This paper has been written in an endeavour to deal with one of the central concerns in programs of liberal and general education, namely, the problem of encouraging in our students the capacity to think clearly. I have tried to indicate the narrowness of the educational notion that adeptness at exercising the canons of formal logic, by applying them to disembodied fragments of lengthy dialogue discussion and argument, is the only essential for straight thinking. There are many other skills required for the free play of mind in real-life contexts. Only two of these other skills which are fairly central to the task of intellectual exploration and effective or straight thinking, should be emphasized here. One of these two skills is the capacity to use definition so as to demarcate the bounds of discussion, stick to the point, and make those essential discriminations in the process of intellectual exploration which can cause the mind to come to rest and can lead debate and intellectual exploration and exchange to consensus and agreement. The second skill is the capacity to develop dialectical or discursive consciousness. This is essentially the skill of intellectual organization, involving the ability to lay bare the presuppositions of intellectual conflict, the establishment of the legitimacy of the methods proposed for dealing with resolvable problems, the capacity to judge the relevance of facts to given issues and the ability to discriminate the relevant from the irrelevant facts, themselves. In addition, dialectic is the basic skill required in dealing with the conflicts among values, for dealing with the problems of special pleading and the implicit values such pleading represents, and for critically examining what people mean by the good life.

Socrates was probably on solid ground when he declared that the unexamined life is not worth living. Dialectic is, perhaps, the major skill in making that examination. It is also a major requirement for some of the traditional tasks of philosophy—apart from the skills required for linguistic analysis—and of what today is called metatheory. The development of the preceding
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skills, then, is essential to what we mean by straight thinking. That development has not as yet been made as central as it should be in a philosophy of education. If a restatement of programs of liberal and general education can be undertaken, in which these skills are regarded as the necessary complement to achieving the formal rectitude of logic in discussion—and, above all, if they are also actually exercised in the classroom by teachers—then one of the tasks essential to the encouragement of straight thinking in education will have been fulfilled.

But most important of all is the fact that a sophisticated and penetrating use of dialectical consciousness is one of the highest forms of intellectual, creative activity. Any doubts on this score can be quickly dispelled, I believe, by a sympathetic reading of Plato's *Republic* or the *Dialogues*. The element of intellectual creativity lies in the fact that dialectical consciousness imposes form and structure upon thinking and communication. It also imposes organization and relevancy as well as economy and depth. It enables a protagonist to develop highly individualized but authentic intellectual approaches for bringing into focus the nature and the assumptions underlying the most complex social and moral issues faced by men. In this way it makes it easier for a listener to perceive what are the essentials of an intellectual or social conflict and, in so doing, makes the issues involved come fully alive. The scope provided by dialectic for all forms of clarification of a normative nature or for all issues involving social and personal values, which entail the need to achieve consensus in a public philosophy, is almost unlimited. It is precisely for this reason that dialectic can be regarded as an avenue for the full exercise of intellectual creativity.

The assertion that students are to “be taught to think” has been a hackneyed objective of liberal arts programs for centuries and of general education for just a few decades. It is inconceivable that any educator would have any quarrel with this objective, which is usually undertaken by the introduction of a routine course in elementary formal logic required of all students. The emphasis is laid on acquainting students with *valid thinking* in the abstract and the formal sense of syllogistic reasoning and its various modes. In addition, the student is usually expected to learn the distinction between material truth and formal validity, the various grammatical transformations to which the syllogism is subject, and the relationships which obtain among various pairs of propositions as indicated in the Aristotelian Diagram Of Opposition. To-
wards the end of such a course the famous logical paradoxes may be discussed
as a sort of intellectual dessert.

Straight thinking, however, involves a great deal more than formal logic. For one thing it involves the capacity to avoid the various pitfalls that general
semanticists write about. For another, it involves a sense of the rational that
is much wider than logical structure—a sense of rationality which includes an
awareness of normative difficulties and moral complexities—and this involves
a sphere of intellectual activity with which Churchman has recently dealt
very succinctly. Above all, it involves what the early Greeks, particularly
Socrates, Plato, and Aristotle, realized was so important in human com-
munication with any philosophical depth, that is, communication preoccupied
with questions of social value, personal morality, and the establishment of a
public philosophy. To this type of communication the Greeks gave the name
"Dialectic."

In all human effort to think about a complex problem which has both
range and depth, a type of skill is generally required which can be properly
christened "dialectical consciousness" or "discursive consciousness." It is, in a
general way, the capacity to structure a discussion, both in the large and in the
small. It is a skill which enables an intelligent communicant to be humble in
the face of a highly intelligent and relevant argument—one that has marshalled
efficient enough factual considerations to satisfy the down-to-earth orientation of the
hearer and that yet brings into central focus the weight, force, and direction
of the argument or discussion itself. This kind of thing is well illustrated in
the form, the structure, and the quality of the total argument in Plato's Republic,
an example that is almost universally familiar to educated people. It is im-
portant to recognize that in this sense dialectic is a form of intellectual creative
activity.

If extended thinking is also to be straight thinking, then what is called
dialectical consciousness should be part of the intellectual kitbag of skills of all
who feel that they can and must think for themselves. The imparting of a
skill such as dialectical consciousness should be one of the basic benefits of a
liberal arts education. This does not mean that it should be a product of
learning which has been acquired only if, by accident, one has managed to have
a course with an isolated and unusual professor who happens to use this skill
and has developed it into a fine art in the classroom. That would only make
it a fringe benefit. In order to sharpen one's skill at dialectical consciousness,
and thereby cultivate a manner of straight thinking that constitutes a very ef-
effective style, it should become, for most of our undergraduates, an experience of common exposure. If all communications are to become intellectually conscious of the exploratory nature of dialogue and to become serious and humble before the force of "directed thinking", one has to be exposed to discursive consciousness quite frequently.

The student very rarely meets with discursive consciousness among behavioural and social scientists, the very groups held to be most familiar with the facts, cultural values, and social psychologies which are most germane to our contemporary social issues and problems. Yet a discussion of such problems in depth requires a considerable exercise of dialectical consciousness. Dialectic is most apposite here, and the amount of disinterested conflict which can be reduced by the exercise and application of dialectic is very great, indeed. Political theory, for instance, is heavily in need of dialectical forms of consciousness. Most behavioural and social scientists would not recognize the tremendous value of dialectical consciousness, because the conventional stereotypes prevalent in academia suggest to most university people that dialectical consciousness is a cryptic form of a new species of rationalism, when, in fact, it is the cultivation of the art of making discriminations which are germane to significant controversy.

The amount of disinterested intellectual conflict which dialectic can profitably guide is also enormous. Yet the very areas in which extended intellectual dialogue could potentially take place and intellectual "conflict", in the honorific sense of this latter term, could be effectively patterned are the areas in which dialectical consciousness rarely puts in an appearance at all. This is true of most of the garden variety of classrooms in philosophy and formal logic, although the charge would clearly not apply in the classroom atmosphere created by outstanding philosophers and logicians, particularly at our better educational institutions.

If we are going to stress the importance of dialectical consciousness to straight thinking, then we had better look more closely and extensively into the nature of this skill—to the ability, that is to say, of a subject to sense as well as to produce logical organization, to grasp the logical schemata needed to represent reality or to organize experience. If this type of awareness were completely acquirable by passive contact with the present content of education, then the exposure of hundreds of thousands of students to mathematics and other disciplinary subjects should have resulted, at least for those students who displayed earnest effort interest and attention, in producing discursive conscious-
ness. The fact is, as we all know, that in most cases the ability for intellectual organization, in the sense in which the term is used here, appears to be specific to the content of whatever education has been prescribed. For contexts with which we are unfamiliar, most of us tend not to show a grasp of intellectual structure at all. Does this mean that a sense of intellectual organization and form is completely dependent upon what psychologists and educators call the “apperceptive mass”\(^2\) of a subject? Personally I do not believe so. In the same way that the logician can abstract the propositional function as structure from a body of propositions, independent of their content, so, too, it is possible to abstract the unity, coherence, direction, and thematic polytonality—if it is permissible to use so mouth-filling a phrase—from a conversation or dialogue, independent of its particular content. The presence of a technical or specialized terminology is no barrier to discursive awareness for, as such terms are introduced, they are defined, so to speak, on an actual basis. Such definitional tangents do not upset the grasp of discursive form, if an awareness of such form is truly present. The factor-analyst\(^3\) in psychology may have a tendency to oversimplify discursive consciousness with certain factors, notably the “verbal” and “reasoning” factors. However, although use has been made of the phrase “intellectual structure”, what is intended is something closer to the more general perception of dialectic structure which Adler\(^4\) has emphasized (about which more will be said shortly) and which Bertrand Russell has exhibited in everything he has ever touched. The attributes involved in the work of these two authors are much broader in scope than those factors mentioned above, and it is doubtful whether the degree of discursive consciousness can be very accurately predicted from the specification equations of the factor analysts.

A very cogent example of what it is intended to convey here has been picturesquely expressed by a friend, the research head of a foundation in New York City. He divides all intelligent people into three categories: low-high IQ’s; middle-high IQ’s; top-notch IQ’s. He does not say what he does with non-high IQ’s but it may be strongly suspected that he confines them to limbo. He has his own operational definitions for these three classes and, curiously enough, they are all in terms of discursive awareness. Members of the low-high IQ group never know when they are logically cornered in an argument and blithely go on talking long after the referee, named Aristotle, has counted to ten. A member of the middle-high IQ group knows when he is cornered, but since he would rather be right than honest and accurate, in order to preserve the shaky structure of argument he has built (and, at the same time, his
tottering self-image), he will weave and weasel, manufacturing non sequiturs at the drop of a syllogism. The top-notch, high IQ also knows when he is on the dialectical hook, but sensing the direction and force of the opposing argument and its supporting data, bows humbly before it and flexibly revises his intellectual organization in order to assimilate it. The term “assimilation” is used, of course, in Piaget's sense of absorbing the imposed intellectual structure and thereby modifying one's own intellectual organization.

By discursive consciousness, then, I refer to this Gestalt5 grasp of the force, continuity, cogency, and organization of an argument. Furthermore, I believe that this is a rather uncommon Gestalt for complex types of discussion and that many subjects have so low a grade of it that one can, for all practical purposes, speak of them as lacking it. Since, however, I hold that such organizing capacity is in part teachable, a genuine educational program should consider its improvement to be an important objective. If this type of consciousness should prove to be largely native (and I do not wish to commit myself on the nature-nurture issue involved here) we must still recognize that, through lack of training, many subjects function below their full capacities in this direction. The Great Books Program in a sense rests on the conviction that there is a consciousness of this type and that it is educable within limits.

Essentially discursive consciousness is, I think, best demonstrated in what Mortimer Adler has called “dialectic”. Dialectic is much wider in scope than the traditional meanings attached to the modes of deduction and the canons of inference. It makes use of analysis in the three senses which Morris has emphasized, namely, syntactic, semantic, and pragmatic analysis, but it is more emphatically in the pragmatic mode. This is because dialectic is concerned with the idiosyncrasies of phenomenal meaning which individuals attach to the complex concepts of discourse and with the value investments which underlie their assumptions. Dialectic is devoted in a sense to the examination of the cognitive maps which underlie philosophical endeavour, and philosophy has traditionally been a holistic enterprise. It still is for those who are uncommitted to the conviction that philosophy can only be a concern with the analysis of meaning. Dialectic is strictly “verbal” in the non-pejorative sense of this term; it is holistically directed and it is interested in facts only to the extent that their meaning for and value in the organization of ideas contributes to the sharpening of the edges of those phenomenal representations by which we propose to pattern experience. It considers the establishment of facts, as such, to be properly the province of scientific inquiry. It uses deductive methods as part of its
equipment in analysing the presuppositions of an opponent's position and the consequences of the propositions which he earnestly defends. It also recognizes that cognitive schemas, considered as creative investments, are not given by logic but only explored by it. The construction and criticism of such schemas is, in our sense, a dialectical enterprise.

Adler himself has given the best statement of the most important features of dialectic as a methodology. He summarizes it in terms of the following theses: (1) Dialectic is an affair in discourse. (2) Dialectic arises through the opposition of meanings in discourse. (3) Dialectic in the recognition of this opposition must be partisan in its attempt to resolve the opposition. (4) Dialectic in the recognition of the grounds which prevent the resolution of differences arbitrarily established must be impartial toward the consequences of these differences. (5) Dialectic is confined entirely to the realm of discourse, and thus is inconsiderate of entities outside of discourse. (6) Since dialectic is considerate only of the meanings of entities in discourse, it cannot establish truths or guarantee beliefs that depend upon the relation between discourse and items not in discourse.

Dialectic is therefore a polemical examination of life in an honest, useful and dispassionate sense of the term “polemical”. It is at the same time an attitude disposition, a state of awareness, which Socrates understood so well that his expression of it has come to be called the “Socratic Method”. Dialectic is uncommitted to any particular doctrine and unconcerned as to whether the end result of its movement is a coming to rest in truth. It is not indifferent to truth but it enjoys the hunt more than the quarry. Its raison d'être is the examination of possible existences and possible phenomenal frames of reference. Its work involves the clarification of meaning and the operation of making explicit our unexpressed values. If as a result of the process of dialectic a decision is reached, then the process itself ceases, only to be reinstituted when circumstances require the reaching of a new decision. Although dialectic has a place in theory construction and metatheory in the empirical sciences, it operates best in the tendentious climate of opinion and value. In such climates truth is on shifting sands. It is only when an effort is made to supersede an existing truth with a new one, or to re-examine the grounds on which the mind came to rest on the existing one, that the process of dialectic comes into its own.

Adler’s concept of dialectic has been much misunderstood and maligned, and it has been seen as a retreat into pre-scientific thoughtways. It has been
seen as an effort to smuggle the logomachy of medieval disputation into modern issues and problems. I believe this interpretation to be mistaken although the suspicion on which it is founded is healthy enough. It takes a discriminating mind, I suppose, to recognize the difference between open-ended verbalism, devoid of content and utility, and discursive notions which may be rough around the edges but which are the product of genuine thought and which are heuristic for intellectual purposes. Many social scientists with an interest in theory will recognize that what we have here called “dialectic” is almost the direct equivalent of everyday bull-sessions and brain-storming, devoted to exploratory flights which often eventuate in a carefully organized theory. They will feel somewhat like the character in Molière, that they have been using dialectic all their lives, so “what’s all the shootin’ fer?” They are right in a restricted sense but their consciousness of dialectic form is generally a product of their specialty and is often conspicuous by its absence when they enter other intellectual domains which are not cognate to their specialties. It is a generalized consciousness of dialectical form for which I am pleading here, a sense of discursive structure which will operate in all contexts for which the appropriate cognitive maps and terminology are supplied in the course of discussion. Furthermore, and most important, this sense of form is greatly needed in the clash of points of view which are operating in the climate of opinion, or for positions which express disagreements in values, or for the clash of restricted social perceptions. There is no discipline which will impart this general type of discursive consciousness better than philosophy in its dialectical aspects.

Minds, in a manner of speaking, are of different colours. There is a type of laboratory scientist whom Richard Meier7 has characterized as lowbrow and whose intelligence, according to Meier, is concentrated in his fingertips. This type of mind is likely to be repelled by the quality of consciousness for which Adler is plumping. The brass-instrument psychologist will view Adler’s emphasis on dialectic as a form of “mentalism”, a sacrilegious term which has a definite enough professional meaning of its own, but which is more likely to be used to castigate any approach which renders the hearer uncomfortable because he may be taxed beyond his mental powers. Other critics of Adler have asserted that he has erected legalistic thinking into a methodological and philosophical system. This may or may not be so. It is probably more true to say that he has torn out of jurisprudence the heart of its alleged claim to logical status and procedure. This core is dialectic and Adler has shown, I believe, its systematic nature and its relevance for the resolution of opinion. Dialectic
as an art was developed by the Greek philosophers, refined by the scholastics, and borrowed by legal philosophy for its utility. Its origins and age, however, cannot bear witness that it is not germane to systematic argument and the polemical clash of values.

If we may be allowed to express ourselves in terms of a cognitive and phenomenological approach in psychology, dialectic may be defined as the scanning of possible discursive meaning via our activity of interpretation; but the meanings with which it deals have relevance to our individual modes of symbolizing reality and certainly have relevance to the presuppositions that underlie these representations. There is a final fear concerning dialectic which springs from guilt by linguistic association. This is the tendency to confuse it with that tortured logorrhea, know as "dialectical materialism", Marxism's modern device for making the worse appear the better reason. A polemic used to mean an impassioned discussion on a high and well-informed level. It consisted of a cleansing operation of clarification. The Marxist polemic is conducted as a comic-opera of hyperbole and equivocation in what might be called the besprizorniki, flop-house style. For the Aristotelian triad—so basic to discursive consciousness—which consists of the three directives, "A is A", "A is either A or non-A", and "A is not non-A", the Marxists have substituted a different set of directives which some waggish critics have dubbed the Marxist Triad. Like the Aristotelian, it, too, consists of three principles. These are called proof by epithet, conviction by repetition, and refutation by circumlocution. With routines of this sort, dialectic, in Adler's sense, refuses to have any traffic whatsoever. There is not even a relationship of historical paternity between the two.

It should not be assumed that, for programs of liberal and general education, discursive consciousness, that is to say, the method of discussion is meant to displace scientific method. Nobody is advocating that the force of argument, alone, should supplant sober thought or carefully planned and conducted experiment. Nobody admires Bacon's motives more than I do, as expressed in one of his letters written at the age of thirty-one. "I have taken all knowledge to be my province; and if I could purge it of two sorts of rovers, whereof the one with frivolous disputations, confutations, and verbosities, the other with blind experiments and auricular traditions and impostures, hath committed so many spoils, I hope I should bring in industrious observations, grounded conclusions, and profitable inventions and discoveries."

Nevertheless, in spite of Bacon's good intentions, his canons of inquiry
are insufficient to grasp this sorry scheme of things entire. For this reason, discussion does have a distinct place in the enhancement of human consciousness, particularly in the sophisticated forms that Adler has examined at such great length and in such great detail in his distinguished book on dialectic. Perhaps one of the most reasonable statements of the proper relationships between the art of discussion and the scientific method was that given by Hutchins when, speaking of the philosophical diversity which is to be encouraged in the University of Utopia, he writes

The Utopians distinguish sharply between knowledge and opinion. They also distinguish sharply between two methods of advancing knowledge: the method of discussion and the method of discovery.

The Utopians have nothing but praise for the scientific method; they are experts at it. Because they are experts at it, they recognize its limitations. But they use it to advance knowledge about the world and man. They do not think that it is the only way of advancing knowledge. The Utopians note with interest, but without surprise, that most of the things they know were not learned by this method, because they knew them before this method was much practiced or much regarded. They came to know by the method of discussion the things they knew before the method of discovery was in common use. The Utopians do not believe that the method of discovery has supplanted the method of discussion. They insist that they need both, employing each in the fields in which each is appropriate. Therefore they do not say, for example, that they can learn only in the laboratory, because no knowledge can be obtained outside it. They say they learn the things that can be learned in the laboratory by the method of discovery and the things that can be learned outside it by the method of discussion.

When the Utopians enter upon the discussion of a matter, they ask themselves what kind of matter it is. Is it one about which they can hope to obtain knowledge, or is it one on which with the best will in the world and the most careful thinking the results can be merely probable? If it is one on which reasonable men can agree that knowledge should be obtainable, the Utopians inquire whether they can arrive at knowledge by discussion of the subject. If they can, they go to work on it with knowledge as the end in view. If it is a matter on which it is clear that reasonable men can always differ, if, in short, it is a matter of opinion, such as the precise reasons for the defeat of Napoleon at Waterloo, the Utopians discuss it and investigate it with a view to arriving at the most enlightened opinion. If it is a matter for action, such as whether the Utopians should negotiate with the Philistines, the Utopians deliberate with a view to the most enlightened decision.

There are two reasons why the discussions conducted in Utopia have had such inspiring results in the material, intellectual, and political progress of the
country. First, the Utopians know what they are talking about. They do not say that everything is a matter of opinion, and one man's opinion is as good as any other man's. This would mean either that no discussion took place, on the ground that it was useless; or that the discussion was endless. The Utopians say that knowledge in certain fields can be advanced by discussion. As to matters of knowledge, the Utopians intend to arrive at the truth by the method of discussion, in so far as the subject is one the knowledge of which is susceptible of advancement by this method. As to matters of opinion, the Utopians hope to reach the most intelligent conclusion, whether theoretical or practical.

The second reason why the discussions in Utopia have the high quality that distinguishes them is that the Utopians have convictions. They have convictions because they think. Their whole educational program is designed to force them to do so from their youth up. They submit their convictions to the scrutiny of their fellows in the expectation that through the consideration and comparison of the reasons for their convictions knowledge or right opinion, as the case may be, will ultimately be obtained (pp. 71-74).

I believe that a major task for programs of liberal and general education is to develop, within the limits of individual differences in capacity, an awareness and application of discursive consciousness. By this, it must be re-emphasized, I have in mind the sense of form which the dialectican creates and imposes upon his opponent. This sense of form was emphasized by Adler⁹ in another volume, *How To Read A Book*. It is present in Plato's *Republic* and the *Dialogues* and in the close-knit analysis which Aristotle brings to any subject. It is curious that dialectic as an expression of form is completely unrecognized by Lancelot Whyte¹⁰ in his editorship of *Aspects Of Form*, a volume which recognizes form in nature, art, and scientific inquiry, but not in discussion. It is my deep conviction that those disciplines which lend themselves to promoting and enhancing the sense of discursive consciousness should be an indispensable part of programs in liberal and general education. Philosophy is certainly the mother of these, but any teaching team each of whose members is a specialist in a given area and each of whom is adept at the art of dialectic can help considerably in making the student conscious of discursive form. If this is true in the individual classroom, it will be truer still of a panel discussion or of a symposium conducted jointly by a group of specialists of this calibre. It will be further advanced when a student undertakes an experimental or library research problem under the joint aegis of a tutorial squad of this calibre. There are many ideas which can be advanced to exploit fully the educational possibilities of a group of experts who are at the same time dialecticians. This, however, is not the place to deal with them. A well-developed,
diasetic sense, then, can act as a permanent traffic policeman toward the flood of ideas and values which crowd more and more upon us. If the educated mind must come to rest in some set of beliefs, if only for a short time, one of the best devices for separating the gold from the mud is, I believe, dialectic. The mark of an uneducated man is ignorance. The mark of a mis-educated man, however, is a defective development of discursive consciousness.

NOTES


2. The concept of "apperceptive mass" refers to an overall pattern of already existing ideas that will determine for any individual what will be relevant or irrelevant to attention.

3. *Factor analysis*, perhaps one of the most quantitative aspects of modern psychology, accepts the existence of "mental factors" which are supposed to underlie human abilities and personality. It seeks to detect these by highly technical mathematical and statistical procedures. When such factors have been isolated by the analysis of the results of psychological tests, they are named in terms of the type of behaviour with which they appear to be associated. It may be that a factor analysis would find "discursive consciousness" to be a complex or composite of many factors.


5. "Gestalt" is a psychological term which, in the present context, emphasizes that we learn to grasp a complex structure (such as *dialectical form*, for instance) as a unit or a whole, rather than by learning to deal with parts of the complexity piecemeal and then synthesizing these part-learnings into a sense of what the whole is all about.

6. Metatheory is defined as the theory which is concerned with the nature and requirements of theories in general.


