the fact that scientific theories are always tested in groups. In testing any theory it is necessary that we describe the initial conditions by a set of auxiliary hypotheses; that is, certain other theories are involved which act as assumptions concerning relevant circumstances of the test; these also give the falsifying significance to the observation deduced from a theory. For example, in making an observation we might assume that light travels in a straight line. Thus the falsifying *modus tollens* formula becomes more complex.

If $(H+h)$ (hypothesis + auxiliary hypotheses),then $e$,

not-$e$

therefore, not-$H$.

Strictly speaking, all we can say in this complex situation is that some element in the totality *(H+h)* is refuted—is shown to be false—and that need not be the theory $H$ under test, but could instead be one or more of the auxiliary hypotheses $h$. What can be said here is that the auxiliary hypotheses are themselves open to testing.

(iii) Closely connected with point (ii), it is always possible to adopt *ad hoc* hypotheses so as to evade refutation. By *ad hoc* hypotheses is meant hypotheses adopted for no other purpose than to avoid refutation. For example the theory "All bread nourishes" can be immunized against refutation by the example of some poisonous bread in France by tacking on to the proposition "All bread nourishes" the expression "except in France". Another *ad hoc* method of evading refutation is simply to define away apparent counter-evidence; thus if "All As are Bs" is presented with the evidence of an $A$ that is not a $B$, it can be said that if we seemed to observe an $A$ that was not a $B$, then it could not have been an $A$ that we observed at all; this makes being a $B$ part of the identifying definition of an $A$. So we might say a non-white swan is not a swan at all.

The adoption of *ad hoc* hypotheses and definitional manoeuvres Popper regards as intellectually dishonest. We must therefore adopt some methodological rules so as to avoid adopting *ad hoc* hypotheses. Partly this is achieved by the methodological principle that if we modify a theory with the addition of some new hypotheses so as to avoid refutation, there must be some consequences that can be deduced from the original theory and the new additional hypotheses that were not deducible from the original unmodified theory. In other words, the additional or modified hypotheses must form a new hypothesis which is testable in some way the original hypothesis was not: they must be independently testable. Thus we reject as *ad hoc* "All bread nourishes, *except in France*", since it has no new testable consequences which are not also a test of "All bread nourishes"; the reverse is not the case, since there are testable consequences of "All bread nourishes" which are not also testable consequences of "All bread nourishes, except in France".

It is clear that some hypotheses are more testable or falsifiable than others. The theory that "All planets move in loops" ($H_1$) is less falsifiable than "All planets move in ellipses" ($H_2$), because $H_1$ is less specific about what evidence would refute it. To put it another way, $H_1$ excludes less than $H_2$: its truth is compatible with a far greater range of possible observations. $H_2$ not only says that the planets move in closed loops, but also specifies the exact kind of loop that is involved. Thus we can say that all the observations that would falsify $H_1$ would falsify $H_2$ but some observations that would falsify $H_2$ would not falsify $H_1$; if the planets moved in anything but ellipses, $H_2$ would be false, while as long as they still moved in some kind of loop $H_1$ would be true. Popper expresses this point by saying the greater the *information content* of a theory, the more falsifiable it is: it tells us more about the way the world *is* by excluding as being the case more logically possible states of affairs. The information content increases with the set of statements which are incompatible with the theory.

Popper also notes that the falsifiability and the information content of a theory are in inverse proportion to its probability. The information content of a tautology—for example, "Either it is raining or it is not raining"—is zero, and its probability is at the maximum of 1. The probability of $H_2$ ("All planets move in ellipses") being true is far less than the probability of $H_1$ ("All planets move in loops") being true because the class of potential falsifiers of $H_2$ is a proper subclass of the potential falsifiers of $H_1$. For example, "The planets move in a straight line" would falsify both $H_1$ and $H_2$, but "The planets move in a circle" would falsify $H_2$ but not $H_1$ because a circle is a kind of loop.

Popper's overall position is then that we make progress in our

knowledge, and approach the truth, by a process of trial and error. Popper gives the following evolutionary view of the growth of scientific knowledge:

$$P_1 \rightarrow TT_1 \rightarrow EE_1 \rightarrow P_2$$

Here $P_1$ designates a problem, for which we propose the tentative theory $TT_1$; we then try to eliminate false theories by testing them severely and subjecting our theory to critical discussion, $EE_1$; then $P_2$ is the problem-situation as we emerge from our attempted solution to our problem, and so on. Science makes progress by conjecture and refutation; we learn from our mistakes. We start with problems, not with neutral observation: that is, we start with the failure to explain some phenomenon. No mere observation constitutes a problem; we have a problem only in the light of some existing theory which fails to explain an observation. We try to solve the problem not by proposing the most probable theory—for more probable theories have less information content—but by proposing bold conjectures or guesses which, because they are highly specific and precise in what they say about the world, are highly falsifiable; we can then test these theories in severe and crucial tests. The tests are severe because what the theory entails is incompatible with a very wide range of possible observations. Intuitively we can see that the severity of a test will increase with its improbability. A new theory will be bold and improbable (unlikely) and its tests severe because it involves rejecting part of the background knowledge of scientific theories of its historical time. For example, Einstein's theory was bold relative to the theoretical background assumptions of its time because it contradicted the background assumption of its time that light travels in straight lines.

It is significant that in Popper's falsificationism the *source* of a scientific theory is totally irrelevant to whether it is scientific or not. A theory is scientific if and only if it is falsifiable; it is quite unimportant whether the theory arises from laboratory observation or an inspirational blow on the head. One method might as a matter of fact be more fruitful as a means of producing good theories than another; but that is irrelevant to the question of whether a statement is scientific or not, and, if it is scientific, how good a scientific theory it is. Science has no mechanical method by which it can make progress; Popper's philosophy gives free rein to imaginative bold speculation. Good science requires just as much imagination as any of the arts. Popper says we do not in fact come to the world as passive or neutral observers, but are born with certain natural expectations or dispositions that operate in the same way as consciously constructed theories. Indeed all animals are in their behaviour acting out innate solutions to problems. But while these innate "theories" might be psychologically *a priori,* that does not mean they are *a priori* valid. The main difference between man and other animals is the extent to which

man can allow his theories to die rather than dying himself; man can adopt new theories rather than hanging on to his theories and dying with them. One sees the point of this in considering the way a wasp unremittingly batters at a glass window and so "fails to solve" the "problem" of escaping.

Normally we will not be in the situation of testing one theory in isolation, but will have to choose between a number of competing theories. Even if we find an observation that falsifies a theory we will not reject it unless we have some better theory with which to replace it. Indeed, Popper's methodological rules demand that we do not hastily reject a theory after a single falsifying instance, but only after frequent and rigorous falsification has taken place, and we have a better theory with which to replace it. The choice between competing theories should be made in the following way: theory $T_2$ should be preferred to $T_1$ if $T_2$ solves all the problems that $T_1$ solves and it solves the problems $T_1$ failed to solve (that is, where $T_1$ was refuted), *and* it offers solutions to some additional problems about which $T_1$ says nothing, thus allowing the further possibility for refutation. To put it another way, we should choose the theory that explains all the previous theory explains, explains what the previous theory failed to explain, and offers an explanation for further phenomena not explained by the previous theory. The satisfaction of these conditions effectively rules out our new theory being merely the old theory plus some *ad hoc* hypotheses which serve only to avoid the apparent refutations or failures.

Popper's philosophy of science can be summarized in the following way. Knowledge progresses by proposing bold explanatory theories, that is, explanations with a high information content that are highly falsifiable, by subjecting those theories to severe and crucial tests and by the replacement of falsified theories by better theories. We can be said to replace a theory by a rationally preferable, better theory, even if the old theory has not been *conclusively* falsified, when the new theory, provided it has not been falsified, is able to explain all that the old theory explained, and things the old theory failed to explain, and offers as well explanations for things for which the old theory offered no explanation. That is, the better theory $T_2$ will contain $T_1$ as an approximation. If any falsification of $T_2$ would be a falsification of $T_1$, but not vice versa, then $T_2$ is rationally preferable to $T_1$ provided $T_2$ has not been falsified. This means we choose the theory $T_2$ which is more falsifiable—has more information content—provided that theory has not been falsified. We can make our assessment of theories only from the position of the current historical state of critical discussion.

If a theory survives continuous attempts to falsify it by severe tests, it can be said to be highly *corroborated*. That is *not* to say its truth has been conclusively established, or even made more probable. The corroboration of a theory at a certain time is essentially a report on its degree of testability, the severity of the tests to which it has been

subjected, and the way it has stood up to those tests. The corroboration of a theory will increase with its falsifiability, provided it is not falsified, because the more falsifiable it is the more severe the tests it can potentially survive. It can then be subjected to further severe tests. Popper is quick to deny that corroboration reintroduces the notion of induction, for he says that the corroboration accorded to a theory does not say anything about its reliability in the future or anything about its future performance. The less the probability of a theory, the higher its degree of potential corroboration can be. A less probable theory can pass more severe tests and so can be more highly corroborated. A theory that has been well corroborated can be *provisionally* accepted. If there is more than one theory covering the same ground, it is rational to choose the best corroborated theory because that has been most severely tested. This again gives an account of rational preference between theories: $T_2$ is preferable to $T_1$ if $T_2$ survives all the tests $T_1$ survives, survives the tests $T_1$ fails, and goes on to explain further facts which are testable consequences of $T_2$, and if $T_2$ has not yet been refuted.

It is clear from Popper's position that we can never establish that a theory is true. He says that we can never "know" in the sense of conclusively establishing a theory to be true so that there is no possibility of our being mistaken. In this sense Popper is a fallibilist: we can never be certain that we have found the truth. All our theories are conjectures or guesses which are open to testing; we can then perhaps say that some conjectures are better than others because they have stood up to tests better.

Since we are interested in the truth we shall be interested in eliminating a theory which we discover to be false, for that way we might hit upon a theory that is true. Popper is absolutely clear in distinguishing whether a theory *is* objectively true or false as a matter of correspondence, or failure of correspondence, with facts (*p* is true if and only if it corresponds to the facts), from our *knowing* if *p* corresponds to the facts. Popper takes from the logician Alfred Tarski (1902–83) the definition of truth: "'*p*' is true if and only if *p*". Every unambiguous statement is either true or false, and there is no third possibility; but determining *when* a proposition corresponds to the facts is quite a different matter, and Popper thinks we are never in the position to say that we have established or justified the truth of a theory. However, the correspondence definition of truth can act as a regulative principle: it is something we can aim at and get nearer to. Indeed, as the corroboration of a theory increases, it is reasonable to conjecture that we are getting nearer the truth. The extent to which a theory approaches the truth Popper refers to as its *verisimilitude*. Popper derives the notion of verisimilitude from the information content of a theory: the content of a theory *T* is all those propositions entailed by it. The content of *T* can then be divided into its truth-

content (the class of all true statements entailed by $T$) and its falsity-content (the class of all false statements entailed by $T$). The verisimilitude of $T$ is its truth content—minus its falsity—content. Assuming that theories $T_1$ and $T_2$ are comparable, then $T_2$ has greater verisimilitude than $T_1$ if its truth-content is greater than $T_1$, but its falsity-content is less than $T_1$, or the falsity-content of $T_2$ is less than $T_1$ but the truth-content of $T_2$ is greater than $T_1$. If more true statements, but not more false statements, follow from $T_2$ than $T_1$, then $T_2$ is nearer the truth.

If $T_2$ entails all the true statements entailed by $T_1$, and $T_2$ entails some true statements not entailed by $T_1$, and $T_2$ does not entail more false statements than $T_1$, then it is reasonable to say that $T_2$ is nearer the truth than $T_1$: $T_2$ has greater verisimilitude even if it is false. Thus we can rationally prefer $T_2$ to $T_1$ if we are in pursuit of the truth even if $T_2$ is false, provided that the falsity-content of $T_2$ is not too great.

The verisimilitude and the degree of corroboration of a theory are connected. If we compare the corroboration of two theories and determine that all the tests passed by $T_1$ are also passed by $T_2$, and that $T_2$ passes some tests that $T_1$ does not pass, and that $T_2$ does not fail more tests than $T_1$ failed, then it is rational to prefer $T_2$ to $T_1$ because $T_2$ can be conjectured to have greater verisimilitude: it is nearer the truth. $T_2$ will be more testable than $T_1$: it will have a greater information content; it will say more about the way the world is. Although we have not established the truth of $T_2$—indeed, as we are fallible, it is likely to be false—we can express a *rational preference* for $T_2$ as being better corroborated than $T_1$ and nearer to the truth than $T_1$. $T_2$ is more testable and survives more tests than $T_1$.

From Popper's acceptance of the correspondence theory of truth it can be seen that he is a metaphysical realist. He thinks that our theories, if true, refer to a reality which is independent of mind and our theories. However, he agrees that such metaphysical realism does not take us very far except as a regulative idea, for we still have to determine when our theories correspond to things as they really are. We cannot "look around" our theories to reality, but can only take to be reality what our best theories in the light of current *critical* discussion and testing say reality is. Popper thinks it unlikely that we will ever discover "the truth" about the world. Popper is opposed in science to instrumentalism, which asserts that scientific theories do not refer to real entities which explain the course of our observations, but are rather useful devices which posit whatever is required—without maintaining its reality—for predicting accurately the course of our experience. On this view scientific laws are rules rather than truths. Popper also opposes essentialism, which maintains that we can discover an ultimate reality in terms of which everything else is explained. This attitude he sees as stultifying to the pursuit of ever better explanations. Popper takes a middle course in which science is a

genuine attempt to explain some real state of affairs which is known or assumed to be true by some other real state of affairs that is unknown and requiring discovery, the truth of which can be tested independently of the phenomena to be explained; but there is no end to the depth to which we can progress in pursuit of explanations.

When Popper talks about "knowledge" he is not referring to finally established, or justified, truths. He also emphasizes that when he talks about "knowledge" he is talking about knowledge in the *objective sense*. He intends by this to make a distinction between any person's subjective knowledge and objective knowledge as it is formulated in language and existent in books and journals in libraries and research institutions open to public inspection and testing. Scientific knowledge is objective in this sense. Objective logical relations exist between statements which are formulated in language, regardless of whether anyone is actually aware of them or not. What individual scientists believe is relatively unimportant compared to the objective growth of knowledge. The error of what Popper terms "belief philosophy" is that it tries to see knowledge as an especially sure kind of belief.

Popper, in fact, makes a distinction between three interdependent worlds: World 1 is the physical world; World 2 is the subjective mental world; World 3 is the objective world of theories, mathematics, literature, art, and the like, within which there exist objective logical relations—objective, that is, in being independent of the awareness of individual minds. The objects of World 3 are developed by World 2 minds, often in response to problems perceived in World 1; but once formulated, they have an objective status transcending the intentions of the individual. Yet it is knowledge in the subjective sense—what the individual person can know—on which traditionally philosophy has concentrated, the notion being that it is only from what an individual mind can really know that any further knowledge claims can be justified. Yet most human knowledge in the objective sense is not known by anyone in the subjective sense. Human knowledge, especially scientific knowledge, almost entirely consists of knowledge without a knowing subject. Popper's World 3 has some similarities to Plato's realm of objective Forms; however, a vital difference is that Popper's World 3 is by no means fixed, but constantly changes and develops as knowledge grows and progresses through the critical examination of the knowledge we already have.

# CHAPTER ELEVEN

# *Linguistic philosophy: Wittgenstein*

After the publication of the *Tractatus logico-philosophicus* in 1921, Wittgenstein abandoned philosophy because he thought that the *Tractatus* gave a definitive solution to all the problems of philosophy. During the following years, however, owing to various influences, including conversations with other philosophers, he came to think that the *Tractatus* was seriously flawed. This led not merely to an attempt to rectify the faults in the position expounded in the *Tractatus* in a piecemeal fashion, but eventually to the development of a new philosophical outlook. Wittgenstein returned in 1929 to Cambridge where he taught and wrote copiously; but no work other than the *Tractatus* was published in his lifetime apart from a short article which he almost immediately repudiated. However, soon after Wittgenstein's death in 1951, a work appeared that he had been preparing for publication, the *Philosophical investigations;* and it is this that contains the most considered and polished statement of his later thought.

There are, however, some common concerns and connections between the earlier and later philosophies. The most obvious of these are the concern with language, the drawing of linguistic boundaries, and the idea that we are led into philosophy and philosophical problems through misunderstanding the nature of language. We should not "solve" the problems of philosophy in their stated form, or on their face value, but should first see whether the problems are a result of our being fundamentally misled by language. Wittgenstein wishes to jolt us out of the traditional way of approaching philosophical problems, not so as to provide yet more in the way of "solutions", but so that we may look at the problems themselves in a manner whereby we see why they do not require such "solutions". Much philosophy rests on a confusion about the way language acquires its meaning, and many philosophical problems are really pseudo-problems or are misconceived.

284

Wittgenstein also opposes the idea that philosophy is a kind of super-science in either its methods or its problems. He objects to the picture of philosophy as being just like science except for the fact that it pushes the search for explanations and justifications deeper, presenting philosophical theories and hypotheses. If we examine carefully the matters discussed in philosophy, we will discover something peculiar and illegitimate about them, and in the later philosophy this will be manifest chiefly in comparing the use of language in philosophy with other uses.

In the *Tractatus* philosophical or metaphysical propositions are ruled out all at once in virtue of their involving meaningless linguistic signs. Since philosophical propositions do not conform to what is *essential* to a proposition being meaningful, they cannot be meaningful. There is an essential way that propositions are meaningful: it is supposed that propositions are meaningful because of something they all have in common; that is, if, and only if, certain conditions are met can a linguistic expression or sign be said to be meaningful. There are necessary and sufficient conditions that any linguistic expression must satisfy if it is to be meaningful; if it fails to satisfy these conditions, then a putative linguistic expression or proposition is meaningless. The essential condition for meaningfulness given in the *Tractatus* is the picturing relation with the world: a genuine proposition is an arrangement of names that pictures a possible fact and is ultimately constituted out of names whose meanings are the objects they stand for in the world. That the propositions of philosophy do not satisfy the essential condition means that philosophy and its "problems" are disposed of in one blow as meaningless.

The *Philosophical investigations* involves a very important shift in approach. If anything binds together the later philosophy, it is *anti-essentialism*. Essentialism amounts to the view that the reason for regarding a group of distinct things as of the same kind is that they have a distinguishing set of features shared by all and only members of that group. Thus we might define an "automobile" as "a self-propelled vehicle suitable for use on a street or roadway". Wittgenstein opposes essentialism generally, and in particular in the attempt to demonstrate that there must be some single way that all instances of meaningful language ultimately have their meaning, which therefore explains or accounts for the meaningfulness of the whole of language. There is no essential feature in virtue of which all language is meaningful. The key to the later philosophy is perhaps the attack on essentialism in general, and about meaning in particular. One attempt to give an account of the essence of language—that language consists ultimately of names of objects—is given in the *Tractatus* itself. A *part* of language may consist of names of objects, but it is not the essence—defining common feature—of all language.

The anti-essentialism of the *Philosophical investigations* has far-

reaching consequences. It may seem that in rejecting the view that language has an essential way of being meaningful Wittgenstein is giving up all hope of disposing of philosophical problems in virtue of their expression being meaningless. In a sense this is true, although an expression might be meaningless in virtue of not being meaningful in *any* of the different ways it might be meaningful. However, anti-essentialism cuts both ways: it has the consequence that there is no way of dismissing philosophical expressions as wholly meaningless because they do not satisfy what is essential for meaningfulness, but it also has the consequence that because there is no single universal way that expressions are meaningful, there is no way of claiming that philosophy concerns itself with the one true, correct, or real meaning of expressions as opposed to the vagaries of their meaning outside philosophy—for example, their ordinary meaning. That there is no single universal criterion for meaningfulness suggests that all philosophical talk cannot be dismissed as wholly meaningless; but it also entails that there is no universal hidden, but perhaps discoverable, standard of meaningfulness in virtue of which one meaning could be picked out as the true meaning which takes precedence over other meanings in other contexts.

It is important to bear in mind the revolutionary nature of Wittgenstein's later thought. The attempt to fit his later thought into the philosophical tradition will result only in distortion and fundamental misunderstanding. There is a great temptation to take Wittgenstein as presenting new solutions and theories for traditional philosophical puzzles; but if we do this we misunderstand what he is about, and come away with a diminished view of his achievement because, viewed as traditional philosophy, what he says may seem deeply unsatisfactory and even beside the point. The later work offers ways of stopping before we begin to step on the road that leads to the traditional problems of philosophy by revealing something about how language acquires its meaning. If this is to be consistent it must avoid philosophizing as it is traditionally thought of. For this reason some have said that in his later thought Wittgenstein is not doing philosophy at all; indeed, Wittgenstein says that his philosophy is "one of the heirs of the subject which used to be called 'philosophy'". The point is that it is possible to talk *about* philosophy without *doing* philosophy in the traditional sense.

Wittgenstein is adamant that he is not putting forward philosophical theories or explanations, but rather assembling reminders as to the actual use of language. Some have argued that the assembling of reminders of actual usage of language in different contexts is without philosophical significance; but this objection assumes that there is something beyond, or other than, the employment or function or use of language in particular contexts, in virtue of which it acquires its meaning, and from which *the* true

meaning could be determined independently of the use in particular contexts. If there were something beyond, and other than, the actual concrete usage of language in different contexts which determined the essential meaning of expressions, then we might ignore the usage in different contexts and concentrate on the real essential meaning of expressions. Wittgenstein argues that there is nothing hidden beyond the meaning involved in the exact description of the usage of expressions in different contexts which would give the real meaning; and there is nothing in common between the various usages in different contexts which we could pick out as the essential meaning of words and concepts.

The negative part of Wittgenstein's project is to show why none of the ways that have been suggested in which language essentially has meaning are correct. There have been various suggestions as to how language essentially has its meaning: for example, terms get their meaning ultimately by naming objects, or by ostensive definitions whereby we are shown examples of what terms mean, or by the association of terms with mental images or ideas. When a feature or set of features is suggested as necessary and sufficient for meaning, Wittgenstein cites instances where these features are not present, and yet we still regard the language as meaningful. The positive part of the project is to describe the different ways that expressions are used in different contexts, which is the same as showing the various meanings that expressions can have.

The *Philosophical investigations* aims to make explicit that philosophy involves using language in ways that are *different* from their normal employment, also that philosophy does not pick out some essential core meaning of expressions. One aim of the later philosophy is not primarily to correct philosophical language, but to show that philosophical usage is radically different from ordinary usage; in that case, what we mean by certain expressions in a philosophical context will be different from what we mean in an ordinary context; and there is no external standard to which we could refer to establish which of the various meanings in different contexts is the only correct one. The generation of many of the problems of traditional philosophy—for example, scepticism—relies on supposing that the meanings given to the concepts studied are the correct ones, or at least that talk of *the* single correct meaning makes sense.

In traditional philosophy there is the semblance of an attempt to solve problems and really get to the bottom of matters, whereas really there are, in different areas, always frameworks and presuppositions which keep the problems alive—indeed keep them as problems— while in other contexts outside philosophy such "problems" do not even arise.

One of the chief characteristics of traditional philosophy is to seek ultimate explanations and justifications beyond the point at which

they can make sense and even arise. That this is not manifestly impossible is only because we do not really take such a step, but bracket off some area in virtue of which the philosophical problems can be stated and solutions offered. For example, in applying universal Cartesian doubt to discover the indubitable foundations of knowledge, we omit to doubt the meaning of the words used to express the universal doubt, without which questions of doubt and knowledge would not arise at all. The supposedly universal doubt of the Cartesian sceptic inconsistently assumes that we know the meaning of the language in which the processes and arguments leading to such doubt are expressed. The later philosophy of Wittgenstein makes these implicit assumptions explicit, and thereby demonstrates that our seeking after ultimate explanations and justifications outside contexts within which they can arise is impossible or nonsensical. There cannot be such explanations for they would either involve something further that would itself require explanation—although this may not be immediately apparent—or step into an area where the request for explanation does not arise. One of Wittgenstein's slogans is that "Explanations come to an end". The import of this is that there comes a point at which our attempts to explain and justify have to stop, and beyond which the question of justification can no longer arise. But we do not stop at something that finally explains all the rest, we stop at something which cannot be given further explanation: at the perimeter of the framework within which asking the questions in that context makes sense. Explanation has to stop and we have to be content with a *description.*

   This does not mean that in the special sciences, such as physics, we cannot explain one thing in terms of another, and push this procedure to profound depths. Philosophy asks certain kinds of questions that sometimes look like questions in the special sciences, but they are not; they often seek to question the very framework in which providing explanations and solving problems could make sense, and so they go beyond the point where explanations can be given or are required. If we do not notice differences in the meaning of the expressions we use in different contexts, we will be tempted to think that we are doing exactly the same kind of thing in each context. If we are explaining $X$, we can do so in terms of $a, b, c$; and we can perhaps further explain $a, b, c$. In explaining anything we are involved in a web of interrelated elements which are used in explaining one another; but it makes no sense to try to step outside everything, and ask for an explanation of the whole thing. Explanations of why something is so require contexts within which asking for explanations makes sense. Eventually we will reach a point at which to ask for explanations in a given context has to end: further explanations will fail either because they are question-begging, or because they involve something further that itself requires explanation. There is in any case no framework of explanation

accounting for or justifying the practices of all other explanatory frameworks, although the frameworks may be logically interconnected. And even if there were such a super-framework, it would also require explanation. This important idea applies to meaning: expressions have meaning in their use in various contexts, and it makes no sense to ask what is their real meaning stripped of what would be said to justify their meaning as employed in various actual contexts.

Moreover, what philosophy is concerned with is seeking logical *justifications* or *reasons,* not, as in the sciences, causal explanations. It is of course possible to give logical justifications or reasons for what we do or say in various contexts; but traditional philosophy often seeks justifications or reasons in ways and in contexts, or outside all contexts, where we can no longer provide them. It seeks to answer the question of what rational justification we have to go on, as we have been doing in certain contexts beyond the point at which such justifications need or can be given; and the attempt to do so merely generates philosophical conundrums which further entangle the philosopher in fruitless theorizing. For example, Wittgenstein himself in the *Tractatus* sought to give an ultimate reason for the meaningfulness of language in terms of its consisting of names of simple or unanalyzable objects.

That there are sometimes *causal* explanations for why we do what we do is not in dispute; but to give a causal explanation is not to say we are *justified* in doing what we do. I might, for example, believe it to be true that $1,574 \times 6,266 = 9,862,684$, and give a causal explanation for having this belief as resulting from a sharp blow on the head received while a child; but that would not give any justification for the belief that the multiplication is true or should be thought so by others. What we require is a justification for the belief that the multiplication is true in terms of some appropriate evidence from which the conclusion can be seen to follow logically or by which it is supported. For example: this was the result I got with my pocket calculator. We might go on further and ask why we believe the calculator reliable. Again we are asking for the evidence we have used, from which the conclusion follows, to be displayed; we are not asking for a causal explanation. An appropriate answer to the question would not be in terms of my brain being in a particular causally produced state, or my being brought up in a particular way, for that would not give us a reason for believing the calculator reliable. I may judge that $p$ is true; a causal explanation for my making that judgement could be given; but that would not answer the question of whether I had a valid reason for thinking $p$ true; for that I would have to present evidence for judging $p$ true; and that would involve some kind of appropriate *logical* connection between the evidence or reasons and the conclusion that $p$. To suggest otherwise is to confuse causal power and logical validity. I can be

causally determined to arrive at a conclusion without the conclusion rationally following from any available evidence; conversely a conclusion may rationally follow from the available evidence without any causal process guaranteeing that I draw it. An example of the latter case is someone saying, "But after all this evidence, you can't say that", followed by the quip "I just did".

Wittgenstein's point is that the giving of reasons or justifications must come to an end, and what we can use as evidence or justification must be available to us to use as evidence or justification, and not be something hidden. But such justification must reach something that does not require further logical justification, and beyond which the seeking of logical justification becomes senseless. At this point we hit bedrock. This line of thought applies, for example, to the justification of belief. In the same way an explanation or an account of the meaningfulness of language must come to an end with something available to us which can be given in explanation, with reference to which we can justify or give reasons for the meanings that words and other linguistic expressions have, but beyond which no further justification is required or can be given.

This attempt to stand completely outside the totality of the patchwork of contexts—it might be pictured as a collection of many overlapping circles—in which justification can be given, and to give reasons for everything at once, is prevalent in the various areas of philosophy. We find it in the area of giving an account of how language gets its meaning and also in the area of what we can be said to know. We are seeking to answer the question of what rational justification we have for saying that certain words have a meaning, and what right we have to say that we know certain things. What justification have we for saying that certain words have, or have not, a meaning? What justification have we for saying we understand the meaning of a word? What justification have we for saying that we do, or do not, know some particular truths? Again, that there are necessary causal conditions for our making claims (such as having brains, having been born, etc.) is not in dispute; nor does what Wittgenstein says rival such causal accounts. What is at issue is whether we can give logical justifications for such claims; we require evidence that in some way supports the truth of the conclusions, and not just a causal explanation for why we in fact make those claims.

Wittgenstein replaces essentialism about meaning with what might be termed linguistic instrumentalism: an account of the phenomenon of language eventually ends at a description of what we do, and the meanings of the concepts language involves can be explained or justified as being the way they are only from within language, not by something else that lies beyond or behind language. Wittgenstein says in the *Philosophical investigations* "Think of the tools in a tool-box... The functions of words are as diverse as the functions of these objects."

Wittgenstein shows how the attempt to justify the meaningfulness of language as a whole fails, because the use of factors outside language always presupposes some linguistic competence, and so does not succeed in grounding the *whole* of language. He also shows that such external ultimate justification is not in any case required for meaningful language.

The negative side of Wittgenstein's work attacks various attempts to justify the meaning that expressions have in virtue of something extralinguistic that purports to give a complete explanation or justification for language having the meanings and concepts it has. If the view opposed by Wittgenstein were established, we might discover the real meaning of expressions beyond their meanings acquired and justifiable within certain contexts. The accounts of language that Wittgenstein opposes involve giving a single unified account of how all language ultimately gets its meaning; it is supposed that all the various manifestations of language have an essence, or single logic, in virtue of which its expressions ultimately have or acquire their true meaning. Three cases Wittgenstein considers are as follows:

(a) the theory of the *Tractatus*
(b) ostensive definition
(c) mentalism.

(a) The heart of the *Tractatus* theory is that whatever the surface appearance of language, on analysis it consists entirely of names which mean the objects for which they stand. There is an obvious problem with the *Tractatus* view that the ultimate constituents of language are names, and the meaning of a name is its object: the problem is that Wittgenstein was unable to give any examples of simple names or objects of the required indestructible unchanging simplicity which would guarantee the meaningfulness of language. If the objects named are complex and hence capable of destruction, and the object is the meaning, then the meaningfulness of language cannot be assured. Moreover, if the objects are hidden and not available readily for us to use in any justification of what we mean, it is difficult to understand in what sense they can be said to explain the meaning of words or be used to justify our understanding of their meaning. Also, naming is merely one of a multitude of functions language can perform and is an activity that presupposes an understanding of what naming something is.

(b) If we are asked to give the meaning of a word we might give some kind of account of its meaning in words in a verbal definition; but this would be of any use only if we understood the meaning of the words used in the given definition. Some have thought that if this process is not to go on indefinitely and language is to talk about the world, not just words, we must step

outside language. This is said to be done through ostensive definitions—that is, by showing. If we take the word "dog" for example, we might learn the meaning of the word through someone uttering the word "dog", in the presence of a dog, and perhaps pointing at the dog. Such understanding of the meaning of words could then be used to build up verbal definitions within language. Wittgenstein does not question that such ostensive teaching of language takes place. What he objects to is the idea that such teaching is sufficient to underpin our understanding of language as a whole. Ostension is systematically ambiguous, so we must understand the significance of, or what is intended in, the situation in which ostensive definitions are given, and such understanding is not accounted for by ostension itself. For us to understand that we are meant to be learning a general name like "pencil", and not a particular name like "Fred", already presupposes some linguistic understanding—in this case the distinction between particular and general names—not accounted for by mere ostension. For this reason ostensive definitions cannot be the ultimate explanation for how language gets its meaning, for ostensive definitions leave some linguistic understanding unexplained; they do not explain how we get from no language at all to some language. Children and foreigners learn some aspects of language by ostensive definition; but such ostension works only because they already have some linguistic understanding,

(c)    Another view is that to understand the meaning of a word involves associating it with a mental image or idea in the mind. Insuperable difficulties arise for this view even if we set aside the obvious objection that what an image of, say, justice would consist in is entirely baffling. Suppose we try to use this theory to explain our understanding of the word "red". I come across an object and I am deciding whether or not to call it red. The mentalistic account suggests that what happens is that I call up the image I have of red, compare it with the colour of the object, and decide whether they are the same; if they are the same the object is correctly called red. But how is this to be done? It is no use my merely *having* the image of red; I must be able to call up the correct image. However, being able to call up the right image involves recognizing which image, among others, is that of red; but such recognition was exactly what we set out to explain. My ability to call up the right image is not explained by my comparing it with another image, because how am I to call up the correct image in that case? Wittgenstein is not denying that we do sometimes use images, and that we may use them to identify things; what he denies is that the reference to images can be the foundation for our understanding of all language, for it already presupposes the kind of understanding it was meant to explain.

> Wittgenstein generally objects to the idea that understanding the meaning of a word is constituted by being in some kind of special mental state. The meaning of words does not rest on our mentally intending a meaning. If we say, "Alan understands what is meant by a crescendo", we are not supposing that there must be thoughts running through Alan's head which constitute this understanding. If this were the case we would say that he ceases to understand what it means when he is asleep or distracted by some other thought. Mental processes are neither necessary nor sufficient for many other cases, such as "knowing", "remembering", "believing".

Wittgenstein's aim is not to deny that many of the ways which are mistakenly proposed as accounting for or explaining the meaning of language as a whole could not be used to account for or explain what we mean within parts of language; what he denies is that there is a single unified account or explanation in terms of something external to language as a whole. This means that the answer to the question "What justifies the meanings and concepts we have in our language as a whole?" is "Nothing does". There is no standard external to the *agreed use* of an expression in the language by which our usage can be further justified. The question cannot be answered any other way because any justification would already involve understanding and taking for granted that we did understand the meaning of certain expressions and concepts. So there is nothing outside all language which gives such a total or complete justification for language being as it is.

This complements Wittgenstein's denial that he is presenting overarching justificatory philosophical theories about language or indeed about any other philosophical matter. By posting reminders of the diversity and multiplicity of the uses of language, he hopes to show that such overarching theories cannot be produced.

It may be thought that if we correctly call a collection of things or activities by the same name, then they *must* have something in common in virtue of which they are things or activities of that kind; they must have a set of features which they, and only they, share; they must have an essence. Such an essence could be characterized by a definition which gives necessary and sufficient conditions or features for being a particular kind of thing: necessary because anything of that kind must have those features; sufficient because anything with those features will be of that kind—so something is an X if and only if it satisfies a certain set of conditions or has a certain set of features. Wittgenstein thinks this is a mistake. If we try to define a concept in this way, we will be unable to give conditions that are at once both necessary and sufficient. Wittgenstein asks us to consider games, and points to the difficulty involved in giving the essence of games:

something that they all have in common in virtue of which they are all games. There is no such essence. There are of course resemblances; but there is no single defining set of features that runs through them all. We characterize them all as games in virtue of a series of various overlapping resemblances; these Wittgenstein calls "family resemblances" and likens to the way that we notice various resemblances between members of the same family.

In the case of language, what we have is not a common defining essence across all uses of language in virtue of which we count something as language, but "a complicated network of similarities overlapping and criss-crossing" between various linguistic activities. There is also a network of logical relations between different linguistic activities which enables us to speak of the whole system of *language* as such.

In the *Tractatus* there was a single essential nature to language and a single boundary between sense and nonsense; in the later philosophy of the *Philosophical investigations* we have a patchwork of related languages with internal boundaries—and although they may change, the ignoring of them produces confusion—the sum total of which constitutes our whole language. Wittgenstein refers to the variety of kinds of ways that language can be used and the functions it can have as "language-games". Outside the boundary of *all* language-games collectively, we do not have language at all, but nonsense.

Wittgenstein is not denying that we can lay down special technical definitions, in science, say; but this is not the way words acquire meaning or their meaning is understood in ordinary language. Once we begin to use a word or concept in normal contexts the definition will break down, and be outgrown, as we extend the application of the concept.

The notion of "family resemblance" applies to the characterization of language itself. Wittgenstein draws an analogy between language and games, and so refers to language-games. But the resemblance between games and language is only partial. He uses the term language-game sometimes to apply to parts of actual language, sometimes to restricted or different imaginary languages, and sometimes to the whole of human language. He is of course concerned not with any particular human language (like English or German), but rather with features of human language in general. Examples of language-games Wittgenstein gives are, among others, giving and obeying orders, describing, storytelling, joking, asking, praying, speculating. Each language-game has a "grammar" which describes, but does not explain, the possible ways that concepts can be combined within the game. We are making a grammatical, not an empirical, point, if we say, "Every measuring rod has a length"; its denial would be ungrammatical, and it is impossible in a different way from a physical impossibility.

Wittgenstein's position is that there is nothing that underlies the whole of language which explains its meaning. Language forms a patchwork of logically related activities which, unlike games, more than merely resemble one another: they are interrelated. Thus we may *order* someone to answer a *question*. The justification for saying that words have a certain meaning does not reside in some single mode of justification and cannot reside in something postulated that is hidden from view beyond language. What justifies the meaning of a word, so far as it *can* be justified, to be of any use to us in giving a justification, must not be something hidden (as the *Tractatus* suggests) but something open to view. If we are to give a logical justification for a word having a certain meaning, it must be in terms of features that are open to view and not hidden. What is hidden is not available to us, and so could not be used in giving a justification of our understanding of the meaning of linguistic expressions. What is available to view is the various ways that language is *used* or employed in different contexts. If we want to give the meaning of a word, the best we can do is to *describe the use* of the word in various contexts; eventually there is no further justification for the use we can give. Ultimately we describe, saying: *that is* how we use it.

If we were asked, "How many goals have been scored in this chess game?", the question would not pose a problem which needs to be solved on its face value, like "How many goals have been scored in this football match?"; rather, we would explain the rules of chess, and that "goal" is "ungrammatical" (in Wittgenstein's sense of the term) in this context. So it is with language-games; propositions are ungrammatical in involving words transferred from a context in which they have a use to a context where they are inappropriate, that is, they have no use. Many philosophical problems are a result of not noticing the transference of a word from one context where it has a use to another where it does not have a use. For example, we may transfer talk of "mechanism" or "object" in a physical context to the context of talk about minds. We produce nonsense by trying to transfer talk outside any and all linguistic frameworks.

It is important to note that Wittgenstein is not giving a "use theory of meaning", as if the use *explains* the meaning; the use in various contexts just *is* the meaning; meaning and use are identical. There is no single feature common to all the various uses to which language can be put; there is a multiplicity of uses. It is not as if the meaning of a word were one thing and its use another; a word gets its meaning in its being used in particular ways. Ultimately the meaning of a word does not determine its use; rather, the use of a word is its meaning; and without a certain sort of use the word does not have a meaning which could determine its use.

However, not every difference in use entails a difference in meaning, so is it right to identify meaning and use? What is involved

here are matters of degree; we do not have to suppose that expressions which we regard as having the same meaning must have identical common uses which are *the* use; that would be to revert to the kind of essentialism Wittgenstein rejects; all that we need suppose is that there is sufficient overlap in use for us to say the meaning is the same. Analogously it is perfectly correct to say a mallet and a plane are both carpentry tools because of what is done with them and the contexts in which they are used, even though their use is not identical. If the uses to which a word was put failed to overlap at all, we would say that we have a word with different meanings, for giving a description of how we would use the word in various situations is what the meaning of the word amounts to. If words failed to overlap by the criteria (whatever they turn out to be) which determine their correct application—that is, uses that are recognized by others—we would then be likely to say that the words each had a different meaning. That a word has a meaning at all depends on there being *some* agreement in use. But the point at which a change of meaning occurs is not necessarily clear-cut. Here Wittgenstein gives up the *Tractatus* requirement of definiteness of meaning.

A good analogy is with money; something becomes money through the way it is used. That something is money consists in what people are willing to do with it, such as take it in exchange for goods and services as virtually everyone else is willing to do. It was soon found to be unnecessary for coins to be made from gold or even to be backed by gold. It is not something intrinsic to the coin which constitutes its being money. If this is doubted we have only to think of the way cigarettes became money during the Second World War and at other times; cigarettes being money was a matter of the way they were used.

To understand the meaning of a word is to be able to participate in using the word appropriately in a language-game. To use a word or other linguistic expression in a language-game is in turn to be involved with using language in a certain "form of life"—certain natural activities and behaviour which arise from human needs, interests and purposes. Language is autonomous in the sense that its justification must lie within it, but is nevertheless evolved from human practices and human needs. At the basic level it is agreement in these practices—the agreement as to how to go on—that makes meaningful language possible but does *not* justify that meaning. That is, the form of life is not what justifies our saying that certain words have such-and-such a meaning; but that we naturally go on in certain ways is what makes agreement in use—hence meaning—possible. The form of life is what we have to "accept as given"; it involves the most basic features of the human condition which stem from the fundamental facts about human nature and the world, "the common behaviour of mankind". That certain fundamental things are unavoidable features of human beings, and that we share needs and interests, is what

enables agreement as to ways of going on in certain situations to get going in the first place. These common needs and interests and our agreement to go on naturally in certain ways are what makes agreement as to use possible. That these ways of going on are often unavoidable means that they are not open to choice; they are not arbitrary; they are simply what we do in a given situation, and lie beyond being justified or unjustified. It is possible that we could go on differently, but in fact in certain ways we do not: we agree.

We can no more ask for rational justification for the givens of human life, or say that they are unjustified, than we can ask for a rational justification—rather than a causal explanation—for a tree falling on us. Rational justification, once we have exhausted all the ways in which we can justify our doing something in such-and-such a way, must come to an end in a description. To lay to rest our philosophical search for ultimate foundations, we have to come to see that certain of our human activities—for example, deriving one proposition from another—are ultimately groundless and not justified, but *also* that they are not the kinds of activities that can be further grounded or justified; therefore their lacking such a grounding is not a deficiency in those activities. Such ways of going on are neither justified nor unjustified, rather they are fundamental facts about human nature and the way humans agree to go on in various situations. That there is no rational justification does not show that what we do is irrational or confused, it could be simply non-rational: what we do. In this it is possible to see some similarity between Hume and Wittgenstein: they agree that rational justification has its limits, and what we are left with are the most basic things that human beings cannot help doing; and it now makes no sense to ask for rational justification for matters that are not a product of reasoning at all.

The possession of our most basic concepts—such as inferring, recognizing, assent and dissent—is not something that can be further explained or justified, because any explanation would *presuppose* those concepts or some others. There is a great diversity of practices or language-games and each involves basic concepts which it is senseless to question; it is senseless because without taking those concepts for granted as "given", the kinds of justifications that take place within the language-games could not even arise. Having these concepts means we can take part in the language-game or practice; but if one does not have them, then the possession of those concepts cannot be further justified by anything else within the language-game, for that would already involve accepting the basic concepts the language-game involves. If the use of expressions within two practices is sufficiently different—that is, there is little or no overlap in use—then it is not that we disagree in our judgements involving these concepts; rather, we are simply saying something else. Wittgenstein says the

practice, or language-game, and the form of life of which it is a part, is given. It is not given in the sense of being a self-evident logical foundation; it is given in the sense that there is no further justification for the whole practice, for justification only makes sense within practices. The form of life which involves a language-game is neither reasonable nor unreasonable. That is not to say that up to a point the normally accepted bedrock of a language-game cannot alter, but there are limits, for beyond a certain point we will say not that we are dealing with a different linguistic practice, but rather that we are not dealing with a language at all. If we cannot identify any part of some behaviour as manifesting the possession of any of our concepts—such as assent and dissent—then we will say that what we are witnessing is not language at all.

It might be thought that the meaning of a word could be finally settled and justified as being such-and-such by citing a rule for its use. We can first note there is no such rule-book for ordinary language; but even if there were it would not help. Any rule can be interpreted in an indefinite number of ways. Suppose I am asked why I interpret a rule in a certain way. I could go on to cite a further rule which says how the original rule is to be interpreted. But suppose I am then asked why I interpret the further rule in a certain way. Eventually this process must come to an end and I will have exhausted all justifications; I will have to say: "This is what we do", which gives a description, not a justification. It makes perfect sense to say that one can act correctly, in accordance with a rule—follow a rule—even though one can give no justification for why one acts that way and interprets it thus. Following a rule amounts to acting in a customary way in specific cases. In the end it is not rules that determine the meaning of words but use of words that determines the rules for use that we might formulate; the rules for use do not exist prior to what we do with the words in the language. That a certain rule can be "interpreted"—substituting one rule for another—in a certain way eventually depends upon there being an agreed natural particular way of going on, perhaps after some kind of natural response to training. Some examples will illustrate these points.

(i)  We might give a justification for saying $X$ is red by comparing $X$ against a colour-chart. How would we know that what we had identified on the chart as red was red? We might say it was because "red" was printed there. But how would we know we were using the chart correctly? A mental colour-chart would have the same problem. We have reached bedrock; we have the capacity to identify the colours of things thanks to the way we naturally respond to certain training. No rational justification can be given as a whole for our adopting classification by colour-concepts.

(ii)  Suppose we asked someone to accept the simple logical theorem

*modus ponens:* "If *p* then *q, p,* therefore *q*". Here *"p"* and *"q"* stand for any propositions you like. What further justification could be given of this? If a person cannot see this, then it is not clear how we could go on to offer further justification as to why, given "(if *p* then *q*) and *p*", he should logically infer *"q"*. The person has parted company with us even before the game of logic begins; he is playing a different game. Even if something further could be offered in justification, we would have to come to an end in a natural way of going on. For a rule does not say of itself how it must be interpreted.

(iii) Wittgenstein gives the following example. Suppose we are given the following table or schema where the letters can be used as orders as to how we should move about:

$a \rightarrow$
$b \leftarrow$
$c \uparrow$
$d \downarrow$

We are then given an order, *aacaddd*. We look up in the table the arrow corresponding to each letter; we get:

$$\rightarrow$$
$$\uparrow \quad \downarrow$$
$$\rightarrow \rightarrow \quad \downarrow$$
$$\downarrow$$

Suppose someone read not straight across the table but diagonally instead? Thus he or she would proceed to read the table according to the following schema:
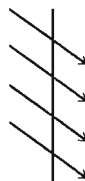


And there are many other possible schemata. What could we do? Construct another table on how to read the first? But this cannot go on indefinitely; eventually one simply has to gather or catch on to what is wanted, and no further justification can be given, for *any* rule can be variously interpreted.

We cannot be compelled to do logic and use language in a certain way unless we already take for granted a framework within which disputes about the correct way of going on can arise. The meaning of the rules is generated by the way they are used; we then impose the rules upon

ourselves. We eventually exhaust reasons, and we have then no reason to follow a rule as we do; that there is such a thing as "following a rule" depends on there being some customary ways of going on, for whatever re-expression we give we eventually have to stop at some agreed way of acting which cannot be further re-expressed.

What we count as "doing the same thing" each time we apply a rule will itself be relative to a framework. Our being inside practices and frameworks takes for granted or depends on human beings acting in natural sorts of ways in certain circumstances—human beings having certain natural ways of responding or reacting; this, logically speaking, gets the practice or framework off the ground. *Within* these practices disputes can arise. No rule can *force* you to go on in a certain way; no logical deduction means you *must* accept the conclusion if you accept the premises. Lewis Carroll in his essay "What the Tortoise said to Achilles" anticipated this point by showing that the attempt to justify all rules of inference, or the process of inference itself, leads to an infinite regress because each attempt will involve a further inference.

This does not mean that necessary truths such as those of mathematics and logic depend for their truth on facts about human nature; what depends on facts about human nature is our possessing and understanding the concepts required for disputes over whether something is true or proved within mathematics and logic to arise at all.

To show whether I understand a word I can give a definition of it; but such definitions cannot go on for ever. Eventually I will have to show that I can use words appropriately in given contexts or practices. The meaning of words and other linguistic expressions is a matter of public or communal agreement to use those words and linguistic expressions in particular ways—ways that can, with care, be described. I can be said to understand the meaning of a word if I can use it in agreed ways. If I start to use it in some other way that differs sufficiently from the agreed usage, it will be doubted that I understand the meaning of the expression at all.

It might be thought that talk of communal agreement involves a kind of relativism about truth, as if it were the case that if enough people agree that something is true, it is true. But this is a mistake. Wittgenstein is concerned with a more fundamental kind of agreement: without our participation in a framework, so that we understand the meaning of its basic concepts, the question of truth or falsity has not yet arisen. But there is no way one can make someone participate in the framework in the first place. We cannot force someone to answer the question "Is this checkmate?" if they cannot, or will not, play chess. The agreement which is relevant here is one of meaning, not of truth. If an agreement or disagreement over the truth or falsity of a statement is possible, then we must mean the same by the statement. That we mean the same will be determined by

agreement in use. Take the statement that "$x$ is $F$"; that two people can be in disagreement as to the truth of this statement presupposes that the meaning of "$F$" for the two people is the same; whether it is the same is established by how the two people use or apply "$F$" in particular contexts. Disagreement as to whether "$x$ is red" is true or false presupposes an agreement over what we mean by "red".

This brings us to Wittgenstein's "private language argument". Wittgenstein argues that language is communal in nature: it depends upon agreement in use within a community. If it were possible to construct a logically private language then this would refute Wittgenstein's view. We must note that such a case must be *logically* private, so that it is impossible for anyone else to understand the language; that is, it must be untranslatable into any other language. Such a case is where we supposedly give names to our private sensations by a sort of "inner" ostensive definition; by this is meant the association of a word with a private mental image which is then the meaning of the word. This is a special case of the meaning of a word being the object for which it stands. Suppose that I keep a diary, and write down "$S$", intending it to stand for a certain sensation; I then aim to write down "$S$" on subsequent occasions when the sensation occurs. How can I tell that I am applying "$S$" correctly on subsequent occasions? One suggestion might be that I could call up from memory the original sensation and check that in applying "$S$" to my current sensation I am applying it correctly. But how do I know that I have called up the right sensation from my memory? Do I go on to check that memory against a further memory? But in that case I have got no further, as the same problem would arise. Without there being some kind of independent objective check as to whether I am applying "$S$" correctly, we cannot speak of being correct or incorrect at all, since there is no distinction between merely seeming right and being right. No consequences follow from my applying the word in one way rather than another; it cannot clash with any established use; and so it is not proper to speak of "$S$" being correctly or incorrectly used. Hence, "$S$" has not been given a meaning; a logically private naming of sensations is not possible. This may imply that no logically private language is possible.

The philosophical import of Wittgenstein's views derives to a large extent from two important connected ideas:

(I)   That there is no essence to language: there is no single way that words and other linguistic expressions acquire their meaning by reference to something external to language.

(II)  That the meaning of a word and other linguistic expressions varies with their use in particular contexts or practices.

These two points together have the effect of undermining much of traditional philosophy and its problems. They attack the idea that

philosophy can establish and study the true or real meaning of certain words which express concepts. There is no independent absolute standard from which the question of *the* correct meaning could be judged or arise, since words and other linguistic expressions have meaning only in their use in actual or concrete human practices. If we attempt to step outside all cases where an expression is actually used, then it ceases to have any meaning, and the question of a meaning being correct does not arise.

Traditional philosophy tends to claim that it is examining the real meaning of "knowledge", and other concepts, as opposed to their meaning in ordinary usage. But there are no grounds for claiming that the philosophical meaning is superior. The sceptic claims that we do not have knowledge in situations where it is perfectly obvious that according to ordinary usage we do have knowledge—but it is in ordinary usage that the meaning of "knowledge" is established; therefore the sceptic's meaning of "knowledge" is different.

Wittgenstein is not saying that the ordinary usage of these concepts is unalterable. The point is that there is no way of establishing that a term has only one correct meaning, disregarding the meaning arising from the ordinary employment of the term. If a term ceases to be applied in any of the cases where it normally has a use, then we will say that it has at least altered its meaning. To argue that this fact is philosophically unimportant relies on the idea that there is some single correct meaning of words which is their true meaning established in all cases by something other than their actual function or use. Philosophers use words in ways different from their ordinary use. Wittgenstein posts reminders that words do have other than philosophical uses and that if philosophers uses the words in ways they would never be used in ordinary contexts, then he must mean something different by them. Concepts have different meanings in different contexts, and no one context can claim to be superior to the rest in giving the single correct meaning of the concept. The denial of this supposes that there is more to the meaning of a word or linguistic expression than the description of how it is used, functions, or is applied in a given context; it supposes that somehow, behind the description of how an expression is used, there is something else by which we can identify its real or essential meaning. The view that posits something else giving the real meaning of a term beyond the meaning resulting from a term's actual agreed use is the view that Wittgenstein rejects.

What becomes of the traditional problems of philosophy? Why does Wittgenstein have so little to offer in the way of traditional philosophical solutions? The answer to this is that Wittgenstein's account of language means that many of the traditional problems of philosophy disappear as problems. The problems we are referring to are such as "our knowledge of the existence of the external world",

"our knowledge of the existence of other minds", "that we cannot really know that someone is in pain, but can only infer it from their behaviour"; and such problems involve concepts such as "knowledge", "being", "object", "I", "proposition", "name". Given that traditional philosophy cannot claim the right to say it has identified the true or real meaning of these terms, Wittgenstein makes explicit the fact that they have a use in circumstances in which there are no problems of the sort characterized by philosophy. There is a perfectly good sense in which we do know whether other people have minds, and whether they are in pain, and we can describe the circumstances in which we employ the words involved. If it is said that we do not really *know* in such cases, then we must say, precisely because there is an attempt to exclude the use of "know" in circumstances central to establishing its use and hence its meaning, that "know" must be being used in a different sense from normal. The meaning of a concept such as "know" is its use in appropriate circumstances; therefore it makes perfect sense to say that we know in those circumstances. There is nowhere beyond a description of actual agreed use from where we could say that it is wrong to speak of knowledge in those cases. If we do not mean by "knowledge" what we mean in cases where "knowledge" is most normally used, then what do we mean by it?

What the sceptical position is supposed to show is that correctly establishing the satisfaction of the criteria of application of a term "*X*" does not show that anything actually corresponds to the theoretical or ontological assumptions that are normally involved in the application of "*X*". The sceptic about knowledge does not doubt that we in fact clearly distinguish cases of knowing from not-knowing in the sense of consistently applying "know" in certain circumstances and withholding it in others; but this fails to show that the cases where we are linguistically correct (by the normal criteria of our language) in applying "know" can be justified as cases of knowing. The reply to this is that if the cases in which we normally use the word "know" are not what we *mean* by "know", then it is not clear what the sceptic can mean when he says that in ordinary cases we do not "know". The sceptic must mean we do not "<know>" (giving some special sense to this word), which is to construe "know" independent of its ordinary use. But then the proposition "I know in circumstances *abc*" cannot be logically contradicted by the proposition "You do not <know> in circumstances *abc*". Otherwise it would be like saying that "I fight in circumstances *abc*" is logically contradicted by the proposition "You do not jump in circumstances *abc*". We may also take the view that if the sceptic fails to pick up on publicly established criteria for the usage of terms, then he does not mean anything at all by "<know>", since it has no use. And even if he does give a new meaning to "<know>" (perhaps by definition, or

by indicating the criteria which have to be satisfied for its use), the onus is on the sceptic to show why it is that we should accept his radically different use (hence different meaning) as the one that should be satisfied before anything can count as knowing instead of the one we all normally accept.

# CHAPTER TWELVE

## *Recent philosophy*

By "recent philosophy" is here meant philosophy since roughly 1945. Some of the most significant figures of this period have already been looked at in some detail in earlier chapters. There will be no attempt here to discern the detail of trends or tendencies in recent philosophy; but it can at least be said that recent philosophy is extremely diverse in its interests and approaches. So in covering the period from 1945 to the present day in a single chapter I will cite some of the more prominent names and state briefly what they stand for. There is, no doubt, room for disagreement over which figures should be selected and which omitted; there is no question of this choice being definitive. The people mentioned are discussed in chronological order according to their date of birth, and main works by the philosophers mentioned are given in the bibliography.

### Gilbert Ryle

Gilbert Ryle (1900–76) was part of a philosophical movement that held that many philosophical problems arose from a misunderstanding and misuse of ordinary language. One of the ways in which such misunderstandings arise is through what Ryle calls "category mistakes", whereby we mistakenly take a concept to refer to a certain kind of entity. Generally this leads to mistaken ontological commitments, that is, to the existence of all sorts of entities which we are misled into supposing exist owing to the way we misunderstand our language. Ryle applies this view to his theory of mind: his opposition to mind as a ghostly object-like substance. We take the term "mind" to refer to some special, albeit ethereal, kind of *thing*. But the mind is not any kind of thing; it is not a thing at all; rather, to talk of mind is to refer to certain kinds of behaviour and dispositions to behave. This has led to

Ryle's views being dubbed behaviourist; but this is a label he rejects as indicating a misunderstanding of his views.

## Nelson Goodman

Nelson Goodman (1906– ) is a philosopher with a background in mathematical logic. His overall philosophical conclusions have led him to a form of relativism, but a relativism within "rigorous restraints". Goodman's argument is that there can be no way of choosing between different versions of the world by a direct comparison with a world that is independent of all versions—all descriptions and depictions— for there can be no such "world". What we aim at in world-views is not truth—that would tend to lead us to the construction of a trivial disconnected inventory; rather, our view or "world-making" always involves simplification and abstraction where what is important is "rightness", which seems to consist of correctness of "fit" within a world-view. The choice between different systems or world-views introduces a battery of criteria; but it is questionable whether these criteria, if they are given determinate content only within systems, can avoid irrational relativism.

## W.V.O.Quine

W.V.O.Quine (1908– ) is a philosopher much of whose earlier work was in the philosophy of mathematics and mathematical logic. Quine agrees with Russell that ordinary language requires "regimentation" into a clearer logical language which makes the minimum of ontological presuppositions so that we do not find ourselves committed, merely because of the grammar of the language we use, to assuming the existence of various entities. Linguistic expressions such as names, whose meanings seem to presuppose the existence of the objects to which they refer, can be replaced by descriptions whereby it becomes a matter of fact whether anything actually satisfies those descriptions. Quine has also attacked the analytic/synthetic distinction, and the view that there is an absolutely non-theoretical basic language which refers to immediate experience. Quine replaces this view with a holistic theory of meaning and knowledge: the sense and epistemological standing of a statement can only be assessed in relation to its position and entrenchment in the whole system of statements which is present knowledge, which Quine identifies as "the whole of science". Statements about the external world answer to or confront experience as a whole; we can always hang on to any statement we like as true provided we are willing, so as to maintain consistency, to make big enough changes elsewhere in the system.

## J.L.Austin

J.L.Austin (1911–60), like Ryle, thought that philosophical problems tended to arise from a misunderstanding of language. Unlike Ryle he did not attempt to replace the systematic philosophies which arose from what he saw as the inattention to fine distinctions of language with a systematic philosophy derived from a view of language purged of such inattention. Austin supposed that philosophy and logic were too ready to ignore the subtle discriminations present in ordinary language. This led to the careful study of shades of meaning manifest in linguistic usage which would be not only a way of avoiding philosophical error but also of interest in its own right.

## Stuart Hampshire

Stuart Hampshire (1914– ) has put forward a theory of language and knowledge which is relativistic in that the system of concepts which we bring to talk about the world is not absolute or fixed, but depends upon the special interests we bring to the world as human beings and as agents in the world. We cannot detach ourselves as disembodied spectators and so achieve a disinterested view of the world. He rejects the view that the more we know about the causes of our actions the less free we will become; on the contrary, it is the essence of our existence as human beings always to be able to stand back from knowledge of our situation, no matter how detailed, and decide what we then want to do.

## Donald Davidson

Donald Davidson (1917– ) has been notably influential on certain parts of analytical philosophy in recent years. Much of his work has centred on the philosophy of language, and the implications of this work for various other areas of philosophy, such as the philosophy of mind. In the philosophy of mind he argues for an "anomalous monism" where, although each mental event is identical with a physical event, there are no strict law-like connections between the two different sorts of descriptions of events.

## P.F.Strawson

P.F.Strawson (1919– ) has been one of the chief opponents of the idea that logic somehow represents in an ideal form the structure of

ordinary language. Strawson's investigations into the informal logic of ordinary language led him to what he called "descriptive metaphysics", which aims to lay bare the most basic features of the conceptual system we actually have; that is, those features of our conceptual system which are a historically unchanging core; this is to be contrasted with "revisionary metaphysics", which aims to change or replace the conceptual structure we actually have with a better one. It is from these considerations that Strawson's project has been seen as having an affinity with the Kantian one of making manifest the common core of conceptual presuppositions logically required for our talk about the world; however, in Strawson's case the aim is the less ambitious one of identifying the logical requirements relative to *our* conceptual system, that is, the concepts logically presupposed by our conceptual system, not by any conceptual system whatsoever. For example Strawson concludes that the possibility of a world in which we re-identify various categories of kinds of particular things depends upon the category of material bodies in space and time. Strawson has also written against the correspondence theory of truth: the function of saying "$p$ is true" is not to describe $p$ as having some special relation with the world, but rather to say that one confirms or endorses $p$.

## Thomas S.Kuhn

Thomas S.Kuhn (1922– ) was trained as a physicist and has been extremely influential in the philosophy of both the physical and social sciences; in this respect he is second only to Popper. His chief thesis involves suggesting that science is not the tidy rational enterprise it is sometimes represented as being by philosophers. Scientists most of the time engage in "puzzle-solving" or "normal science" within a set of currently unquestioned assumptions about the world which forms a "paradigm" or world-view. The "anomalies" presented by experience are in normal science accommodated within the assumptions defining the paradigm. But eventually the anomalies become too troublesome. The choice of paradigms, the revolutionary movement between them being called a "paradigm shift", is difficult to justify rationally because the standards of rationality, methodology, and what constitutes good evidence are determined within each paradigm. Many have seen Kuhn's view as an admission of relativism because of the rational incommensurability of paradigms, and as an undermining of the rationality of science.

## Paul Feyerabend

Paul Feyerabend (1924– ) is a philosopher whose training was originally in theoretical physics. His main work has been in epistemology and the philosophy of science. The chief outcome of his work has been to criticize the view that there is something called "the scientific method", and thus to release human investigations into the nature of the world from the presupposition that there is only one rational way of going about such investigations. There is no pure way of describing the world independently of conceptual and theoretical assumptions, which leaves us with the possibility of there being a variety of conceptual systems between which there can be no means of adjudication ultimately independent of all theoretical assumptions. This has led to a view of Feyerabend as a methodological anarchist. But his position is best described as that of a democratic relativist which, he suggests, frees inquiry from the shackles of supposing there is only one correct method of understanding the world.

## Michael Dummett

The two most important aspects of Michael Dummett's (1925– ) philosophical doctrines are his search for a systematic theory of meaning and his anti-realism. The knowledge we display of the meaning of expressions is based on the implicit knowledge of linguistic principles, and it is the function of a theory of meaning to bring these to light. The proposition central to the notion of anti-realism is the assertion that there are certain classes of statements which are not determinately true or false independently of our means of knowing which they are. This amounts to a denial of the principle of bivalence which says that any statement must be determinately either true or false regardless of whether we can know which it is.

## Richard Rorty

Much of Richard Rorty's (1931– ) recent work has been concerned with examining the nature of the philosophical enterprise itself. This has led him to question the presuppositions that lie behind much of what he identifies as the philosophical tradition. The philosophical approaches that are chiefly criticized are analytical philosophy and continental phenomenology; philosophy in these traditions he sees as a kind of dead end where there is no possible way of adjudicating between different views. In particular Rorty suggests that the central error of the philosophical tradition of which he is critical is the attempt to hold

a mirror up to nature in which is reflected the nature of the world in a way that is ahistorical, spectatorial, and independent of any perspective. But we cannot escape our historical and human perspective. Rorty advocates that we replace traditional "systematic" philosophy, which aims at timelessly true foundations (represented by such figures as Descartes, Kant, Husserl, Russell), with "edifying" philosophy (represented by such figures as Heidegger, Wittgenstein, Dewey, Sartre), whose central job is the freeing and facilitation of dialogue between different areas of human inquiry in the historical context in which they find themselves.

## John R.Searle

Much of the work of John R.Searle (1932– ) has been in the philosophy of language, but he has also done important work in the philosophy of mind and the philosophical implications of artificial intelligence. Central to Searle's work in the philosophy of language is that of "speech acts" (which partly develops the pioneering work of Austin), which are distinguished by their point or purpose; expressions with similar content fall into different types of speech act depending on what is done with them: whether they are orders, promises, pleas, descriptions, predictions and the like. Searle aims to produce a taxonomy of speech acts.

## Saul Kripke

Saul Kripke (1940– ) is a philosopher trained in mathematical logic; his work in modal logic has led him to revive a form of essentialism and reintroduce the concept of natural or metaphysical necessity. Necessity is said, especially by empiricists and logical positivists, only to hold among the propositions of mathematics, logic and semantic truths (such as "All bachelors are unmarried"), not among objects or events in the world, and all propositions concerning the actual nature of the world are contingent. Kripke thinks mistaken the view of some philosophers that the *a priori* and the *a posteriori*, and the necessary and contingent, are, respectively, coextensive. The distinctions belong to different philosophical domains: knowledge and metaphysics. There are, Kripke argues, necessarily true statements which cannot be known to be true merely through understanding the meanings of the terms involved, but can be known only through experience *a posteriori*. In particular there are expressions that Kripke calls "rigid designators", which name the same individual in every possible world in which that individual

exists, and which form identity statements, such as "The Morning Star is identical with the Evening Star", which are necessary but knowable only *a posteriori*. He reintroduces essentialism: the notion that particular objects and kinds of objects have necessary properties: that is, those properties something must have to be just *that* object or *that sort* of object.