Van Inwagen, Peter. *An Essay on Free Will*. Oxford, U.K.: Clarendon Press, 1983.

For a discussion of difficulties in applying determinism as unique evolution to psychology, see:

Bishop, Robert C. "Deterministic and Indeterministic Descriptions." In *Between Chance and Choice: Interdisciplinary Perspectives on Determinism*, edited by Harald Atmanspacher and Robert C. Bishop. Thorverton, U.K.: Imprint Academic, 2002.

Elements of the faithful model assumption have received some scrutiny in recent physics literature. In particular, there is evidence that perfect models are not guaranteed to describe system behavior in nonlinear contexts:

Judd, Kevin, and Leonard A. Smith. "Indistinguishable States I: Perfect Model Scenario." *Physica D* 151 (2001): 125–141.

Judd, Kevin, and Leonard A. Smith. "Indistinguishable States II: Imperfect Model Scenarios." *Physica D* 196 (2004): 224–242.

Smith, Leonard A. "Disentangling Uncertainty and Error: On the Predictability of Nonlinear Systems." In *Nonlinear Dynamics and Statistics*, edited by Alistair I. Mees. Boston: Birkäuser, 2001.

Robert C. Bishop (2005)

DETERMINISM IN HISTORY

Philosophical reflection upon history has always been impressed by the limited extent to which individuals and groups seem to be able to mold events to their purposes. In the case of some events at least, there seems to be an inexorable necessity—an inevitability or unavoidability—about what happens. The "necessity" of historical events, however, has been asserted by historians and philosophers of history in at least three fundamentally different senses.

SENSES OF DETERMINISM

FATE AND PROVIDENCE. The first sense is the notion that events are "fated" to occur, a notion familiar to Greek as well as Oriental thought. The central concept is of an agency external to the historical process itself, sometimes, but not always, personified, determining events somewhat in the way a human agent may be said to determine, through his will, what happens in a process he monitors and manipulates. It is generally assumed, however, that the means by which fated events are brought about lie outside the mechanism of ordinary causal connection: they are "transcendent." This clears the way for a characteristic expression of fatalism—the assertion that what is fated will occur no matter what we do to try to prevent it. To many critics, such a claim has appeared unintelligible. For historical events are surely, in some sense at least, constituted by what we do. A revolution, for example, could hardly occur if nobody revolted. The fatalist claim thus looks self-contradictory. What fatalism really denies, however, is the preventive efficacy of anyone's actions prior to the fated event, a refinement that leaves the claim coherent, if unbelievable. Nor is the doctrine necessarily involved in the incoherence of representing prior actions as both within our power to have performed otherwise and, at the same time, fated in their turn. For fatalism, unlike some other forms of historical determinism, has generally been asserted selectively. It is the doctrine that certain things will necessarily come to pass, not that everything happens necessarily.

Many theological philosophies of history are fatalistic in the indicated sense because of the role they assign to the will of God in their accounts. Unlike most of their pagan predecessors, however, these accounts generally make some attempt to rationalize and even to moralize interventions hitherto conceived as arbitrary, and usually also as menacing. In this way a fatalistic conception of history becomes "providential." Theological interpretations, of course, leave little for philosophers to argue about; for the workings of Divine Providence can be discerned only through some extrarational insight or source of revelation. And as G. W. F. Hegel complained about providential theories generally, the overarching purpose or plan is usually conceded, even by those who claim insight into it, to be partly "concealed from our view." Some theological interpretations have tried to meet this sort of objection by identifying the workings of providence, tentatively at least, with certain standing conditions and even with historical laws. A comparison between Reinhold Niebuhr's twentieth-century *Faith and History,* with its confidence in the "providential structure of existence," and Bishop Jacques Bénigne Bossuet's seventeenth-century *Discourse on Universal History,* which still envisages God ruling the course of empire by "decree," is instructive in this connection. Yet even Niebuhr confessed in the end that, to a finite human mind, both the plan and mode of operation of God in history remain mysterious.

HISTORICAL INEVITABILITY. Any attempt to make fate or providence immanent in the ordinary processes of history is a move toward a second major conception of the necessity of historical events, one often referred to in contemporary discussion as the doctrine of "historical inevitability." In this conception, the course of history has a necessary overall direction, whether it be attributed to an active but impersonal "force," a nisus toward some

ultimate goal, or a "dynamic" law of development. The necessary direction of history has been variously conceived by various philosophers. Thus the Greeks tended to envisage it as cyclical and repetitive, while most philosophers of the Enlightenment found an equally simple but linear pattern of inevitable progress. According to Giambattista Vico, history traces a spiral path as civilization after civilization, each in its own unique way, follows the curve from heroic age to neobarbarism. According to Hegel, the spiral proceeds dialectically toward the actualization of a potential human freedom, each regress contributing to an ultimate spiritual synthesis. Just how deterministic such interpretations of history's direction were actually intended to be is, in fact, a disputable matter. Almost none assert that every historical event happens necessarily; the claim is usually limited to the main trend or the more significant events. And many speculative theorists do not seem to claim even that much. Oswald Spengler, for example, in his *Decline of the West* left the origin, by contrast with the development, of historical cultures unaccounted for; Hegel's lectures on the philosophy of history can be interpreted as having held that the stages of freedom succeed each other only with "rational," and not with "natural" necessity; and Arnold Toynbee's *Study of History* discovered historical "laws" so accommodating that they appear to be compatible with an almost indefinite number of exceptions.

Yet the discovery of inevitability is generally taken to be a major goal of speculative theories of history. And historians themselves often refer to "underlying tides and currents" (A. L. Rowse) or "great social forces" (E. P. Cheyney) in a way which seems to call for a more literal interpretation than the references they also occasionally let slip to the "fate" or "destiny" of historical individuals. Recent polemical works like K. R. Popper's *The Poverty of Historicism* (Boston: Beacon, 1957) and Isaiah Berlin's *Historical Inevitability* (London: Oxford Univ. Press, 1955) certainly assume that the doctrine of inevitability is still a live option for many people. Like fatalism, it is regarded by its critics as morally and politically dangerous. But it has also been subjected to a logical and conceptual critique, the major complaint of which is that insofar as historical inevitability is asserted on empirical grounds, the notion of "necessity" is employed in a way that is scientifically indefensible. According to Popper, inevitability theories confuse genuine laws, which assert conditional and hypothetical necessities, with statements of historical *trends,* which are not necessities, but facts. Laws license prediction whenever the conditions specified in their antecedent clauses are satisfied. The lack of corresponding empirical justification for the social "prophecies" obtained by merely extrapolating trends is often obscured by the "force" metaphors characteristically used in describing them.

A speculative theorist who wished to claim metaphysical rather than scientific status for his conclusions might perhaps remain unmoved by such considerations. Yet almost all inevitability theorists at some point cite empirical evidence; and in the nineteenth century particularly, such theories were often thought to provide models for social science itself. The belief that the extrapolation of trends is a scientifically respectable procedure, Popper observed, may well be traceable to the fascination that untypical sciences like astronomy have had for philosophers of history. The temptation is to say that if eclipses can be predicted by projecting the observed behavior of the solar system, then revolutions and the like ought similarly to be predictable by projecting the tendencies of the social system. Such reasoning ignores the fact that the cyclical "direction" of the solar system is not just observed; it is explained. And the explanation is in terms of initial conditions obtaining, together with laws of motion that are conditional and hypothetical. The same could be said of the so-called directional law of evolution in biology, which is sometimes cited as a paradigm for linear theories of historical inevitability. No corresponding attempt is usually made to derive the alleged necessity of observed historical trends from more fundamental considerations. For to represent the large-scale pattern as "resultant" in such a way, especially if the relevant initial conditions included individual human actions, might undermine the thesis of unavoidability.

SCIENTIFIC DETERMINISM. The notion of explaining historical trends in terms of the operation of scientific laws brings us to a third generic conception of necessity in history, the "scientific" sense. To put it most simply, an event might be said to be determined in this sense if there is some other event or condition or group of them, sometimes called its cause, that is a sufficient condition for its occurrence, the sufficiency residing in the effect's following the cause in accordance with one or more laws of nature. The general assertion of historical determinism then becomes the assertion that for every historical event there is such a sufficient condition. Whether, in consequence, history manifests a unitary pattern or direction is a further and separate question.

Race and climate. Many historical determinists who would claim to be "scientific" in the above sense have gone a step further. Like the inevitability theorists, they have sought a simple clue to the historical process, in this

case in causal factors of a limited range. Typical of such single-factor theories are those that fasten on certain biological or psychological conditions, such as the alleged racial characteristics of certain groups, or on features of the physical environment, such as topography, climate, soil, or natural resources. The writings of Joseph Arthur de Gobineau and of Houston Stewart Chamberlain, with their concept of Aryan superiority, are notorious examples of the first of these, although few serious attempts have been made to write detailed and scholarly histories (rather than propaganda) on their principles. The search for geographical determinants, on the other hand, has a reputable record going back at least to Baron de Montesquieu and Jean Bodin, and it received classic expression in the work of Henry Thomas Buckle in the nineteenth century and of Ellsworth Huntington in the twentieth. Both types of theory, however, oversimplify the diversity of history. It is one thing to point out that civilizations originated in river valleys or that the decline of Rome was accompanied by race-mixing. It is quite another—even if some features of events can properly be ascribed to such factors—to say that all significant historical change is determined by geographical or biological causes.

Social causes. Racial and environmental interpretations locate the explanatory factors outside the course of historical events themselves. Social interpretations offer single-factor accounts that seek causes in one kind of historical condition by contrast with others. According to Karl Marx, for example, the explanation of political, religious, legal, and other "ideological" features of a society is to be found in that society's mode of economic life and in the relations of production that its human elements consequently take up toward each other. In extreme forms of the theory at least, a one-way causal relation is asserted to hold at any time between economic and noneconomic factors, as well as between economic conditions at different times. Such an economic interpretation of history, with its more variable explanatory factor, has a far richer potential than racial or environmental ones for explaining the details of historical change. As with all single-factor theories, however, any attempt to defend its monistic causal claims generally either fails to carry conviction or runs afoul of a basic distinction between sufficient (determining) and merely necessary (conditioning) conditions. Thus, in a crude but revealing lapse, often cited, Friedrich Engels argued that because a man cannot engage in politics, science, religion, and art if he lacks the basic material conditions of life, the latter *determine* the former.

Multiple-factor theories. More considered statements of single-factor theories try to provide for a degree of interaction between the chosen factor and others. This leaves the difficult problem of explaining the sense, if any, in which the special factor is the fundamental one. It also leaves the problem—which bedeviled inevitability theories as well—of the relation between large-scale social causes and effects and the actions of participating individuals. "Great man" theories like Thomas Carlyle's are rightly out of fashion, but it is difficult to deny the historical importance of a Vladimir Lenin or a Napoleon Bonaparte. Georgii Valentinovich Plekhanov's classical Marxist discussion of this problem, in *The Role of the Individual in History,* adopts the uneasy compromise that individual causes can make a difference to a historical outcome, but only to its less significant features or to its timing. Such legislation as to the "spheres of influence" of various sorts of conditions, all conceded to be necessary, often seems highly arbitrary; and under pressure, single-factor theories tend to develop into "interpretations" only in the sense of directing attention to one factor in historical change that is deemed especially noteworthy, often for pragmatic reasons. The claim that historical events are determined then ceases to have any special connection with the claims made for the chosen factor. It reverts simply to the assertion that for every event there is a sufficient condition, no matter how disparate the causal elements that may sometimes be required to constitute it.

In the broad sense thus indicated, the contention that historical events are all determined may seem quite unproblematic. And when one considers the thoroughly causal language of historical accounts, the contention may seem also to be in accordance with historical practice. It is true that what historians actually call a cause is seldom itself a sufficient condition. But it is generally assumed by determinists that its claim to be a cause depends upon its completing a sufficient set of such conditions, some of which may not have been overtly specified. Yet the assumption of scientific determinism in history has been disputed on a number of grounds, the three set forth below being among the most frequently cited. These arguments have a common feature: all claim that this assumption contradicts others that the historian normally and properly makes. In consequence, the notion is represented as importing an incoherence into historical thinking as a whole.

OBJECTIONS TO DETERMINISM

CHANCE. It has been objected, first, that history is a realm in which events sometimes occur "by chance"—it

being assumed that what happens by chance cannot happen of necessity. Certainly, historians often report what happened in such terms. And chance has been regarded by some of them almost as a principle of historical interpretation. Thus J. B. Bury, in his *Later Roman Empire,* represented the success of the barbarians in penetrating the Roman Empire as due to a succession of coincidences—the "historical surprise" of the onslaught of the Asiatic Huns, which drove the Goths west and south; the lucky blow that killed a Roman emperor when the Goths engaged a Roman army that just happened to be in their way; the untimely death of that emperor's talented successor before he had arranged for the assimilation of those tribesmen who had settled within the imperial border; the unhappy fact that the two sons who subsequently divided the empire were both incompetent, and so on. Bury's example does at least afford a strong argument against the notion that history is a *self*-determining system—one of the assumptions of the doctrine of historical inevitability. It illustrates the intrusion of nonhistorical factors into the historical process—an untimely death, for example—Bury's awareness of which led him to object to any search for what he called "general" causes. Bury's example makes clearer, too, the inappropriateness of a science like astronomy as a model for social and historical explanation. For the solar system, unlike human society, is virtually isolated from such external influences. This makes it possible for us to make astronomical predictions without taking into account anything but the description of the state of the system itself at any time and to predict accurately for long periods ahead. In history the situation is very different. The sufficient conditions of historical events are seldom to be found in other historical events.

But does the admission of chance, as Bury described it, count against the whole doctrine of historical determinism in the scientific sense? In support of their claim that it must, historical indeterminists sometimes cite parallels in physical inquiry. Modern subatomic physics, for example, whether correctly or not, has often been said to be indeterministic precisely because it regards certain aspects of the behavior of single electrons as matters of chance. Yet it may be questioned whether any of the contingencies, accidents, or unlucky "breaks" mentioned by Bury were matters of chance in the physicist's sense. For there is no reason to think of any of them as uncaused. What is peculiar about them is that they occur (to use a common phrase) at the intersection of two or more relatively independent causal chains. But there is nothing in such coincidences, determinists will maintain, that enables us to say that what occurs at the "intersections" could not be deduced from prior statements of conditions and appropriate laws, provided we took all the relevant conditions into account.

In practice, of course, a historian may not be in a position to explain why a given coincidence occurred; at least one relevant chain—the biological one leading to the emperor's death, for example—may be beyond the scope of his kind of inquiry. What happened may consequently be represented by him as something unforeseen—perhaps even as the intrusion of the "irrational" into the course of events. Here the notion of chance is extended from the paradigm case where an event is said to have no cause at all to one where the cause is simply unknown because nonhistorical.

The notion is commonly extended further (as Bury's example illustrates) to events whose causes, although not beyond the range of historical inquiry, are beyond the immediate range of the historian's interests—the appearance of the Huns, for example. This makes it misleading to define "chance event" in history, as some have done, as an event that has historical effects but lacks historical causes. The causes of the invasion of the Huns simply lie outside the story the historian is telling. The judgment that a historical event happened by chance is thus a function of what the historian (and his readers) are concerned about. (This also covers the case where "by chance" seems chiefly to mean "unplanned.") It follows that, from one standpoint, an event may properly be judged to be a chance occurrence, while from another it clearly could not be: the activities of the Huns, for example, were scarcely a matter of chance from their own standpoint. Speculative philosophers of history, if they aim to take the additional standpoints of God or "History" into account, will obviously have further problems when deciding whether something was a chance occurrence. The issues thus raised are doubtless of considerable interest for a general account of the logic of historical narration. It is difficult to see, however, that they have any important bearing on the acceptability of historical determinism.

NOVELTY. A second consideration often advanced against the determinist assumption is that history is a realm of novelty and that its course must therefore remain not only unforeseen but unforeseeable, even if we take into account the broadest possible range of antecedent conditions. The fact that what the historian discovers is often surprising is thus held to have an objective basis in human creativity, from which periodically there emerge events and conditions with radically novel characteristics. Such "emergence," it is often claimed,

rules out the possibility of scientific prediction before the event because prediction is necessarily based on laws and theories that relate types of characteristics already known. In this connection it is interesting to note a "proof" offered by Popper that some historical events at least are unpredictable in principle. If we accept the common assumption that some historical events are dependent in part on the growth of human knowledge, Popper pointed out, then it is logically impossible that we should be able to predict them before they occur. For ex hypothesi, one of their conditions must remain unknown to us.

Confronted by such an argument, determinists would want to make clear that, as they conceive it, determinism does not entail predictability, even though it has, unfortunately, sometimes been defined in terms of predictability. An event can be determined even though it is not known to be so. Popper himself did not regard the argument cited above as counting against historical determinism; indeed, his own statement of it strongly suggested that the unpredictability of the events in question actually follows from their being determined in a certain way, that is, by a set of conditions that are less than sufficient in the absence of as yet unattained human knowledge. All that is required by the doctrine of determinism, however, is that events *have* sufficient conditions, whether or not they can be known before the fact. It would thus be better, perhaps, to define the notion in terms of explicability rather than predictability. Determinists often point out that the emergent characteristics of natural things can be explained in the scientific sense, although they could not have been predicted before they first emerged. In his "Determinism in History," Ernest Nagel cited the emergence of the qualities of water out of a combination of hydrogen and oxygen. These are emergent and novel in the sense of not being possessed by the original elements and not being deducible from information about the behavior of these elements in isolation. Yet we have been able to frame laws governing the emergence of these originally novel attributes under specifiable conditions that allow us to deduce and now even to predict the attributes.

A likely reply is that whereas the emergence of the characteristics of water is a recurring, experimentally testable phenomenon, the emergence of novelty in the course of history is not. At least some historical events and conditions, it may be said, are unique and hence not subject to scientific explanation even after the fact. In considering this rejoinder, however, it is important not to misunderstand the claims of scientific determinism. For these do not include the deducibility in principle of the occurrence of historical events "in all their concrete actuality." Only events as historians represent them in their narratives are said to be so deducible. And their descriptions of events, it will be argued, are necessarily phrased in terms that apply, although not necessarily in the same combinations, to events at other times and places.

It may of course be doubted that we shall ever actually discover the determining conditions of such historical novelties as Alexander's use of the phalanx, Caesar Augustus's imperial policy, or the organization of the medieval church, under descriptions as highly detailed as historians customarily apply to them—a problem scarcely touched by the consideration, advanced by Nagel, that social science has sought, with some measure of success, to discover the conditions under which men act creatively. Yet determinists will regard these as merely "practical" difficulties, not bearing on the basic issue. That issue, they will maintain, is whether the novelties that can be recognized by historical inquiry are such as to rule out their subsumability under laws "in principle." Unless historians' knowledge can be said to go beyond any description of such novelties in terms of a unique conjunction of recurring characteristics, the argument from historical novelty will be deemed to have missed its mark.

In fact, this further, and highly debatable claim is one that some historical theorists would be quite prepared to make. They would point out, for example, that we can *listen* to Wolfgang Amadeus Mozart's music and *read* Isaac Newton's scientific writings—two examples of creativity cited by Nagel—and, by thus enjoying direct acquaintance with radical historical novelty, discover more than could be conveyed by any description in terms of recurring characteristics. Ordinary historical knowledge of novel military tactics, imperial policies, or institutional organizations, they would maintain, would similarly go beyond what could be expressed without reference, either explicitly or implicitly, to named individuals, groups, or periods. They would consequently represent historical narrative as employing concrete universals—like "Renaissance" or "Gothic"—as well as abstract ones. And since scientific laws can be framed only in terms of abstract universals, they would claim that warranted assertions of novelty expressed in terms of concrete universals do undermine the assumption of determinism.

FREEDOM. A third and even more common argument against accepting a determinist view of historical events turns on the claim that history is a realm not only of chance and novelty but of human freedom. The subject

matter of history, it is sometimes said, is not mere "events" but human "actions," in a distinctive sense quite familiar to plain men who deliberate and decide what to do. If the historian is not to misrepresent such a subject matter, the argument goes, then he must take seriously the notion of choosing between alternatives. As Johan Huizinga expressed it, in his "Idea of History" (in *The Varieties of History,* edited by Fritz Stern), "the historian must put himself at a point in the past at which the known factors still seem to permit different outcomes. If he speaks of Salamis, then it must be as if the Persians might still win." In *Historical Inevitability,* Isaiah Berlin gave a further and even more familiar reason for adopting the standpoint of "agency." "If determinism were true, …" he wrote, "the notion of human responsibility, as ordinarily understood, would no longer apply." For an ascription of responsibility requires the assumption that the agent was "in control," that he could have acted otherwise than he did. Historical accounts, in other words, like the moralistic ones plain men ordinarily give of their own and others' actions, presuppose "freedom of the will." And this is held to be incompatible with the assumption of determinism.

Few philosophical problems have been discussed as exhaustively (or as inconclusively) as the problem of freedom of the will, and it is quite impossible in this context to do justice to the subtleties involved. There are, however, two chief ways of handling the present objection. Historical determinists can try to explain away the problem of freedom by arguing that, although moralistic accounts properly regard historical agents as free, the sense in which they must do so is quite compatible with the deterministic assumption. Libertarians, correspondingly, can try to give an account of historic causation that does not rule out an action's being both caused and undetermined. For historians, either of these ways out of the difficulty would presumably be more acceptable than the outright denial of the legitimacy of either moral appraisal or causal explanation in historical accounts. For, with no obvious sign of strain, historians generally offer both.

The determinist case often turns on the contention that the sense of freedom involved in attributing responsibility to a moral agent is not the "could have done otherwise" of absolute indeterminism; that sense implies only that the agent would have done otherwise if certain antecedents—his circumstances or his character, for example—had been a little different. Indeed, it is often argued that the test of whether the agent is really "in control," and hence responsible, is whether he acts differently on another occasion when the conditions have been changed—say, by his having been praised or blamed, rewarded or punished. It is therefore not the agent's freedom in the sense of his action's being uncaused that is at stake. The determinist, in arguing this way, conceives himself, furthermore, as accepting, not rejecting, the notion that the moral categories the historian uses are those of the plain man. What is denied is that the "ordinary" sense of "free" is the unconditional "freedom of the will" of the metaphysicians. As for Huizinga's claim that the historian must think of the agent's problem as if there were real possibilities open to him, this would be regarded as a purely methodological point. What is brought out thereby is the applicability to actions of a concept of understanding that requires us, quite properly, to view them in relation to what the agents thought about their situations, including any illusions they may have had about them.

Many libertarians might accept the latter contention. But most would surely repudiate the claim that responsibility requires freedom only in a sense compatible with determinism. To ascribe responsibility to a person whose actions necessarily follow from antecedent events, Berlin declared, is "stupid and cruel," and he meant rationally incoherent, not just foolish. In a sense alleged to be central to our notion of responsibility, such a person could *not* have done otherwise. Must a libertarian who takes such a stand, then, abandon the possibility of explaining actions causally? Some, at least, would say, No, provided we recognize that the term *cause,* when applied to human actions, bears a special sense. Thus, according to R. G. Collingwood, the causes (in a distinctively historical sense) of "the free and deliberate act of a conscious and responsible agent" are to be sought in the agent's "thought" about his situation, his reasons for deciding to act (*Essay on Metaphysics*). What a libertarian will deny is that any combination of such "rational" causes that excludes the agent's decision to act—since the latter falls into the historian's explanandum, not his explanans—is a sufficient condition of his action. Such causes become "effective," it might be said, only through an agent's deciding to act upon them. Yet when he does so, reference to them as his "reasons" will explain what he did in the sense of making it understandable. What such reference will not and need not do is explain his action in the sense of showing its performance to be deducible from sufficient antecedent conditions.

It is generally agreed that the conflict between historical determinists and indeterminists cannot be resolved by the offering of proofs or disproofs. Modern scientific determinists, in any case, seldom state their position dog-

matically. According to Nagel, for example, all that can be claimed is that the principle of determinism has "regulative" status as a presupposition of the possibility of scientific inquiry—a principle that must therefore govern the scientific study of history as well. What is particularly interesting about theories of rational causation is the conceptual foundation they offer for denying that the principle of determinism is a necessary presupposition even of seeking explanations when the subject matter is human action: they show at least the conceivability of explanatory inquiry on libertarian principles. It must be conceded, however, that few contemporary philosophers regard indeterminism as an acceptable assumption to carry into historical or social investigation.

See also Berlin, Isaiah; Bodin, Jean; Bossuet, Jacques Bénigne; Buckle, Henry Thomas; Carlyle, Thomas; Chamberlain, Houston Stewart; Chance; Collingwood, Robin George; Determinism, A Historical Survey; Determinism, Theological; Determinism and Freedom; Determinism and Indeterminism; Engels, Friedrich; Gobineau, Comte Joseph Arthur de; Hegel, Georg Wilhelm Friedrich; Lenin, Vladimir Il'ich; Marx, Karl; Montesquieu, Baron de; Nagel, Ernest; Newton, Isaac; Niebuhr, Reinhold; Paradigm-Case Argument; Philosophy of History; Plekhanov, Georgii Valentinovich; Popper, Karl Raimund; Providence; Spengler, Oswald.

Bibliography

For examples of determinist or near-determinist views of history, see H. T. Buckle, *A History of Civilization in England* (London, 1899) or E. Huntington, *Mainsprings of Civilization* (New York, 1945). The works of various speculative and single-factor theorists mentioned above may also be consulted: Patrick Gardiner's *Theories of History* (Glencoe, IL, 1959) contains relevant extracts from the works of Vico, Hegel, Marx, Plekhanov, Buckle, Tolstoy, Spengler, Toynbee, Croce, and Collingwood. For a contemporary attack on deterministic views, of both the scientific and metaphysical kinds, see Isaiah Berlin, *Historical Inevitability* (London: Oxford University Press, 1954) and the reply offered by E. H. Carr in *What Is History?* (London, 1961). For a moderate defense of the deterministic assumption against such attacks, see Ernest Nagel, "Determinism in History," *Philosophy and Phenomenological Research* 20 (1960): 291–317. The viability of indeterministic historical and social scientific inquiry is argued for in Alan Donagan, "Social Science and Historical Antinomianism," *Revue Internationale de Philosophie* 11 (1957): 433–449. The role of the individual in history is discussed in Sidney Hook, *The Hero in History* (New York: John Day, 1943). Johan Huizinga's "Idea of History" is included in English translation in *The Varieties of History,* edited by Fritz Stern, pp. 290–303 (New York: Meridian, 1956). The claim that historians use "cause" in a special sense is developed by R. G. Collingwood in *An Essay on Metaphysics* (Oxford: Clarendon Press, 1940), which should be read in conjunction with his *The Idea of History* (Oxford: Clarendon Press, 1946).

W. H. Dray (1967)

DEUSSEN, PAUL

(1845–1919)

Paul Deussen, the German philologist and philosopher, was the son of a Protestant clergyman in the village of Oberdreis in the Westerwald. He received a thorough classical training in the old secondary school of Pforta, where he developed a close friendship with Friedrich Nietzsche. Both Deussen and Nietzsche enrolled in the theological faculty at the University of Bonn, but Nietzsche soon shifted to classical philology and followed his teacher Ritschl to Leipzig. Deussen remained in Bonn for four semesters, then also shifted to classical philology and earned his doctorate at Berlin in 1869 with a dissertation on Plato's *Sophist.* After a brief period of teaching in secondary schools, he became the tutor for a Russian family in Geneva in 1872. There he intensified his study of Sanskrit, began a study of the Indian philosophical classics, and became an enthusiastic follower and interpreter of Arthur Schopenhauer (after having long resisted Nietzsche's enthusiastic endorsements). In 1881 he qualified to lecture in Berlin under Eduard Zeller on the basis of his work *The System of the Vedanta,* and became an extraordinary professor in 1887. Appointed full professor in Kiel in 1889, he retained this post until his retirement.

Deussen's major work, on which he labored for more than twenty years, was the *Universal History of Philosophy,* consisting of two large volumes in six parts. The first volume was devoted to Indian thought and the second to the thought of the West from the Greeks to Schopenhauer, with a section on the philosophy of the Bible.

For Deussen the history of philosophy was a discipline indispensable not only for the understanding of life but for its religious interpretation as well. Its task was to strip off the "mythical vestments" or "hulls" of the various philosophical and religious systems in order to discover the single unified truth that all share.

This unified, permanent truth was made clear in the philosophy of Immanuel Kant as completed by Schopenhauer, but it also embraced insights from the Vedanta, Plato's doctrine of Ideas, and Christian theology. Schopenhauer, Deussen said, had "freed the essentials of