In the years just behind us, the word that received the most attention in discourses on education was *relevance*. Every education writer, it seemed, was expected to work it over, and I joined in the fun myself in two books I wrote.

The prevailing opinion in those years was that educational relevance meant "that which has a bearing on a student's life in some direct and urgent way." It followed from this that any topic that was relevant would engage the student's whole-hearted attention, and by that sole virtue was deserving of inclusion in the school curriculum. The opposite, by the way, was also held to be true—that which did not have a direct and urgent bearing on a student's life was considered mere pedantry and a waste of valuable time. The question of what "having a bearing" meant wasn't gone into, at least not deeply. History, for instance, was usually found not to qualify as relevant. It was assumed that since we lived in revolutionary conditions, the experience of the past could not have a bearing, and this was an assumption students daily amplified by displaying a measure of disdain toward events that had not occurred, let's say, during the lifetime of the Beatles. Many of them, I imagine, still feel this way. But history was not the only subject to take a beating at the hands of relevance back in the late 1960s and early 1970s, especially in high schools and colleges. Science, music, art, foreign languages, and literature came under the closest scrutiny by being put to the "direct and urgent" test.

In every subject where it was possible, that which was most contemporary, most familiar, and most controversial was brought to the forefront. Relevance meant "now," just like television. From our present vantage point, it's easy to ridicule this conception of relevance, especially for its crudeness and superficiality; but I do think that in the circumstances that produced it, it was not entirely unjustified. In many schools, traditional subjects have been taught in such an uninspired and meaningless way that almost anything is preferable to their deadening influence. And it is certainly true that a student can sometimes be led to a disciplined study of an enduring subject through the stimulus provided by an interest of the moment. Then, too, we mustn't forget that during most of these years there was a war in progress; people were being killed for reasons that were any-
thing but clear. The times were nervous and tormenting, and there arose a passionate and honest doubting of the value of traditional academics amidst all the confusion and carnage.

Now the times are not so nervous and still less tormenting, so we may be permitted to reconsider the question of what relevance means, or what has a bearing on a student’s life. In other words: Where do we go from here? I intend to give some answers to that question, but I must first put before you two ideas.

A Theory of Education

The first is a theory of education, and it is the foundation on which my proposals will rest. It goes like this. What has the most relevance to students is that which their culture least provides them. This is what Cicero meant when he said that the purpose of education is to free a student from the tyranny of the present. It’s also what André Gide meant when he said the best education is that which goes counter to you.

I call this the thermostatic view of education; that is, education must try to cool down the culture when it’s too hot, or heat up the culture when it’s too cool. You could also call this the ecological view of education, which is to say that education should try to keep things in balance. In this way, there is a continuous argument or dialogue sustained between competing points of view—that is, between the teachings of the culture and the teachings of the school.

To leave students entirely to the influences of the dominating biases of their culture is to guarantee them a one-dimensional education and a half-developed personality. What is relevant, therefore, is what the culture is insisting is irrelevant. That’s the first idea.

The second is not so much an idea, but an analysis of the culture’s teachings. The major cultural teachings are being done by and through the electronic media of communication. The media teaches many things, but I should like to concentrate on four characteristics of the media, all of which are in special need of opposition in the schools.

The first characteristic is that the media, most especially television, are image-centered; that is, they are nonlinguistic symbolic forms. Television consists of fast-moving, continuously changing, analogic visual symbols that compress time to an extraordinary degree. On commercials, for instance, the average length of a shot is one and a half seconds. In the United States, a child from the age of five to 18 will see 675,000 TV commercials at the rate of 1,000 a week. So in television, and I should add movies, we have media whose mode of expression is entirely antithetical to the structure of either the spoken or written word.

Language is by its nature slow-moving, hierarchical, logical, and continuous. Whether you’re writing or speaking, or listening or reading, you must maintain a fixed point of view and continuity of content. You must move to higher or lower levels of abstraction. You must follow to a greater or lesser degree rules of syntax and logic. But this is not so in experiencing television, or movies, or photographs of any kind. Words and pictures are processed by the brain differently and require entirely different responses. Moreover, the two electronic media most suited to the transmission of human speech—the radio and phonograph—have been given over almost entirely to the transmission of music, that is, a nonlinguistic form of communication.

So the first characteristic of electronic media is that they encode their messages in imagery that is fast-moving, concrete, discontinuous, and alogical, requiring emotional response not conceptual processing.

Their second characteristic is related to this. Most of the media are nonpropositional. Unlike language, television, movies, or music, they do not make assertions about the world. They are presentations of experience, not commentary about experience. Therefore they are irrefutable. You can dislike TV programs, but you cannot disagree with them. In this sense the media are nonanalytical experiences.

The third characteristic of the media is that they are always in the present tense. With movies, and even more so with television, we are always at the center of the action. The electronic media are largely incapable of communicating a sense of the past or of the future. They stress immediacy and instancy. Whatever is presented on television, for example, always appears as if it is happening now. The past and the future are concepts made possible only through language.
The media, of course, are also nonhierarchical. Information is moved to everyone in the culture simultaneously, regardless of age, sex, education, or whatever. There are no prerequisites for watching television. The same is true of access to radio, film, and recordings. The media, therefore, undermine all rational concepts of authority and role differentiation.

Finally, I want to note the fragmented, disconnected character of the media. Nothing on television, for instance, has anything to do with anything else on television. There's no theme, coherence, or order to what is presented.

So, as I view it, the teachings of the media are hostile to language and language development, hostile to vigorous intellectual activity, hostile to both science and history, hostile to social order, and hostile in a general way to conceptualization. The teachings of the media stress instancy, not constancy; discontinuity, not coherence; immediate, not deferred gratification; and emotional, not analytical response. The thermostatic function of education would suggest, that the schooling of our youth at all levels must provide the opposite of, or at least an alternative to, these biases. If the schools do not do it, there is no institution in the culture that will.

Coherent Curriculum Needed

From this perspective, perhaps the most important contribution we can make to the education of our youth is to provide them with a sense of coherence in their studies. At present, the typical high school or college curriculum reflects the fragmentation one finds in television's weekly schedule. Each subject, like each program, has nothing to do with any other. We must say this for television; however, it offers what it does in the hope of winning the student's attention. Its major theme is the psychological gratification of the viewer. Schools, on the other hand, offer what they do either because they have always done so, or because the colleges or professional schools require it. There is no longer any principle that unifies the school program and furnishes it with meaning, unless it is simply that education is to provide jobs, which is hardly a moral or intellectual theme.

While one obviously treads on shaky ground in suggesting a plausible theme, with all due apprehension I would propose as a possibility the theme that animates Jacob Bronowski's *The Ascent of Man*. This book and its philosophy are filled with optimism and suffused with the transcendent belief that humanity's destiny is the discovery of knowledge. Moreover, although Bronowski's emphasis is on science, he finds ample warrant to include the arts and humanities as part of the quest to gain an understanding of nature and of our place in it. Thus, to chart the ascent of humanity, we would join art and science, but we would also join the past and present, for the ascent of humanity is above all a continuous story.

"The Ascent of Humanity" as Curriculum

The virtues of adopting the ascent of humanity as a scaffolding on which to build a school curriculum are many and various. For one thing, it does not require that we invent new subjects or discard old ones. The structure of the curriculum that presently exists in most schools is entirely usable. For another, it provides students with a point of view from which to understand the meaning of subjects. For each subject can be seen as a battleground of sorts, an area in which a fierce intellectual struggle has taken place and continues to take place. Each idea within a subject marks the place where someone fell and where someone rose. From this point of view, the curriculum may be seen as a celebration of human intelligence and creativity, not a meaningless collection of academic requirements.

But best of all, the theme of the ascent of humanity provides us with a nontechnical, noncommercial definition of education. It is a definition drawn from an honorable humanistic tradition, and it reflects a concept of the purposes of academic life that goes counter to the biases of the media. I am referring to the idea that to become educated means to become aware of the origins and growth of knowledge and knowledge systems; to be familiar with the intellectual and creative processes by which the best that has been thought and said has been produced; and to learn how to participate, even if as a listener, in what Robert Maynard Hutchins once called The Great Conversation.

You'll note that such a definition of education is not student-centered; it is not training-centered; it is not skill-centered; it is not even problem-centered. It is idea-centered and coherence-centered. It is also other-worldly, in the sense that it does not assume that what one learns in school must be directly and urgently related to a problem of today. In other words, this is a definition of education that stresses history, the scientific mode of thinking, the disciplined use of language, a wide-ranging knowledge of the arts and religion, and the continuity of human enterprise.

To give this conception of education somewhat more specificity, let me mention briefly five areas of inquiry on which a curriculum centered on the ascent of humanity would build.

1. *History*. History is not merely one subject among many that may be taught in school. Every
subject has a history. To teach what we know today without also teaching what we once knew, or thought we knew, is to reduce knowledge to a mere consumer product. I would recommend, therefore, that every subject be taught as history. In this way our students can begin to understand, as they presently do not, that knowledge is not a fixed thing but a stage in human development, with a past and a future.

If every subject were taught with a historical dimension, the history teacher would be free to teach what histories are, which is to say, theories about why change occurs. The task of the history teacher, then, would be to become a histories teacher, to show how histories are themselves theories, and how and why they differ. To teach the past simply as a chronicle of indisputable, fragmented, concrete events is to replicate the biases of the media that largely deny our youth access to concepts and theories, and provide them only with a stream of meaningless events. In other words, the idea is to raise the level of abstraction at which "history" is taught. This would apply to all subjects, including science.

2. Science. Just as every science course should include a serious historical dimension, I would propose that every school offer and require courses in the philosophy of science. Such courses should include a consideration of the language of science, the nature of scientific proof, the sources of scientific hypotheses, the role of imagination, the conditions of experimentation, and especially the value of error and disproof. Such courses would get at the notion that science is not pharmacy, technology, or magic tricks, but a special way of employing human intelligence. It is important that students learn one does not become scientific by donning a white coat, which is what television teaches, but by practicing a set of canons of thought, many of which have to do with the disciplined use of language.

3. Language. I should like to propose that every school offer a course in semantics—that is, in the processes by which people make meaning. It would be extremely useful to the growth of our youth's intelligence if special courses were available in which fundamental principles of language were identified and explained. Such courses would deal not only with the various uses of language, but with the relationship between things and words, symbols and signs, factual statements and judgments, and even grammar and thought. These courses should also emphasize the kinds of semantic errors that are common to all of us and which are avoidable through awareness and discipline.

4. The Arts. In using the ascent of humanity as a theme, we would of necessity elevate such subjects as literature, music, and art to prominence. The most obvious reason is their subject matter contains the best evidence we have of the unity and continuity of human experience and feeling. And that is why I would propose that in the teaching of the humanities, we should emphasize the enduring creations of the past. Because of the nature of the communications industry, our students have continuous access to the popular arts of their own times. Their knowledge of the form and content of this art is by no means satisfactory, but their ignorance of the form and content of the art of the past is cavernous.

School must make available the products of classical art forms, precisely because they are not so available, and because they demand a different order of sensibility and response.

5. Religion. Finally, I want to propose that high school and college curriculums include a course or courses in comparative religion. Such courses would deal with religion as an expression of humanity's creativeness, as a total integrated response to fundamental questions about the meaning of existence. The courses would be descriptive, promoting no particular religion, but illuminating the metaphors, the literature, the art, the ritual of religious expression itself. I'm not unaware of the difficulties such courses would face. But I do not see how we can claim to be educating our youth if we do not ask them to consider how different people, of different times and places, have tried to achieve a sense of transcendence.

A Conservative Education

To summarize, I am proposing a curriculum in which all subjects are presented as a stage in humanity's historical development, in which the philosophy of science, of history, of language, and of religion are taught, and in which there is strong emphasis on classical forms of artistic expression. Such an education might be considered conservative. But I believe it is justified by the fact that we are surrounded by a culture that is volatile, experimental, and very nearly monolithic in its technological biases. Without the schools to teach the values and intellectual predispositions that our media ignore, and even despise, our students will be disarmed and their future exceedingly bleak.