高等学校英语专业高年级阅读教材

主编 高广文

Perspectives

II

西安交通大学出版社

高等学校英语专业高年级阅读教材

Perspectives
Ⅱ

主编　高广文
编者　胡小花　贾丽萍　常晓梅
　　蔚　兰　冯晓媛　刘育红

西安交通大学出版社
·西安·

内 容 提 要

本教材是根据教育部高等学校外语专业教学指导委员会英语组制订的《英语教学大纲》(2000 年 4 月修订)编写的英语专业阅读教材。全书共两册,20 章,按题材分为:论阅读、大自然、人、个人与社会、哲学、文化、艺术、心理学、科学与技术、经济与经济学、历史、教育、语言、男人与女人、政治、环境保护、媒体、人物传记、宗教、论死亡。每章含 4－5 文章,既有论说文,又有短篇小说、戏剧和诗歌。本教材适合青年教师、研究生、英语专业高年级学生使用,将给使用者语言质量的提高、视野的开拓、思辩能力的增强以及综合素质的培养提供较大帮助。

图书在版编目(CIP)数据

视点 = Perspectives /高广文主编;胡小花等编.
西安:西安交通大学出版社,2000.9
ISBN 7－5605－1300－X

Ⅰ.视… Ⅱ.①高…②胡… Ⅲ.英语-阅读教学-教学参考资料 Ⅳ.H319.4

中国版本图书馆 CIP 数据核字(2000)第 70352 号

西安交通大学出版社出版发行
(西安市咸宁西路 28 号 邮政编码:710049 电话:(029)2668316)
陕西宝石兰印务有限责任公司印装
各地新华书店经销
*
开本:787 mm×1 092 mm 1/16 印张:23.25 字数:569 千字
2000 年 9 月第 1 版 2000 年 9 月第 1 次印刷
印数:0 001－3 000 定价:28.00 元

前　言

阅读在语言学习中有着不可替代的作用，在外语学习中尤其如此。阅读既是掌握、扩大词汇的有效途径，也是巩固已有语言知识、丰富表达技巧、提高表达质量的有效途径。这一点似乎是不容置疑的。在交际中，听和说是重要的，但如果没有阅读，就不可能提高口头表达的质量，就不可能有向写和译转化的质的飞跃。阅读又是吸收、借鉴前人积累的知识的有效途径，不管知识传播的手段如何发展变化，要把他人的知识变成自己思想的一部分，没有阅读，真正意义上的转化就失去了基础。在我国，听、说、读、写、译是指导外语教学实践、衡量外语教学质量的行之有效的准则。阅读之所以处于中心位置，其意义也在于此，这也是我们编写这套教材的初衷。

《观点》(*Perspectives*)是为我国高等院校英语专业高年级学生编写的阅读教材，供两学期使用。根据中华人民共和国教育部外语教学指导委员会英语组制订并颁发的我国高等院校英语专业高年级教学大纲的要求，我们在选取阅读材料时，作了如下考虑：

(一) 阅读量要大。我们认为，英语专业高年级阅读课首先要解决量的问题，没有量的增大，就不能保证质的提高。三五百字的短文，对训练学生的阅读技巧是有帮助的，但这一任务应在打基础的低年级教学中完成，高年级教学的重点应在提高；阅读短文的另一个作用是应试，应试教育只适用于短期培训，我们不主张在正规高等教育中推行不利于学生素质提高的应试教育。本教材所选文章平均在2,000到3,000英文单词左右，每章4～5篇文章，表达的内容和表达方式都有一定的难度，既有助于提高高年级学生的阅读质量和水准，又方便使用者酌情进行取舍。

(二) 阅读内容要广。随着我国改革开放不断深入发展，人才市场对高校毕业生的要求更高、更全面，而我国高等外语院校课程设置较单一，毕业生知识结构不甚合理。为给学生提供内容尽可能广泛的阅读材料，我们在章节安排上包括：论阅读、大自然、人、环境保护、人与社会、经济与经济学、哲学、历史、科学与技术、教育、政治、语言、男人与女人、文化、艺术、媒体、心理学、人物传记、宗教、论死亡，共20章，分一、二册。在可能的情况下，我们也收编了部分在同一问题上观点针锋相对的文章。我们期望本教材能在开拓学生视野、启发学生思维、提高学生的思辩能力和创造力方面起一定的作用。

(三) 选文体裁要多样。除题材的广泛性外，我们在选取各章阅读材料时，也力争体现体裁的多样性。选文以论说文为主，也适当包括了一些诗歌、小说、戏剧作品。体裁的多样性既体现语言的多重功能，帮助学生加深对语言本身的理解，提高学生运用语言的能力，又可以使读者少一点单调感，提高阅读兴趣和效果。

本教材的全体编写人员都付出了很大努力。在88篇文章中，高文广同志编写了27篇，胡小花同志编写了18篇，贾丽萍同志编写了12篇，常晓梅同志编写了10篇，蔚兰同志编写了8篇，冯晓媛同志编写了7篇，刘育红同志编写了6篇。

本教材的编写得到西安外国语学院有关部门和英语系的大力支持，得到学院英语专业学

者、专家的指导和帮助，更得到西安交通大学出版社的鼎力支持，我们在此一并表示谢忱。没有他们的支持，就不会有这套教材。由于资料限制，选文不一定都合适，其余文字中若有谬误，当属编写者水平有限，望专家学者及读者不吝指教，以利于我们修正。

编　者

2000 年 5 月于西安

Contents

Unit Eleven History

The Asking Animal

Daniel J. Boorstin

Daniel J. Boorstin, the U. S. Librarian of Congress Emeritus, is one of America's most eminent historians. His books include The Discoveries, The Creators, *and the celebrated trilogy* The Americans. *In this piece contributed to a special issue of* Time, *Dr. Boorstin traces throughout history, from the time of Socrates to our own modern age, and presents man as an inquisitive creature that has sought answers to the fundamental questions: Who are we and why are we here?*

Caught between two eternities—the vanished past and the unknown future—human beings never cease to seek their bearings and sense of direction. We inherit our legacy of the sciences and the arts—the works of the great discoveries and creators, the Columbuses and Leonardos—but we all remain seekers. Man is the asking animal.

In one of his works, the Welsh poet Dylan Thomas recalls his frustration as a boy when he was given a beautiful book at Christmas that told him everything about the wasp but "why." All the knowledge in our universities and all the treasures in our museums do not satisfy us.

Western culture has witnessed at least three grant historical epochs of seeking—each with a dominant spirit, enduring spokesmen and distinctive problems. We have gone from the "Why?" to the "How?", from the search for the purpose to the search for causes.

First was the heroic way of prophets and philosophers seeking answers—salvation or truth—from the God above or the reason within each of us. Then came an age of communal seeking, pursuing civilization in the liberal spirit. And more recently there was the age of the social science, in which man was ruled by the forces of history. We can draw on all these ways of seeking in our personal search for purpose, to find meaning in the seeking.

Prophets and Philosophers

The first epoch, our ancient heritage, was an age of individual heroic seekers, of inspired prophets and philosophers. It sought its message from the God above or from the reason within. In fact, the Hebrew word prophet (nabi) means someone who is inspired by and speaks for God. These prophets were not mere foretellers of the future, but revealers of God's purpose, God's

answer to man's "Why."

Moses, prototype of the prophet, offered no mere blueprint of the future, but the commandments of God to His people. In so doing, he established the test of obedience to God as a way to give purpose to man's life. The Ten Commandments thus made obedience the mark of the true believer. Millennia later, this idea would become the very heart of Islam, a term derived from the Arabic word for submission to God's will. The commanding voice of God through His prophets provided a clear direction for man and society.

The special problem of the seekers in the age of prophets was revealed in the celebrated life of Job. And the Job Syndrome would carry a warning for all over—confident seekers to come. The story of Job is a parable of how man makes his own problems in his search for purpose. The Book of Job, a poem in dialogue, is one of the profoundest compositions in the Hebrew canon. This familiar story became the classic epic of human suffering—and the suffering of the innocent. For Job was a virtuous man, and prosperous, and faithful worshipper of his God. He enjoys the rewards of virtue in the form of a rich farm, a beautiful family and the respect of his neighbors. Satan suggested to God the Job's virtue and piety were motivated only by his desire for earthly reward. Satan urged God to test Job's faith. If God took away everything from Job, Satan insisted, Job would curse God to His face.

God allowed Satan to put Job's faith to the test. Job's cattle were stolen, his sheep struck by lightning, his children killed in a desert storm. And finally Satan covered Job's body with sores. Still Job did not curse God but extolled His wisdom "not to be found among men." When the Lord responds to Job, He does not boast of His power, but offers only reminders of His glory and the wonders of His creation. He reminds Job that he is addressing the creator. Finally, Job confesses that the Lord is "all powerful; that you can do everything that you want." The Lord accepts Job's confession and He blesses Job with greater prosperity than ever before. Now Job has seven sons, and no other women are as beautiful as his three daughters.

Why is Job not told why he is made to suffer? Why would a good God allow evil in the world? This problem, one that Judeo-Christian man had created for himself by his belief, has haunted Western thought for millennia. It is plainly a byproduct of ethical monotheism—a "trilemma" created by the three indisputable qualities of an all-knowing, all-powerful and all-benevolent God. "If God were good," the British writer C. S. Lewis once observed, "He would wish to make his creatures perfectly happy, and if God were almighty, He would be able to do what He wished. But the creatures are not happy. Therefore God lacks either goodness, or power, or both."

Reluctant to abandon belief in God, Western seekers have exercised their ingenuity and imagination to solve the paradox of Job. This was John Milton's theme in *Paradise Lost*—to "justify the ways of God to man." Not until the 18th century did Leibniz give a name to this troublesome problem—Theodicy, from the Greek *theos* (God) and *dike* (Justice). If Job and others after him had not set out with a belief in a benevolent God, would they have been so puzzled by the suffering of the innocent? This question has not equally troubled people

everywhere. Religions in the East have provided plausible theological explanations for divine punishment and retribution in the concept of *karma* (the accumulation of debts from earlier lives) and the work of Kali and other destructive divinities.

The Seeker-Prophet aimed his preachments at a tribal society held together by a common ancestry, culture and leadership. His God's promise in a covenant with the ancestors bound together the God and His people. God was committed to guard and guide His chosen people, while His people were committed to obey His commandments carved in the Tablets of the Law. In this way the purposes of man and society were permanently defined and declared.

The desert-dwelling peoples of the Middle East naturally looked upward to the heavens for their guide and purpose. But the appeal to God and His commandments was not the only way of seeking. At about the same time, the "Greek miracle" was beginning. In small, sea-girt, mountain-fractured communities of the eastern Mediterranean, the ancient Greeks found their own way. The Greek polis, originating in the natural division of the country by mountains and sea, was a small community of people who governed by meeting face to face in their *Ecclessia* (Assembly) of all citizens. The shared spoken word defined policies and purposes. In these small communities citizens counseled one another. They idealized the spoken word and the wondrous instrument of reason within each person, and pursued the way of dialogue.

The patron saint of this way was Socrates. Socrates brought the search for meaning down from heaven to earth. The influence of Socrates was not in a school of philosophy but in his person, in his life and the circumstances of his death. Unlike Jesus, Socrates had the misfortune to have his life reported by literary persons—Aristophanes, Xenophon, Plato, Aristotle—each with his own philosophical axe to grind. Still the dominant spirit of Socrates' way of seeking is revealed unmistakably in the Platonic dialogues.

Socrates himself repeatedly denied the role of teacher, and he never bores us with the wagging didactic fingers. But he did boast the role of midwife. "And like the midwives, I am barren, and the reproach which is often made against me, that I ask questions of others and have not the wit to answer them myself, is very just—the reason is that the god compels me to be a midwife, but does not allow me to bring forth ... But to me and the god they owe their delivery." The very midwifely technique by which Socrates revealed ignorance in his conversational partners suggested that truths lay undiscovered within each person being questioned: the Socratic technique implied a hidden wisdom in everyone. Socrates's paradoxical discovery was that skillful dialogue could elicit the universal ignorance and universal potential for wisdom inside each person. The pursuit of truth was a fluid process that took place in the living, spoken word.

Plato lived in an age of transition in Athens when the written word was invading the world of learning. This explains his concern for the menace of the written word—expressed in the warnings of the Egyptian god-king Thamus to Thoth, the inventor of writing: "... this discovery of yours [writing] will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of

themselves. The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth, but only the semblance of truth ..."

The way of dialogue was a special way of seeking that valued the spoken word and gave a secondary role to writing. Today, the thinker is a writer; then, the thinker was a speaker. Socrates explained that just as a painting, unlike a living person, can not respond to questions, so too the written word is lifeless. But the spoken word, "an intelligent word graven in the soul ... can defend itself, and knows when to speak and when to be silent ... The living word of knowledge ... has a soul ... of which the written word is no more than an image." So the thinker "will not seriously incline to 'write' his thoughts 'in water' with pen and ink, sowing words which can neither speak for themselves nor teach the truth adequately to others."

At his trial Socrates was not charged with being a member of a sect or the author of subversive writing. But he heard "voices" and was accused of unorthodox teaching in his interviews with Athenian youth. The irony of the trial and death of Socrates still challenges us. He had repeatedly risked his life on the battlefield, fighting for Athens in the Great Peloponnesian War. Yet he had become the gadfly of the state and then outraged citizens by asserting the superiority of individual reason over conventional wisdom. And he gave his life willingly in deference to the laws of his little community.

Job finally confessed his inability to understand and judge the will of God, while Socrates died for the right to awaken his fellow Athenians to their ignorance. But while Job finally acquiesced in his own ignorance, Socrates died for the right to seek. And Socrates in his last words begged his judges: "When my sons are grown up, I would ask you, O my friends, to punish them; I would have you trouble them, as I have troubled you, if they seem to care about riches, or anything, more than about virtue; or if they pretend to be something when they are really nothing ... The hour of departure has arrived, and we go our ways — I to die, and you to live. Which is better God only knows."

It was ironic, too, that Plato, Socrates' editor, ghost-writer and perpetuator, should become the patron saint of pure, changeless ideas and author of *The Republic*, the prototype and most influential of all Utopias, a terminal portrait of the perfected community. And Plato's *Republic* would claim to be the static end of seeking and the need for seekers. "Although all the rulers are to be philosophers," British mathematician and philosopher Bertrand Russell once objected, "there are to be no innovations; a philosopher is to be, for all time, a man who understands and agrees with Plato." Socrates could hardly have been any more content in Plato's Republic than he had been in his own Athens.

In recalling the story of our human search for meaning, we have been inclined to remember the courage, initiative and imagination of the messengers and forget the message. The Hebrew prophets still live for us in their eloquent exhortations and jeremiads. The Greek philosophers live in their wisdom and drama of Socrates. The prophets sought purpose in the word of God for whom they spoke, the philosophers sought to free the wondrous instrument of reason within everyone. They spoke with heroic voices-the prophets channels for the voice above; the

philosophers midwives for the hidden voice within.

Ways of Community

The next great age of seeking in the West sought purpose not in the vision of individual prophets or the personal revelation of reason within each person. The appeal was to man in society. Communal enterprises in the late 15th century, signaled a turn to experience—to shared experience—and dramatized the power and possibilities of community. The European exploration of America showed how much of the world the Europeans still did not know, and how community enterprises of discovery could open opportunities for nations and individuals. Out of this experience and the vitality of the Renaissance—with its discovery of the world and of man—came a new sense of seeking as a communal endeavor.

There emerged a new way of describing the communal search that had great influence in succeeding centuries. "Civilization" would suggest the meaning and purpose of community. The word in its modern sense does not enter our language until the 18th century. On 23 March, 1772, James Boswell reports, he tried to persuade British lexicographer Dr. Samuel Johnson to admit the word "civilization" into his landmark *Dictionary of the English Language*. Johnson could not be persuaded, and insisted instead on "civility," to which he would give only a technical legal meaning. But in the lexicon of Voltaire's French enlightenment, "civilization" was coming to be the name for the enlightened state of which all mankind was capable. In France, Voltaire had seen a climax of civilization. He wrote his history, and new way of viewing history, in *The Age of Louis XIV*. In the Russia of Peter the Great he thought he was seeing the process by which civilization would come to other countries.

Civilization then, according to Voltaire, was no monopoly of France or any one people or language. It was people in community seeking the perfection of their society and its achievements. Voltaire noted three earlier happy ages of civilization. The first was "classical Greece in the time of Philip and Alexander . . . the rest of the known world being in a barbarous state." The second, the era of Caesar and Augustus, was "distinguished by the names of Lucretius, Cicero, Livy, Virgil, Horace, Ovid, Varro and Vitruvius." The third was the Renaissance, "the hour of Italy's glory. The arts, forever transplanted from Greece to Italy, fell on favorable ground, where they flourished immediately. France, England, Germany and Spain, in their turn, desired the possession of these fruits . . . The fourth age is that which we call the age of Louis XIV, and it is perhaps of the four the one which most nearly approaches perfection." Enriched by earlier discoveries, the age of Louis XIV accomplished more than the other three together. "All the arts, it is true, did not progress any further that they had under the Medici, under Augustus or under Alexander; but human reason in general was brought to perfection." And finally "rational philosophy" spread its beneficent influence to England, Germany and Russia, and revived Italy.

With his *Age of Louis XIV*, Voltaire earned his title as the first historian of civilization. He named the pioneer book after the Sun King of Versailles, he explained in 1738, because "no

single person could epitomize the high level that civilization had reached in the 17th century better than Louis XIV." And Voltaire reached far beyond political and military events for the broadest definition of civilization. A third of his pages are devoted to social and fiscal institutions, laws, science, literature and the arts, and religion and ecclesiastical affairs. He concludes with a brisk polemic chapter illustrating his "terrible reproach" that the Christian church had caused that "blood should have been shed for so many centuries by men who proclaimed the god of peace. Paganism knew no such fury. It covered the world in darkness, but shed hardly a drop of blood save that of beasts.... The spirit of dogma bred the madness of religious wars in the minds of men."

The seeking spirit—not fanaticism or orthodoxy—built civilization and enriched human life. The defense of dogmas and the expansion of nations and empires had been the enemy of progress. "Of those who have commanded battalions and squadrons, only the names remain. The human race has nothing to show for a hundred battles that have been waged. But the great men ... have prepared pure and lasting pleasures for men yet to be born. A canal lock uniting two seas, a painting by Poussin, a beautiful tragedy, a newly discovered truth-these are things a thousand times more precious than all the annals of the court or all the accounts of military campaigns.... You know that, with me, great men come first and heroes last. I call great men all those who have excelled in creating what is useful or agreeable. The plunderers of the provinces are merely heroes."

When Voltaire fled from Paris to London he plainly saw the promise of civilization in human community. This was "the decisive hegira" that produced Voltairism and faith in the whole human community. Voltaire's two-and-a-half years in England inspired his admiration for "that intellectual and fearless nation." It also provided the material for his ironic and eloquent *Letters Concerning the English Nation* celebrating the distinctive and miscellaneous triumphs of civilized enlightenment in England: the Parliament; the Quakers; inoculation against smallpox; the physics and optics of Newton; the spirit of toleration and the persons of rank who cultivated learning. Voltaire's English exile showed him how nations could enrich one another, and share their civilization. This experience, if no other, would have cured Voltaire of French chauvinism. But it had no such effect in France itself, where his brief volume was condemned in 1734 by the *Parlement* of Paris to be burned by the hangman as "likely to inspire a license of thought most dangerous to religion and civil order."

While Voltaire was chronicling the triumph of civilization in the France of Louis XIV and witnessed the rise of civilization in Russia, his France saw the building of a magnificent monument to civilization, a witness to the powers of collaboration among an enlightened people. The *Encyclopédie, ou Dictionnaire Raisonné des Sciences, des Arts et des Métiers*, edited by Voltaire's friends Denis Diderot, had begun as the ambitious commercial venture of the French bookseller-publisher Le Breton, who also owned the largest printing house in Paris. He planned to publish a French translation of the Scottish Ephraim Chamber's *Encyclopaedia*; or, *An Universal Dictionary of Arts and Sciences* which had appeared in 1728. But when he put his

project in the hands of d'Alembert and Diderot, it became a monument far overshadowing its model. The 28 volumes (17 of text, 11 of illustrations), covering all knowledge and the arts in around 8,000 articles and 3,000 plates, was the work of the leading French thinkers of the age. It included some of Voltaire's best essays and articles by Rousseau, Turgot, d'Holbach and Quesnay. It was both a compendium of the latest knowledge and a manifesto of the Enlightenment. Its comprehensive view of the world came to be called encyclopedism.

There were some 2,000 subscribers to the first volume. And the subscribers multiplied with each volume despite the increasing opposition of the authorities. Without doubt this was a dangerous—even explosive—book, for it urged readers to consult only reason and their own sense in place of the dictates of church and state. What it offered was not just a point of view, but the whole knowledge. Traditional learning was treated as prejudice or superstition. Here was the harvest of new science in an age of brilliant scientists—from the physics of Bernoulli to the natural history of Buffon and the sociology of Quesnay. Its articles challenged the ideas on which the tottering *ancien régime* relied. Diderot's article on political authority degraded the position of the king to one who ruled merely by the consent of the people. D'Holbach urged a constitutional monarchy. Rousseau expounded his subversive ideas of the general will. And articles on many subjects eroded the Bourbon and Catholic dogmas.

It was an omen of the Revolution to come. The King revoked the privilege of publishing the book in 1759. In that same year, the *Encyclopédie* was put on the index of Forbidden Books and all Catholics who owned the book faced excommunication. The great intellectual monument of the age stood overwhelmingly condemned by the age's highest authorities. But it attested the powers of "civilization" toward which Voltaire and other philosophers were collaborating. And the survival of the *Encyclopédie* attested the vitality of the Enlightenment.

Voltairism—the reach for knowledge and the shared experience of civilization—in the age of the French Revolution revealed the significance of what I would call *The Treasure of the Sierra Madre* syndrome. In that unforgettable tale by B. Traven, men meet by accident and join together in their search for gold. They take mortal risks for one another in their community of search. But when they find the gold, they are filled with suspicion and end up murdering each other—and losing their treasure in the process. The moment toward the Revolution in France also had drawn the distraught Parisians together in their search for justice. But having defined, dogmatized and fantasized their find, they destroyed themselves with the guillotine of reason.

Civilization, for Voltaire, is an achievement of all mankind, not just Europeans. In a cosmopolitan spirit remarkable for his time, disputing Biblical chronology, he begins his *Universal History* with geography and the different races of men, moving on to "the Usages and Sentiments Common to Almost All Ancient Peoples," and yields to the Chaldeans, Indians and Chinese as "the first nations to become civilized." With an eye alert for the piecemeal progress of civilization, he remarks that, even in the "uncivilized times" of 13th- and 14th-century Europe, "certain useful inventions were made, the fruit of the inventiveness which nature has given to men and which is quite independent of their scientific or philosophical knowledge." For the 15th

century his surprising examples are the inventions of spectacles to aid eyesight, windmills, glass windows and mirrors.

While Voltaire was appalled by the prevalence of fanaticism and superstition, still undaunted he has faith in the seeking spirit and "cannot but believe that reason and human industry will continue to make further progress." History, the great resource for the seeking spirit, provides "the comparison which a statesman or an ordinary citizen can make between the laws and customs of other countries and those of his own; this is what leads modern nations to emulate each other. The crimes and misfortunes of history cannot be too frequently pondered on, for whatever people say, it is possible to prevent both."

The age of European community-seeking, which extended from the English Civil War in the mid-17th century into the 19th century, was an age of declarations, constitutions and manifestos. It was an age, too, of enlightened monarchs consciously pursuing the interests and glory of their communities. Louis XIV was Voltaire's model, but other enlightened monarchs flourished among his contemporaries. Voltaire exchanged letters with Catherine II (the Great) of Russia, who was bringing her country into Europe, and he carried on a lively correspondence with Frederick the Great of Prussia, who was an admirer of Washington. Descartes too had been a missionary of civilization. He died in 1650 from pneumonia contracted during his frosty early-morning tutoring assignments with the young Queen Christina of Sweden, eager for enlightenment. Modern liberalism was the legacy of community seeking, and the United States of America was the first nation founded in organized community effort. Milton and Locke were the American's English progenitors, and Franklin and Jefferson in Paris would share their efforts in a transatlantic Republic of Letters.

Ways of Science and Destiny

In one of the least noted ironies, modern Western man's enlightened grasp of history—with his belief in progress, in the rise of civilization and in laws for all humanity—led to the abdication of men's sense of control over his own future and to the discovery of historic forces that mastered him. The result in this century was a new word with a new meaning—historicism, expressing a belief that historical change occurs according to fixed laws. According to this view, the course of history may be predicted but cannot be altered by human will. The social sciences have taken on the role of the ancient prophets, the role of prediction.

French philosophers, in the enlightenment tradition, had paved the way. Condorcet preached the gospel of progress, and Auguste Comte marked the stages. But before Karl Marx, these social science dogmas lacked the power to drive Western politics and society. Marx succeeded in giving the dogmas of social science the power of a religion. And the new social sciences made history their arsenal of prophecy. Just as Darwin discovered the law of evolution in organic nature, declared Friedrich Engels at the graveside of his hero, so Marx discovered the law of evolution in human history. But while Darwin shook the faith of the prevailing religion of Western Europe, Karl Marx went on to create a new religion of revolution. Marx's new

historicism charted the destiny of Western civilization in an ideology that revealed the shaping forces of which men were part. But he left little freedom for mankind to deflect the material forces. The movement for which Karl Marx supplied the sacred text would command a life-risking passion no less than the faith of the Christian saints and martyrs of the Middle Ages. "What the bourgeoisie... produces, above all," he prophesied in the *Communist Manifesto*, "are its own gravediggers. Its fall and the victory of the proletariat are equally inevitable." He concluded by appealing to the proletariat to fulfill his scientific prophecy: "Working men of all countries, unite!" This was an invitation to join the bandwagon of history. According to Marx, then, what defined destiny was not the will of individual men and women, but the forces of Marxian historical science. Association, which he founded, properly christened his monumental Das Kapital, with no intended irony, as "The Bible of the working class."

But even in the age of Darwin and Marx there was room for the imaginative seeker. A French philosopher, Henri Bergson, was the prophet and spokesman of the unpredictable, dynamic human spirit. He rejected mechanistic dogmas and the automatic forces of history and gave a new voice to man's independence. And so he gave refreshing new definition to time and evolution. Bergson first objected to what the machine had done to our concept of time. He found the meaning and essential character of life in the lived experience of time. This was his first argument against mechanistic and materialistic dogmas. The mechanistic view of time, he observed, was itself a by-product of technology: the idea of clock-time, the notion that time could be ticked off and measured in uniform fictional units (minutes, hours, days). On the contrary, Bergson observed, lived-time was duration, "the stuff" our physical life was made of.

"For our duration is not merely one instant replacing another; if it were, there would never be anything but the present—no prolonging of the past into the actual, no evolution, no concrete duration. Duration is the continuous progress of the past which gnaws into the future and swells as it advances. As the past grows without ceasing, so there is no limit to its preservation. Memory... is not a faculty of putting away recollections in a drawer... In reality, the past is reserved by itself, automatically. In its entirely, probably it follows us at every instant."

This elementary idea—the uniqueness of time in the lived experience—became the basis of Bergson's influential idea of memory and freedom. Change, then, was the core of experience, "For an ego which does not change does not endure..." And our enduring is what makes freedom possible. Our freedom is real, but indefinable "just because we are free." Which recalls American psychologist William James' observation that "My first act of free will shall be to believe in free will." Finally, Bergson concluded, "Consciousness is essentially free; it is freedom itself."

In his powerful book *Creative Evolution*, published in 1907, Bergson did not reject evolution as a historical fact, but added a vitalist element that made it more widely acceptable and consistent with the independent, innovative human spirit. The book detailed Bergson's dissatisfaction with the prevailing mechanistic and materialist views of evolution and outlined eloquently his own vitalist view. From the every beginning Bergson found the automatic processes of evolution unconvincing. Were not the earliest living things mere unicellular entities, well-

adapted to their environment? Why then did not evolution stop at that age, as pure mechanism must have suggested? But, instead, life continued to complicate itself "more and more dangerously." Did this not make plausible—or even necessary—some vital impulse—or explain the multiplication and elaboration of species?

Bergson's survey of the process and products of evolution brought additional clues of something more than mindless physical forces. So he rescued evolution from crass materialism. The process of natural selection operating on random variations, he argued, could not explain the evolution of a complex organ like the eye of vertebrates. Evolution supposes that at each stage of development all the parts of an animal and of its organs are varying contemporaneously, for they must function together to ensure the survival of the species. Bergson found it implausible to suppose that the co-adapted variations in the countless parts of the eye could have been random. What was maintaining the continuity of functions while the various forms were altering? Surely, he proposed, there must have been a vital impulse (*élan vital*) directing and channeling the growth of these complex parts and the organism as a whole. Certain obvious large features in the processes and products of evolution also led him in this direction. "Two points are equally striking in an organ like an eye: the complexity of its structure and the simplicity of its function... Just because the act is simple, the slightest negligence on the part of nature in the building of the infinitely complex machine would have made vision impossible." Did not this too suggest some channeling force at work, some vital impulse?

Bergson's eloquence and his flair for the unforgettable metaphor made him a literary prophet of the human element in experience. In the universal, everyday experience he found the vitality of lived-time, or duration. So in the very processes of evolution, which for many in his time had emptied history of meaning—substituting the "how" for the "why"—Bergson saw his vital impulse.

He had a talent, too, for finding new meaning in the latest science and technology. His concluding chapter in *Creative Evolution* was "The Cinematographical Mechanism of Thought and the Mechanistic Illusion." The word cinema had entered English only a decade before. And for Bergson, the metaphor of the cinema—a succession of changed images both the making of the "mechanistic illusion" and the need for the idea of living-duration. William James, captivated by Bergson's writings, called him "a magician" for having transformed the dry doctrines of biologists into the "persistent euphony... of a rich river." And Bergson's talent was recognized by the Nobel Prize for literature in 1928. Author of the phrase and the idea of "stream of consciousness," William James welcomed Bergson as an ally for free-flowing thought, and as a fellow-advocate of the "open society" to be enlivened by the works of poets, artists and mystics. Life could be known only by "bathing in the full stream of experience." Just as William James had transformed the pursuit of truth into stream of consciousness, so Bergson saw reality not as something static out there to be grasped, but as a stream on which we are floating, on which we must find our bearing and our direction.

What were the consequences of this impressive Western succession of Seekers for man's sense