



BRITANNICA
PERSPECTIVES

Britannica Perspectives

VOLUME

I



1768 1968

ENCYCLOPÆDIA BRITANNICA, INC.

William Benton, Publisher

CHICAGO · LONDON · TORONTO · GENEVA · SYDNEY · TOKYO · MANILA

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1968

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PRINTED IN THE U. S. A.

Library of Congress Catalog Card Number: 68-10064

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Britannica Perspectives



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Introduction

"THE WHEELS ON WHICH TRADITION MOVES . . ."

by Harry S. Ashmore, Editor, *Britannica Perspectives*

MY NOMINATION for the most compelling statistic compiled so far in this extravagantly charted age is the finding that 90 percent of all the scientists and engineers who ever lived are still alive and practising.

At a minimum this means that most of the goods and services that sustain and shape our civilization have been conceived or perfected by the contemporary generation. The material world is almost entirely new; the world that is emerging is bound to be newer still. And now it is suggested that the rate of technological change may be approaching the exponential, ushering in a permanent condition of newness, world without end.

This condition has been accompanied by a new form of cultural lag. The void between the most advanced and the most backward civilizations now appears to be no greater than the gap between the manifest requirements of the new technological dispensation and man's ability to keep his social and political institutions up to date. The usual, defensive reaction to this thesis is one of incredulity. There are not many, post-Hiroshima, who still equate change with progress, or progress with automatic beneficence. So most of us cling to the faith that there must be dominant spiritual values beyond the reach of material novelty, and turn for comfort to historical proofs of the constancy of human experience. Still, the signs and portents are hard to ignore. At the leading edge of technological thrust Western man in ordinary course gazes upon images sent through the air and sees his fellows walking in space; at the trailing edge an aborigine in the most remote bush looks upward to a sky laced with jet trails and hears the sonic boom that marks another barrier shattered by the grand inquisition of nature.

All can agree, at least, that by any measure of time or space the world has been shrunk, and is still shrinking. One result, not without irony, has been to bring an effective end not only to the traditional isolation of the noble savage but to that of the advanced thinker who pursues theory beyond the limits of the known. Now the hardware is next door to the blackboard, the scientist and the technologist have acknowledged their interdependence, and the gap between theory and practice steadily narrows. The world has come to academe, and old quarrels have been sharpened by new issues of ultimate responsibility.

Those on the outside sense, if they do not always understand, the tensions and uncertainties that have arisen among the learned. And this, perforce, becomes the practical business of the encyclopaedist, who locates his basic resources in the academic community, but finds his primary audience among the general public. At their most grandiose, encyclopaedias have described themselves as compendia of human knowledge, thus charging their editors with harvesting the total yield of contemporary scholarship and rendering it intelligible to laymen. The task could never have been described as modest. Now the question is whether it is possible.

* * *

Two hundred years ago the "brilliant and bibulous" free-lance scholar, William Smellie of Edinburgh, faced no less pressing, but inherently different problems as he set about compiling the three thick volumes that have provided the matrix of the present *Encyclopædia Britannica*. Smellie and his supporting Society of Gentlemen had no doubt that they could bring the sum of human knowledge within the compass of a set of books. But the brave theory was beset by grave practical difficulties, as the contemporary French encyclopaedist, Diderot, conceded when he noted that this knowledge was "scattered over the surface of the earth."

Diderot's colleague, D'Alembert, saw the monumental task as one of pulling together the bits and pieces in order to express "for each science and each art, liberal and mechanical, the general principles which are its basis, and the most essential details which are its body and substance." While the 18th-century encyclopaedists undoubtedly shared the prevailing view that the phenomena of the universe were infinite, it is evident that they also presumed that human knowledge about them was finite and therefore accessible. Thus the so-called modern encyclopaedias were founded on an essentially empirical organizing principle. Their editors assumed their ability to assemble and make intelligible all facts and theory about matters of import, and order their work so that truth would emerge and understanding flow.

The task was considered not unlike that confronting the famous lexicographers of the age, as Smellie recognized when he subtitled the first edition of *Britannica* "a Dictionary of Arts and Sciences." A man who was familiar with all the words in use in his time, and understood their definitions, would be master of his language. But even the richest vocabulary exhausts as it accretes, and so far none has yet exceeded the practical limits within which the empirical principle can produce an up-to-date collection of words and their meanings. The assumption that these conditions still apply to an encyclopaedia that now must look toward the 21st century has been challenged by the historian Arnold Toynbee. In a paper prepared for *Britannica's* Board of Editors, he wrote:

In our modern world our knowledge of the phenomena has been increasing at an accelerating pace. No doubt the sum of what we know is, and always will be, infinitesimal by comparison with the amount of what there is to be known; but the amount of what is now known has already become overwhelming if we think of it, in a practical way, as something that a single mind has to try to master within a single lifetime. This present situation forces the reader, and therefore the editor, to be deliberately selective in his approach to knowledge. Being selective means being systematic. My own guess would be that, whether or not an empirical (meaning an unsystematic) procedure for assembling information has been possible in the past, the Eleventh Edition of the *Encyclopædia Britannica* (1910) was probably the last in which it was practically possible for the Board of Editors to work on dictionary lines.

The sheer glut of knowledge, then, has made the modern encyclopaedist's task different in important respects from anything known to the pioneers of his art. For a century the proprietors of *Britannica* could indulge in a comfortable, episodic publishing cycle under which an editor considered his job done when he sent his work off to the printers, secure in the belief that it would require no further attention in his own time. But by 1875 the encyclopaedia was taking public notice of the ravages of change on its content; in the preface to the Ninth Edition, Thomas Spencer Baynes wrote with some asperity of physics and biology: "Much in what was written about each a generation ago is now of comparatively little value."

Baynes's comment is a not insignificant monument to the point in time when the theorists of the academy began to join forces with the tinkerers and mechanics whose hit-or-miss technology already had launched the Industrial Revolution. Thereafter many of the principles of which D'Alembert wrote would prove vulnerable, while the essential details he listed as the body and substance of the arts and sciences were reduced to a state of flux.

By the 1930s *Britannica's* editorial headquarters had moved from Edinburgh to London to New York to Chicago, a migration that not only followed an expanding market but reflected the increasing volume and changing locus of the resources of scholarship in the English-speaking world. In the process the Fourteenth became the last of the numbered editions. A permanent editorial staff was assembled and new printing methods were adapted to a process of continuous revision under which articles could be updated or replaced in each annual printing. Currently, as many as 6,000,000 and more words may be reset each year out of the total of more than 36,000,000.

The issue raised by Toynbee, however, goes beyond the practical questions posed by the deluge of new information. Keeping the facts reasonably up-to-date does not necessarily meet his challenge to the organizing principle upon which most encyclopaedias continue to base their editorial design. If the problem is only one of capacity to store and retrieve information and recorded theory mere humans are bound to yield sooner or later to the superior capacities of the computer. There are, indeed, already those who profess to hear in the

humming of the ubiquitous machines a requiem for the reference work as we have known it.

But the encyclopaedic tradition carries with it an ambition to educate as well as inform. Diderot charged his colleagues not only with locating and classifying the scattered knowledge of their time but with explaining "its general system to the men who will come after us in order that the labors of centuries past may not be useless for the centuries to come; that our descendants, by becoming better instructed, may as a consequence be more virtuous and happier; and that we may not die without having deserved well of the human race."

* * *

In one form or another this issue has been on the agenda of *Britannica's* Board of Editors for more than 20 years. In January of 1960 the chairman, Robert Maynard Hutchins, addressed a memorandum to his colleagues quoting the head of an Irish company who, upon hearing the results of the operations for the year, said, "This is all right in practice. But how will it work out in theory?" The question, the chairman suggested, applied not only to the highly successful *Britannica* but to encyclopaedias in general. If there is to be intellectual as well as practical justification for a contemporary encyclopaedia, he contended, it would have to be found in its educational function:

I think it will not be denied that the leading characteristic of our age is confusion. We cannot understand anything any more in terms of the principles, ideas or slogans on which we were brought up. Our situation has changed too fast for us. Meanwhile the institutions that ought to enlighten us have in the United States taken on so many other responsibilities that they have merely added to the confusion. The advance of vocationalization and specialization has cut off most of the light that might come from the educational system

I suggest that the object of *Britannica* should be to help its readers understand the world they live in and the one that is opening before them. I think this would mean that *Britannica* would set out to re-examine our ideas in the light of our situation. It would seek to advance the dialogue by getting the important issues clear.

The theory thus expounded is unexceptionable so long as it retains a high level of generality. It is not easy to demonstrate that intellectual chaos is not the mark of the age, and it is hardly seemly to deny that clarification of the basic issues is desirable. Translation of the theory into encyclopaedic practice, however, tends to unleash old academic controversies and foment new ones. These have been reflected in the deliberations of the Board of Editors and the array of scholars and experts brought in for consultation over the years.

In its special terms the issue is whether an encyclopaedia should be first intentional or second intentional—whether the encyclopaedist should consciously practise arts and make sciences, as does the artist, the explorer, the discoverer, the inventor, and the speculator; or whether he should confine himself to reflecting on the arts and sciences practised and made by others.

It is argued that modern encyclopaedias are by their nature second intentional, and even Hutchins, who contends that they do not have to be, concedes that this is so. The lack of philosophical unity and the absence of intellectual synthesis in the contemporary encyclopaedia correspond to the prevailing condition in the academic community, where for more than half a century scholarship has been primarily characterized by specialization, and knowledge has become increasingly compartmentalized. So long as an encyclopaedia is merely reflective these qualities of fragmentation necessarily will apply to any compendium of knowledge it may embrace.

In any case, the linkage between the encyclopaedia and the world of scholarship is close and inevitable. The University of Chicago philosopher Richard McKeon, in a paper prepared for his colleagues on the *Britannica* editorial board, traces the encyclopaedic concept to antiquity, with Aristotle enshrined as the patron saint. But McKeon makes a sharp distinction between what he calls *philosophic encyclopaedic speculation* and *scholarly encyclopaedia studies*.

The first he describes as dealing "with the problems of the principles, methods and branches of knowledge, those that bear on the moral, social, and political problems of men, and the products of the applied and fine arts, as well as those that treat the nature of things and men." This kind of speculation was the dominant characteristic of the encyclopaedic effort until the death of Aristotle in 322 B.C. Then came a marked shift to scholarship of the second order, employing the prior philosophical foundation as the basis for editing, indexing, and interpreting the first true books, for constructing chronological relations, and for organizing the materials of the astronomical, geographical, and medical sciences.

In his examination of subsequent intellectual history McKeon discerns an oscillation between these two concepts. He locates several periods of "encyclopaedic curiosity" preceding the age that produced the French *Encyclopédie* and the *Britannica*—the Hellenistic period of Alexandrian and Pergamene scholars; the 2nd century A.D. in the West; the Byzantine period in Eastern Europe; and the period of juridical scholars and "polyhistorians" which runs from the late Renaissance to the 18th century. Works of undoubted encyclopaedic character appeared well before Diderot, D'Alembert, and Smellie. Dr. Johnson said of Morhof's *Polyhistor, Literarius, Philosophicus, et Practicus*, first published at Lubeck in 1688: "Here is the book upon which all my fame was originally founded; when I read this book I could teach my tutors." Of this continuing process McKeon writes:

The problems of organizing knowledge in philosophic systems, in scholarly compendia, and in encyclopaedias are totally different, yet encyclopaedias depend on and reflect prior philosophic speculation and scholarly analysis. The history of encyclopaedias suggests,

moreover, that these processes follow a time sequence; that the work of scholars is based on assumptions that are philosophic in character, but that they are assumptions drawn from the philosophies of a prior age; that philosophers tend to seek their objectives by other means than universal coverage in periods in which scholars are encyclopaedic; that encyclopaedias present knowledge in a form accessible to the ordinary man on the basis of prior scholarly and scientific work; and finally that philosophers, scholars and scientists do not tend to be encyclopaedic in speculation, analysis, and inquiry in ages in which encyclopaedias flourish.

* * *

It is inevitable that encyclopaedias should take on the intellectual coloration of their time, although their ponderous efforts at balance and comprehensiveness may tend to delay and dull the impact of new ideas. D'Alembert and Diderot were counted among the *philosophes* who fashioned an age of revolution out of the Enlightenment. Quite consciously they addressed themselves to Newtonian science, deism, and the new political humanism in an effort to free men from what they considered to be the tyranny and theological superstition of the old world of kings, landlords, and clerics. Across the channel, *Britannica's* second editor, James Tytler, was banished from Scotland by the High Court of Justiciary when he urged his fellow citizens to address the throne directly in their effort to obtain more equal representation in Parliament.

But if encyclopaedias have sometimes served as the cutting edge of new thought, they have never yet relinquished their function as repository of ancient wisdom. "Encyclopaedias in the past have been the intellectual instruments by which the process of tradition, passing on, has been maintained," writes the philosopher Scott Buchanan. "Encyclopaedias are the wheels on which tradition moves."

In support of McKeon's cyclical theory the Canadian scholar, George P. Grant of McMaster University, contends that the philosophical ferment of the 18th century was succeeded by a leveling and consolidation of scholarly endeavour in the century that followed. In a memorandum to the Board of Editors he argued that the present style and character of *Britannica* were fixed in the late 19th and early 20th centuries, when it is generally considered to have reached the apex of its scholarly reputation:

The great Ninth (1875) and Eleventh (1910) editions of the *Encyclopædia Britannica* were a product of the flowering of scholarship which took place in Nineteenth Century Europe, particularly in England and Germany. The encyclopaedia reflected that scholarship both in its greatness and in its limitations. To the scholars of that era, "scientific" knowledge was the final court of appeal and there was nothing beyond it. Most of them so confidently assumed that their liberal faith gave meaning to the world that they did not even consider that above scholarship lies thought, and that scholarship, like money, must serve purposes beyond itself. They saw little need, therefore, to unify or give meaning to the knowledge they presented to the world. It is this assumed objectivity which distinguishes the Nineteenth Century *Britannica* from Diderot's *Encyclopédie* . . .

In the Nineteenth Century the assumptions [of the revolutionary encyclopaedists] are no longer fighting for acceptance but have become the established tradition. The result is that the encyclopaedia is a powerful summation of the scholarship of its day, written within the modern assumption of the primacy of scientific and scholarly knowledge without any discussion of that assumption.

The assumption of scholarship's being the ultimate criterion is also clear in the "ideal man" to whom the encyclopaedia was addressed . . . This followed from the progressivist faith that all that good men needed were the facts. With this faith in the facts (conceived in a simple positivist way) went also the belief that a properly educated man could keep up with the expanding sciences . . .

Here two of the familiar epithets of contemporary academic controversy appear—"progressivist" and "positivist." As a philosopher, Grant is constrained to protest the notion that an assemblage of facts can produce understanding without philosophic insight. In one sense this reflects the humanist-scientific cleavage memorialized by C. P. Snow's *Two Cultures*, but it cuts somewhat deeper than the interdisciplinary quarrels that agitate the universities. An encyclopaedia fashioned in the current mode is necessarily subject to challenge by the classic philosopher who, in Scott Buchanan's description, considers it his duty "to see what has been created as a whole, or if it turns out to be only a part, to find the whole to which it belongs."

* * *

With considerable eloquence Buchanan has insisted that the contemporary encyclopaedist has no choice but to seek a new (or perhaps a very old) and radical approach to the problems posed by a scientific/technological revolution of a force comparable to the great political dislocations of the 17th and 18th centuries. The encyclopaedist, he contends, cannot deal intelligibly with contemporary phenomena without reference to what a philosopher would call concepts and principles.

To that end, Buchanan contends, the encyclopaedist must search out an adequate leading idea, a single theme that will be high and comprehensive enough to draw out and make explicit the essential and genuine themes of all the systems, arts, and sciences that labour and clash in what he sees as "our inchoate pluralistic culture." Conceding that such an enterprise is bold and risky, he argues that men have undertaken it in the past and that their successes have marked the enduring progress of civilization:

The ancient world until the Thirteenth Century seems to have been dominated by the idea of God. For most of this time it was not a dogma, but rather a question, effectively demanding exploration. Even when it was a dogma it was not an answer, but rather a mystery focussing thought . . . Its effect was to stretch and expand human intellectual powers, to and beyond their natural limits, as in the *Summas* of the Thirteenth Century. There were times when the idea was divisive and explosive in a culture, as there were times when it was integrative and oppressive. One can say that it never was exhausted, as it is

not now. It has never been a simple, easily grasped and mastered idea. Taken on a certain level it served as an encyclopaedic theme, and it was often so used.

From the Renaissance through the first half of the 20th century, Buchanan holds, the idea of man came to play a role similar to that assumed earlier by the idea of God. It was not that God was presumed dead, but rather that His reflected image in mortals became the basis of the compelling new concept of the Dignity of Man. Knowing oneself was seen as the method of knowing in general. "God was still the light," Buchanan writes, "but the object illumined was man, and man was the proper study of man." He continues:

As both of these ideas were accepted by thought, and thought in turn was overwhelmed by them, so now in the Twentieth Century there begins to appear another idea to inherit their roles, the idea of the world. It is not, of course, that the world did not exist or was not thought of before; many cultures have come to terms with it, perhaps the Roman stoics most reasonably. But in the Twentieth Century the idea of the world has been moving in on us inexorably and incredibly. Dostoevski in 1880 has Ivan say to Alyosha: "Yet would you believe it, in the final result, I don't accept this world of God's, and, although I know it exists, I don't accept it at all. It's not that I don't accept God, you must understand, it's the world created by Him I don't and can't accept."

It could be that Dostoevski discerned the theme for the Twentieth Century and that all of us suffer, each in his own way, from Ivan's complaint. We know that the world exists, but we do not and cannot accept it in this and that part; in consequence we banish it in part or as a whole from our minds. We live in the tension of the new dominant idea with which we have not come to terms. We may postpone, but we shall not escape, the attempt to do so.

* * *

This is a powerful charge and, as Buchanan no doubt intended, it has produced shock waves in the intellectual community, including the small enclave that is the Board of Editors of *Britannica*. Some have expressed despair at the magnitude of the proposed task, and others have rejected the concept as foreign to the true encyclopaedic tradition. The latter view found a leading spokesman in Jacques Barzun of Columbia University. In a memorandum to the Board he writes:

Understanding requires a prehensile mind, and, as Dr. Johnson said, no man can be required to furnish another with an understanding. Only the means can be proffered; the beneficiary must seize and use them. Now, in an encyclopaedia the means is information; the initial stage of understanding is for the user to understand the subject of inquiry.

In short, an encyclopaedia is first and foremost a work of reference. Its chief use is bound to be as a set of answers to questions about matters of history or scientific fact . . . presented in the briefest form compatible with clarity.

No surer way could be found to render the work at once tedious and suspect than to obtrude a didactic intention beyond that of supplying answers to questions of fact and meaning. Indeed, one could go further and state as a general proposition that the task is . . . to employ as writers men who understand their subject and also the world in which the subject grows. Such writers, like good teachers, will spontaneously expound and explain with full consciousness of the natural environment of their thought. The resulting

article will then form one intelligible piece of the reality which the whole set of books aims at reproducing.

Barzun concedes that his formula imposes narrow limits upon the encyclopaedist, and poses particular difficulties in handling issues and ideas. But these restrictions, he contends, are essential to guard against the deadly sin of artificially injecting "significance," "perspective," and "insight." He comes down, finally, in opposition to any effort at synthesis that would take the existing encyclopaedia very far beyond its present fragmented format.

George Grant, in rebuttal, charges that Barzun is simply defending 19th-century scholarship and an idea of objectivity long since proved inadequate:

What is implied by saying that significance is artificial is that it is external to the factual content and not intrinsic to it. What is implied by "obtruding a didactic intention" is that any attempt to make scholarship meaningful by philosophic thought is always suspect as being a kind of propaganda put over by somebody with an axe to grind. But this is true only if there is no such thing as philosophical synthesis. It is, of course, true that philosophy has been and can be perverted by being used for propagandistic purposes, and that artificial injections of significance (external to the information) would do appalling harm to any decent and fair-minded encyclopaedia. As a *reductio ad absurdum* of both these processes we have before us certain parts of the Soviet encyclopaedia . . .

But the problem remains whether the Western world can be content with facing ideologies by excluding questions of meaning, and whether it should do this in so central a document of its intellectual tradition as the *Encyclopædia Britannica* . . . The Board of Editors in deciding for or against Mr. Barzun's vision are deciding not only about their particular problem but about issues of magnitude concerning the present intellectual state of the Western world.

* * *

At least one member of the editorial board endorsed the thesis that the encyclopaedia had inherited heavy obligations to the culture that gave it birth. Stanley Morison, the English typographer and antiquarian, urged that *Britannica* not only should expose what he regards as the moral and intellectual depredations of Marxist theory and practice but should seek to confront the Eastern heretics with an academic company faithful to the West:

The Russian-Chinese axis, even when subject to internal strain, amounts to much more than a challenge to the West. It is an accusation and a defiance that cannot possibly be rebutted by casual and evasive references to "our way of life." . . . The social claim is made that justice is in favor of the accusation and that time is in favor of the defiance. The intellectual claim is made that the Western philosophy is decadent and impotent. Small wonder, therefore, that the class known as "intellectuals" in many Western academies comprises many who are susceptible to these formidable claims, and the diplomatic successes of those who make them.

The *Encyclopædia Britannica* is better fitted than any other agency in the English-speaking world to attempt the expository and educational task that now confronts the West: to render as many as can be reached of those literate in our language intellectually and philosophically equal to the crucial ideological struggle that must inevitably be their portion for at least the next half-century. All the relevant philosophical articles in the *Bri-*

tannica should be edited in the context of the present illimitable drift of the power-political, the industrial, and the intellectual—which is rendered not merely inimical but dynamic by the philosophical doctrine of Marx and Engels.

There is overmuch shyness, timidity and reluctance on the part of the West to commit itself to more than a minimum of faith, belief or conviction. The breakdown of institutional Christianity is one cause, and an undue separation of philosophy and science is the result.

Morison's spirited manifesto doubtless stirred some blood and generated some sympathy, but it did not carry the day. One reason may have been that the Board had before it a historian's warning of the practical consequences of being led into this sort of temptation. Here is Arnold Toynbee's pointed advisory:

Let us imagine that the first edition has been published one hundred years earlier than it was. A board of editors in England in 1668 might well have built the original *Encyclopædia Britannica* round the concept of the rightness of the contemporary episcopalian establishment as opposed to the wrongness of Roman Catholicism and non-episcopalian Protestantism. In the Western world three centuries ago religious controversy loomed as large, and aroused as violent feelings, as ideological controversy does today; so in 1668 there would have been a strong temptation to give the encyclopaedia the form of a polemical work of episcopalian Protestant apologetics. By that date, the then current religious controversies had been obsessing Western minds for nearly a century and a half. Yet an encyclopaedia based on religious propaganda and published in 1668 would have been obsolete, and indeed almost unintelligible, within the next twenty-five years.

Before the end of the Seventeenth Century the long-sustained Western interest in religious controversy suddenly slumped . . . I should be surprised if the fate of our present-day ideological controversies was not the same. Within the next twenty-five years they may already have come to seem irrelevant and boring. Present passion is no guarantee of future durability.

The Morison proposal is significant as one pole in the range of issues that confront the contemporary encyclopaedist. It also is symptomatic of the impossibility of containing editorial policy within the safe and sanitary limits of conventional scholarship. In 1875 Thomas Baynes, noting that "the air is full of novel and extreme opinions, arising often from a hasty or one-sided interpretation of the newer aspects and results of modern inquiry," firmly declared his Ninth Edition above the battle: "It cannot be an organ of any sect or party in Science, Religion or Philosophy." Before all the volumes were off the press the *Britannica* and its principal contributor of articles on religion, William Robertson Smith, were embroiled with the Free Church of Scotland in a heresy trial that raged for more than two years.

If it were possible to draw a philosophical curve linking the positions of Buchanan, Toynbee, Barzun, Grant, and Morison, it would provide a graphic image of the convolutions of the continuing controversy within the Western academies. The editor can, with Baynes, hope to avoid partisanship, but he is not likely to escape involvement.

No matter how diverting he may find this philosophical toboggan run, the encyclopaedist is constantly beset by reminders that he is at least part journalist, with a book to get out, and printers' deadlines to meet. The Board's vice-chairman, Sir Geoffrey Crowther, himself a former editor of *The Economist*, never let go of the point that any significant departure from the empirical organizing principle would require reconsideration of what he called the "grand architecture" of *Britannica's* system of classification—a design, as in most encyclopaedias, that employs alphabetical arrangement as the primary means of reference.

There was, moreover, a special time factor. The first published material included in *Britannica* came off the press in Edinburgh in 1768, and it had been decided that the two-hundredth anniversary of the set should be marked by some significant new encyclopaedic publication. These volumes of *Britannica Perspectives* grew out of the coincidence of this memorial need and the Board's ongoing discussion of new editorial techniques.

Preliminary work had been undertaken on an experimental set of lengthy articles dealing with the "orders" of contemporary society, as opposed to the academic disciplines which generally provide the structure of even the most ambitious of the encyclopaedia's leading articles. The intent was to treat scientific, social, political, educational, economic, and cultural institutions and processes as they affect the daily lives of ordinary men everywhere, rather than in terms of the organizing principles employed by natural scientists, sociologists, political scientists, pedagogues, economists, and artists.

Sir Geoffrey, noting that these works would be likely to run to book length and would be undertaken at a level of generality well above that of any articles presently in the set, employed his architectural analogy to suggest that they might be termed "roof articles." The name caught on and became a part of the intramural parlance generated by the project during the more than five years required for its execution. Mortimer Adler, the philosopher who edited the *Syntopicon*, was the first to see the possibility of bringing these articles together for separate publication in time for distribution with *Britannica* in the anniversary year 1968.

Late in 1962 the project was laid out in an editorial design that identified fifteen "orders," and a brief prospectus was drafted as a guide to authors. The roof analogy provided a description of the proposed articles as "standing at the top of the encyclopaedic structure, with a spread great enough to cover the range of interrelated ideas walled apart by the requirements, or at least the practices, of the academic disciplines." The prospectus continued:

Fundamental to the notion of the roof article is the understanding that the world always has been characterized by dominant issues—great unresolved conflicts that are related to, but go far beyond, the level of academic dispute, professional quarrel, political ar-

gument, or international violence. Such issues ignore academic departmentalization, cross religious, economic and political demarcations, and jump over national boundaries.

For the purposes of the roof articles, this level is perhaps best expressed in the notion of an "order." Man's understanding of his world is organized—"ordered"—on the basis of discernible patterns. At a simple level, the organization of a college catalogue represents an ordering in that it permits knowledge to be dispensed in small packages made up on the basis of subject matter (English literature) or activities (accounting). The order with which a roof article is concerned may include, but certainly goes well beyond, such outlines. Its subject matter is man in his world, not academic man in an academic world . . .

In effect, the series was conceived as 15 different ways of looking at, and organizing intelligence about, the world as a whole; the lens would change but not the object of the view. A degree of repetition and overlap had to be assumed, since issues of enduring human concern can only be understood when their interconnections and interactions have been seen and understood. Indeed, a primary justification of the new approach was that it would make possible consideration of emerging patterns of relationship well before they could be accommodated by the compartmentalized structures, and vested interests, of the academic community (and, therefore, of the conventional encyclopaedia).

The soaring idea of the world, as set forth by Scott Buchanan, was neither prescribed nor proscribed. The spirit of the roof article proposal, and the dominant hypotheses with which it would of necessity deal, required that the approach be to some degree prospective; one test of the issues to which the authors were urged to address themselves was that they should be enduring, and such an appraisal requires some projection into the future. Prediction, in the usual sense, was not expected, but it was noted that a successful article would indicate tendencies and directions for the remaining third of the century—those primary trends William Gorman has characterized as "vectors of attention." The limitations, and the hazards, of such an undertaking were clearly recognized:

Since the roof articles are to be concerned with the major issues involved in an understanding of the existing and emerging worlds, they cannot provide "answers." By definition, the issues on which the articles will focus must be living, and hence unresolved. Further, since the issues to be considered are presumed to be of the highest importance, related to fundamental concerns of life and death and the quality of both, they must be controversial. The authors will have "positions." Inevitably, and properly, they will write from these positions and their qualifications as authors will lend weight to them. At the same time, however, since the issues are still open, the roof articles must give consideration to all responsible positions. These articles must be dialectical. Authors may be encouraged to develop their own theses, but not at the expense of ignoring all others.

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The fifteen articles originally projected for these three volumes of *Perspectives* came down to thirteen as the editors wrestled with the problems of grouping subject matter in unconventional fashion and locating qualified authors