

Afterword

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I. Platonic Origins of Educational Thought

Plato's dialogues, because of their extraordinary quality of raising the right questions and identifying the important ideas relevant to their answers, have had more impact and influence on Western philosophy and Western educational theory than any other writings in these fields. Plato's works offer, therefore, a natural beginning for our discussion of the questions great philosophers have asked and the answers they proposed when they turned their attention to education. But it would certainly be a mistake to think of Plato solely in historical terms, for the Platonic dialogues are more widely read than any other philosophic works. From high school to graduate school or adult discussions of great books, most Americans make their first acquaintance with philosophy by way of Plato.

Plato's ideas on the subject of education not only are found in his text as historical facts, but are, many of them, living doctrines in constant use. In some cases they have become so much a part of our educational thinking and planning that we do not even see sensible alternatives to them. The use of discussion method as part of instruction; the idea of a university as the highest point of a public system of educational institutions, primarily directed toward teaching and research; the division of levels of schools and curricula into elementary, secondary, and advanced; coeducation; the combination of physical with mental "education" on the pre-research level—all of these ideas, as well as many more, originated as Platonic concepts.

We are thus reminded not only that Plato was an unsurpassed philosopher and a brilliant author but that his practical vocation in life was that of an educator. Plato's stature as a philosopher and his genius for practical embodiment of ideas in educational programs and institutions place him in the first rank in the history of education; he knows from experience what he is talking about, he cares about it, and he proposes to do something original with education. . . .

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II. Plato's Philosophy

Plato's philosophy brings together three important themes. The first is his view of philosophy as shared inquiry, as a search for self-knowledge and self-realization. He had been convinced by his teacher and hero, Socrates, that the human self is a far more mysterious thing than anyone up to that time had suspected. Plato's early philosophical writings are all dialogues, in which Socrates talks with leading politicians, educators, and citizens of his day about problems of human nature and human society. The second leading theme in Plato's philosophy is the discovery of form. The mathematicians of ancient Greece had developed an appreciation of the ability to reason "formally": to abstract and generalize, to talk about numbers and shapes "in general." Applying mathematics revealed many quantitative laws and patterns in nature and art and seemed to promise a whole new world of scientific discovery and precision. The third major theme in Plato's thought, mainly his own discovery, is that of the relation of form to value. We can see what this means when we look at a Platonic dialogue as an attempt to present some insight that is true, important, and beautiful. There has seldom been, in Western literature, a more meticulous attention to "literary form," in the interest of creating value. Socrates was concerned with ethical and psychological questions in his later life, and no doubt it was he who caused Plato to look for the relation of value to form. But it was Plato's contribution to recognize that ideals, goals, and criteria are ends to which form, in the sense of definite structure, is a means, and that ideals actually operate as causes in nature and human life. Plato saw that neither evaluating something nor describing it can be carried very far without the other. As a result he refused to separate questions of "fact" from those of "value."

Inquiry

Plato learned two main ideas from Socrates. One concerned the difficulty and complexity of self-knowledge. Socrates was condemned to death in 399 B.C. for refusing to stop his public inquiry into moral, social, and political matters. He embarrassed his persecutors by refusing to escape when he had a chance, drank the prescribed fatal cup of hemlock, and died. He was martyr to a frightened and stupid "people's government" that had little use for individual conscience. Plato, on the verge of a career as a young politician, was disillusioned by the unthinking conservatism that led to Socrates' death. He turned to education as a means of instilling the passion for self-knowledge in the young citizens of Athens.

Form

A second idea, less personally vivid but equally exciting, was the discovery we have mentioned, that one could study the formal features of things, apart from the things themselves. A hundred years before Plato, Pythagoras had begun to develop the science of "pure" mathematics, as opposed to accounting and computation. We can deal with the number two itself without limiting this concept to a pair of fish or of countesses. Again, when we talk about "triangles," we recognize triangularity as a common form even though different *instances* of triangularity may be equilateral, isosceles, and scalene and may be made of chalk lines, stylus marks on wax, or bronze strips. . . .

Plato's forms are the characteristics that give things their identities. Two chairs, for

example, share the property or form of chairness; this is why we call them by the same name, differentiating them from, say, bookcases. Just as we recognize that two mathematical triangles have the same "form," which is common to both, a Platonist thinks of two persons or chairs as having a common "form" that makes them alike. These forms are not things in the sense of material objects in space and time; they are rather sets of general characteristics, which do not change. We cannot see or touch them, but we can recognize them by using our minds to compare and classify and generalize the concrete things about us that we *can* touch and see. Plato intends to say that the forms are actually present in things and therefore are not simply arbitrary ideas in human minds. I think and say that two chairs are alike because there is something essential and common in the chairs themselves which makes them alike. . . .

Their mathematical ancestry suggests to us that Platonic forms may be thought of as structures; however, they are more than structures. The forms are also, in his view, ideals and criteria of value. Some chairs are better, as chairs, than others. Thus we might say, "That's a real chair," or "That's not really a chair," to indicate that although a common structure is recognizable, there are degrees of realizing the form of "chairness," and these degrees are degrees of worth. One of the most important things to notice about the Platonic forms is that they are related to each other in a definite system. Some forms include others: the form of "furniture," for example, includes the form of "chair." This means that if anything has the form of chair, it also has the form of furniture. Some forms exclude others: odd and even, for example. Everything that has any form must also have all the other forms that include the one it has, and cannot have any of the other forms that are excluded by its own. Reasoning and logic consist in tracing these systematic connections among forms themselves; they apply to actual experience because each form, as it is realized, brings with it all of its systematic relations to the others. The forms are ordered in a rational system, which does not change, and we can "reason" by tracing their relations. For example, if the form of "furniture" includes the form of "chair," we recognize that all chairs are furniture. In the same way, if "number" is divided into "odd" and "even," and "odd" excludes "two," then "two" must be an even number.

Value

Like the mathematicians, Socrates had directed his inquiries toward finding some common nature present in the objects of human knowledge, but Socrates chose as his objects the study of the things that men live by: instances of courage, temperance, or friendship. Plato, carrying on Socrates' concern with the human self, turned his attention to the underlying forms which are the causes of value.

Value seems always to require a form which is the basis of coherent order: Beauty requires organic pattern, virtue requires a harmonious relation of man's powers and faculties, truth requires a systematic coherence of steps in a proof or inquiry. These forms—virtue, truth, and beauty—therefore themselves are instances of a still higher form. The highest form in his system Plato calls the "good," the essence of all that is right, proper, and orderly. This form must be, in some measure, present in all things, giving them that value which lures us into wanting to possess them or to know about them. . . .

We always want to know *why* things have the shapes they do. In the case of the chair, and

other artificial things, their "good" lies in how well they perform a certain useful function, and so we can relate them to the user and to their maker's intention. In inanimate nature—the world of crystals, stones, and stars—we wonder why the same patterns repeat so often: The reason a modern scientist gives is that patterns in nature tend toward those with minimum free energy; that is, they tend always to have a maximum symmetry, stability, and balance (crystals are a particularly good example). A Pythagorean scientist would regard this selection of stable shapes as involving a kind of goal or desire, an innate natural tendency in things. A modern philosopher might be willing to agree that we can *describe* it as a search by each thing for an arrangement and identity that will be stable. Similarly, with animals there is a certain nonreflective desire for immortality manifested in the instinct for preservation of the species. There is, even on a low level of life, an innate drive toward self-realization. In man, there emerges a vision of ideals, a drive toward self-transcendence.

On every level, knowledge of the goals of the things we encounter helps us to explain and understand their structures. Structures are the fixities and finalities of things, whether they be the arch that the bridge is, or the oak that the acorn will become. They stay just what they are, and they bring a system of limits and relations to the particulars they characterize. But if we were to restrict our idea of "forms" to structures detached from value or purpose, they would become unimportant and unintelligible. The conclusion drawn by Plato was that values are objective and knowable forms and that the realm of the ideal is in fact causally related to the realm of the actual, so that we cannot really separate "description" and "evaluation," in greater or less degree, in all actual "organization men." All valuation requires a standard, and most standards are ideals.

Plato's philosophy is also a formalism, for the ideals are themselves forms. They are not mere targets toward which things tend or aim. They are present in actual things, giving them the definite structure that the things have. Every actual thing incarnates many forms. Some of the forms, however, are not *essential* to the thing, that is, they do not give it its most important identity. A chair, for example, may embody rectangularity and brownness, but neither of these gives it its identity as a chair; that is given by the form of chairness. The same thing holds true of human nature; we should be able, if Plato is right, to recognize an essential form of man, which represents the true goals of life. According to Platonic doctrine, then, the problem of education, in whatever field, is that of bringing a latent awareness of ideal forms—a latent awareness which every man has—to as clear and high a level of realization as one's talents will permit. The happiness both of society and of the individual will, ultimately, depend on our success in getting and communicating a clear vision of essential form.

III. The Divided Line: Knowledge and the Curriculum

From this summary of leading themes in Plato's overall philosophy, it will be clear that the attempt to isolate a "philosophy of education" from his dialogues is a difficult enterprise. Plato would agree completely with Dewey's comment that philosophy of education is the same thing as philosophy itself, broadly interpreted.

Accordingly, we are lucky that Plato, in his *Republic*, gives us . . . a treatment of the theory of education in considerable depth. It exemplifies a method of teaching, develops a theory of

knowledge, outlines an educational curriculum, locates education in its social role, and gives an analysis of human nature. We will follow the method of the *Republic* in our own presentation, supplementing it by the special treatment of motivation, inquiry, and discussion offered in Plato's earlier dialogues, particularly the *Meno*.

In the *Republic* Socrates leads a discussion of "justice." What is a "just" man? What is a "just" society? Why are they both called "just"? In Book vi he explains that in a good society policy must be made by legislators who really know what their aims are, rather than by the practical "political technicians" of the day. As part of this explanation, Socrates asks Glaucon, Plato's brother, to visualize a vertical line divided into four parts, each representing a different degree of "clearness of knowledge." . . . We will discuss them from bottom to top, in order.

Eikasia—Hearsay and Fiction

The bottom segment of Plato's line is "knowledge" that rests primarily on images and imagination. It is a world of story, myth, hearsay, and conjecture. The term suggests a kind of picture thinking, and evidently Plato has some notion that to "know" in this way is nothing more than "having a picture in my mind." *Eikasia* has a personal subjective quality, a vividness, and a romance to its imagery. For example, really to "see" what an abstract argument or proposition means to me as a unique individual, a "myth" is essential. But obviously this kind of thinking, for all its authenticity and color, is wholly unreliable when we compare it to the common-sense world of objects and techniques in space and time; a carpenter, not a poet, knows how to make a table. *Eikasia* has the lowest position on the divided line because we are arranging kinds of knowing in an order of clarity, objectivity, and genuine explanatory power. All the same, images and myths, imagination and fancy, are not to be scorned. Plato himself ends the *Republic* with a myth presenting his beliefs concerning human immortality, thus showing the need for imagery even at a very high level of understanding.

Pistis—Grounded Belief and "Know-How"

The second level of knowing is called *pistis*, testable belief as opposed to individual imagination. This is the stage of technique, of familiarity with how things behave. *Pistis* refers to a "public" world. Plato illustrates the difference between these two levels in the analogy of "The Cave." Here he pictures the bulk of mankind underground, fixed in their seats, watching the play of shadows at the end of a cave. For some the only reality lies in these images. Others are able to turn and see the actual puppets whose firelit images are thrown on the cave wall. The puppets stand for the actual world, the shadows stand for the partial representation of that world which most men confine themselves to. Even this actual world is an incomplete vision of reality, however, which is only revealed to the philosopher who leaves the cave and stands at last confronting the sun, the source and sustainer of all that is. The sun, in this tale, represents the form of all forms, the good. We will see in a moment where "the good" stands in the ladder of knowledge.

Pistis is essentially know-how. It is what the mechanic has that Jones does not. . . . Most practical knowledge is of this sort: "If I do so and so, then such and such happens." Plato calls this practical knack *empeirea*. We get our word "empirical" from this Greek term, and

we use it to refer to knowledge gained from experience. It is at the level of *pistis* that we first encounter the idea that if something is true, it is true for all. "True for me" can only make sense at the level of individual imagination, *eikasias*.

Dianoia—Generalization and Knowing Why

There is a third kind of knowledge, clearer than knowing *that* and knowing *how*. This Plato calls *dianoia*, which is a kind of knowing *why*. *Dianoia* is the kind of knowledge a scientist has of my television set, as opposed to that of the competent repairman. The repairman has a circuit diagram and tests each element and connection to see how it is working; why it works that way is clear only when we see the behavior of each part as a special case of general physical theory. Mathematics is an ideal example of dianoetic explanation: Experiments, from now until eternity, might well make us *believe* that there is only one even prime number, and give us a technique for determining whether any given number was even and prime, but it takes a different kind of explanation to show that this must be true in every case, and why. The *why* here is given by deducing the solution to our question from the very general definitions and operations of the number system, which are found by "generalization" or "recognition of a form." *Dianoia* recognizes the unchanging types and laws that limit and control the behavior of actual objects and processes in the commonsense world of public space and time. The forms, as we have said, are the causes both of definiteness and order and also of value. *Dianoia* concentrates on the forms in the first of these roles. It finds general laws and descriptions but cannot, with its formal method, resolve questions of evaluation. For this a still more adequate recognition of "form" must be required.

Noesis—Tested Theory and Evaluation

The fourth segment of Plato's line is called *noesis*; this is the knowledge that has true certainty. This fourth kind of knowledge includes the certainty that we know, that our combination of theory and data has produced an answer that is a good one. Since *dianoia* is, as we have just seen, a method of explanation by deduction from general hypotheses, there can be more than one hypothesis that will "explain" a particular situation. If it is hard to imagine this in arithmetic, it is certainly easy in social science: Different presupposed definitions of human nature could all have some explanatory power. One task of knowledge on this highest level is to examine these explanatory presuppositions. We want the best hypotheses. We want to know whether or not the hypothesis explains all the relevant facts it is supposed to explain. At this level we pursue ideals of clarity, universality, and simplicity, which are higher aims than that of just letting appearance speak for itself, or letting experience speak for itself, or even putting up a plausible theory. The whole explanatory enterprise is dominated by a desire to get the best possible understanding from a personal point of view, from a practical public point of view, from a theoretical point of view. It thus ends with an evaluation, and Plato puts the form of "the good," the criterion we have been using without clear awareness of it, at the very top of the line in his diagram.

To Agathon—the Form of the Good

The highest object of *noesis* in Plato's system is the form of the good, standing at the summit of the divided line. This is the form which is responsible for the value and attraction

of the other forms, and which therefore holds together all of reality in systematic interconnection. . . .

The account of the divided line brings out, in its discussion of degrees and dimensions of knowledge, the complexity of the human self and of the world we inhabit. The human self is at once a partially separate, changing, unique individual in space and time and a timeless being able to know laws that are universal, values that do not change. Our existence is a complex interplay of transitory adventure and awareness of eternal ideals, which we can partially realize.

There is an immediate implication for educational practice and educational theory. It would be a serious mistake to omit any dimension of human existence from either. Education, to be realistic, must combine the values of adventure, social activity, intellectual discipline, and vision of a moral ideal. For all of these are aspects of the human self, and all are parts of our cosmic environment, causally related to each other. . . .

IV. Motivation and the Method of Inquiry

. . . What is an educational experience like, from the learner's point of view? Is there a need for engagement in a quest for self-improvement, a genuine and absorbed desire to know, if education is to make the student better? Must learning be by grasping truths for oneself? Or should we settle for a student who pays attention, retains information, practices exercises, and knows where to find references and authorities that give information? The way we measure what degree of educational effectiveness we have attained, the way we grade students, select materials, and conduct classes, depends, finally, on the way we picture "learning" as it goes on in the mind of the student. The professional teachers of Plato's time, the Sophists, held learning to be mainly a retention of information and the mastery of rhetoric in using information. The benefit for the student was instrumental, as a way to wealth or power. The student's state of mind was that of attentive memory, patient drill, for the sake of an external goal in the future. Socrates disagreed. Aren't there aspirations and ideals of the student's inner self? Isn't self-realization intrinsically rewarding, without external prizes for motivation?

Socrates had been confused in the minds of some Athenians with the Sophists; Plato disabuses them in a brilliant dialogue which centers on the opposition of the two ideas of education. The *Meno*, which we analyze in some detail, is named for its respondent, a talented young man who has had the benefit of upper-class education at the hands of the Sophist, Gorgias. Visiting Athens, Meno encounters Socrates, and it becomes obvious that his Sophistication has not made him a really educated person. Plato describes Meno's changes in feeling as he tries to "learn" for himself, instead of merely remembering, thereby establishing motivation as coming either from within or not at all.

It is obvious at the outset of Plato's dialogue that Meno has not been taught to be a good human being. He cannot generalize. He expects Socrates to tell him the answer to his question "Can virtue be taught?" He becomes discouraged and abusive when Socrates offers to help him inquire into the question. Yet he is clever, wealthy, unusually attractive: he is not unpromising material. "How can we possibly inquire into something neither of us knows?" asks Meno, when Socrates will not give a simple answer to his question. "Even if we found it,

we wouldn't know we had the answer!" And, indeed, if "knowledge" were only items of information in reference works, this would be true. Socrates responds with a myth, an experiment, and a general statement of the method of inquiry. There is a myth, he tells Meno, that all knowledge is recollection; the soul, "before it was a man," knew the natures and truths of all things, and has within it latent memories. When we inquire, we are trying to become clear about something which we already know. But it takes an effort to "remember," and unless some problem makes us want to recover this inner insight, we do not make the effort to inquire. There is, then, no way to impart knowledge mechanically, by filling a mind with facts as though it were a storage bin. The student must provide the motivation, and take an active part in order to "recall" any knowledge with an inner conviction that it is true. Socrates himself will not argue that all the details of this myth are true, but he is ready to defend the conclusion that we will be wiser and better if we do inquire than if we do not.

Plato's use of this myth in the *Meno* is a popular presentation of a point that is essential to his educational theory. The latent power of the soul to remember truths it has already seen corresponds to the mind's power to discern unchanging forms in the changing world it confronts. The comparison to trying to remember brings out well the feeling that a learning situation always has. For the forms are realized in things in different degrees of exactness and adequacy, and are "seen" by the human observer with more or less clarity, depending on ability and training. "Knowing" is not, in Plato's view, a simple either-or relation, with the only alternatives "knowing" something or "not knowing" it. On the contrary, all of us "know" the forms in a dim and confused way—it is because we have some notion at the outset that there is a form of "virtue," for example, that we are motivated to inquire about it, and that we have a definite direction in our inquiry. Whether and how far Plato believed this doctrine of recollection literally is an interesting scholarly problem but irrelevant to the apparently novel and certainly correct conclusion that he drew: namely, that learning must begin with the student's desire to know; that it requires active attention for the student to have the feeling of "insight" or "recognition" that comes with "seeing" an answer; and that the basic capacities for educational progress must be present in the learner.

Meno "somehow likes what Socrates is saying." To convince him further, Socrates performs an experiment which has become a classical example of teaching method. A slave boy, who knows no geometry but thinks that doubling its sides will double the area of a square, is brought by leading questions to recognize that this is not the answer, then to "remember" that the square on the diagonal will be double the original square. The surprising thing about this performance, particularly for a modern teacher or student who has not appreciated Plato's intended Socrates-Gorgias contrast, is Meno's bewildered assurance that he has watched closely and seen that Socrates *has not "taught" the boy anything*. We feel that Meno was tricked, for Socrates certainly has used "leading questions" repeatedly, and diagrams as well. But the fact is that in Meno's limited sense of "teaching" as authoritative, external *instruction*, Socrates has not taught the boy the answer. The method Meno has in mind obviously won't account for the result; he may still distrust the myth of recollection, but he will have to admit that a student challenged to think can learn by directed inquiry.

Socrates then suggests that he and Meno return to their question of what virtue is, but Meno insists that instead they return to *his* question, and ask if it can be taught. The method Socrates uses is "the method of hypothesis": given a problem, we see what general

assumptions would lead to a solution; then we deduce and check the consequences of such generalizations. For example, if virtue were knowledge, it could be taught, and since virtue is good, any person who knew it would also embody it and therefore certainly would be willing to teach it. We thus find that, if virtue is knowledge, there should be teachers of it. Suppose Gorgias and his student Meno are evident that teaching is either by precept or by example. Gorgias, indeed, as proof that the leading Sophists do not succeed by the method of precept: Gorgias, indeed, as Meno recalls, thinks none of them teaches virtue at all.

Here Plato has Anytus, the democratic leader who inspired the execution of Socrates, enter the discussion, for Anytus believes virtue is taught by example. Just as a child learns to speak Greek from the community, without a special tutor, so young Athenians learn to be good by following the example of gentlemen, and of the great men of Athens. Socrates doubts this. For example, Pericles was not able to make either his sons or the Athenian public good through his example. If he had been, and was a good man himself, clearly the Athenian public would not have rejected his leadership after his many years in office! Anytus withdraws angrily, and Socrates and Meno are left with an inconclusive end to their discussion.

It is not hard to see that Plato intended to demonstrate for us that virtue can be taught neither by precept nor by example, but by the method used by Socrates. For during their conversation Meno does indeed seem to become (if only temporarily) wiser, more energetic, less vain, and "better."

Plato himself never forgot the educational significance of this Socratic discovery of freedom of the self, with its implication that true learning is founded on motivation. Throughout his work he indicates that the use of compulsion, pain, and fear as external motivation in education is immoral and worse than ineffectual, because it makes students dislike learning. For young students, education should begin as directed play. The suggestions for introducing youngsters to arithmetic, written into the educational statutes of the *Laws*, sound almost like a contemporary first-grade or kindergarten program. But the aim of secondary and higher education is excellence in the appreciation of form, i.e., the permanent laws and structures that govern individual persons and things.

Socrates' discovery that teaching must begin in the accepted challenge to inquire is one of his lasting contributions to modern educational thought. The Platonic myths give a vivid picture of the love of inquiry as arising from a sense of incompleteness and desire. Plato envisions the soul in the context of a world that stretches far beyond our immediate environment space and time, a self which recognizes its freedom and responsibility for choice. . . .

V. Education and Society

In the present section we are concerned with a "public" or "social" self, and with "education" as a community affair, aimed at citizenship, technique, and social adaptation. Can we take such an objective view without denying the importance and right of each individual to a private self, and his own quest for excellence? Does the shaping of "the organization man" necessarily crush the soul beneath a weight of social pressure? For Plato this issue was not merely an abstract question but a vital personal one. As a young man he had seen his own relatives set up an interim dictatorship and become so power-mad that he indignantly refused their invitation to join them. He had seen the Athenian state under a shaky

democratic government try and execute Socrates for insisting on the need to ask questions, even if the answers were not always the conventional patriotic ones the government wanted to hear. Did the Athenian city-state have either to fall into absolute obedience to the whim of the majority or else to become the scene of a struggle between powerful minorities?

Plato's effort to solve this problem is not simple and it does not always match our own ideas. The problem can be stated in a simple way, however. We strive, as a society, for the best possible state. As individuals, we strive for personal excellence. Must there be a conflict? Clearly there was, in the case of Socrates. What the state thought it most wanted of its citizens, unquestioning acceptance of its rule, was exactly counter to the life of inquiry necessary to an individual's self-development. So the state executed its finest citizen.

The Greek citizen or politician was even more committed than we are today to the notion that the function of society is to transmit tradition, to teach useful skills, and to shape character, so that younger students may fit in with the economic needs and political "common sense" of the community. Education as training in the interest of society, as a social institution less concerned with the demands of the ideal of human life than with the need for social stability, was part of the common sense of the day. In fact, "the state" made a powerful claim on the individual, since effective life in a community was understood to be a necessary part of civilized living. Moreover, loyalty to the state was one way in which, by identifying himself with something larger and more enduring, the individual could reach beyond his own finite life toward immortality. Yet "the state," as administered by a dictatorship of influential Athenian conservatives, Athenian democratic politicians, the military in Sparta, the dictator in Syracuse, or the Chamber of Commerce in Corinth, would certainly neither produce nor tolerate a truly excellent human individual. Was it a necessary consequence of society's nature that state and individual could not realize excellence together?

Only a clear analysis of the forms of state and individual could decide. In the *Republic* Plato gives his answer to this problem: The excesses of existing governments and the demand for mediocrity as the touchstone of "good social adjustment" in the local societies were not inevitable, but the result of unclear vision and errors in judgment as to the nature of the public good. The situation was correctable, Plato argued. By a close attention to education, the society could further the virtue of its citizens, and they in turn could modify its traditions and institutions for the better.

Education is meant to serve both the state and the person. To the person it owes the opportunity for the best realization of one's abilities. To the state it has the responsibility of developing citizens trained and happy in the roles whereby they carry on community life. A just state is one in which these roles are carried out by properly trained and motivated individuals. A just person is one in whom the various parts of the soul, the inner life, operate in the same harmonious way. Justice (the closest translation we can get for the Greek *dikē*) in both the individual and the state is the aim of education. Justice is "each part performing its proper share"; it is the ideal "form" for both the constitution of the state and the constitution of the individual. But, as we have seen, a "form" is capable of different degrees and, indeed, of different kinds, of approximation. We share a common "human nature," but there are individual differences—Plato thinks they may well be hereditary—which mean that our interests and aptitudes will differ. Could there be such a relation between state and individual

that the social function of each person was exactly the one found most rewarding and freely chosen?

This depends, of course, on the relation of the ranges of individual differences and of specialized social functions. Plato analyzes the human self into three distinct "parts" (drives, dispositions, or interests). They are distinct, though *not separate*, for they can come into opposition with one another in the same situation. One of these "parts of the soul" is appetite; a second is "spirit," which we can think of as "ambition" plus a desire for competition and overt action; "reason" is the third. It is within every one's power to lead an intelligent life, not allowing desire for fame or fortune to run beyond all limits, creating inevitable unhappiness. But, given their physiques and innate tendencies of character, some will find their satisfaction in competitions and contests, others will rather prefer craftsmanship or farming, while a third group will choose a life of intellectual inquiry and research. If we think of social "classes" in terms of function rather than accidental characteristics, such as property or family background, it turns out that there are also three such functional "classes" in a good state. There must be producers, protectors, and directors. Plato can now offer a solution to his problem, though it is one that runs radically counter to Greek thought and practice of the time: When each individual has a place in the social class which one's interests and talents match, then justice is possible at the same time for the person as self and for the society as organic whole. The details involved in applying this theory were too complex and novel for Plato to develop thoroughly, but the *Republic* had done what it was meant to, and proved that, while the state is a super-organism with its own goal and individuality, there was no necessary conflict between the society and the individual. In a state which knew how to use talent for the general good, a truly good person would not be executed but would be a useful and respected citizen.

To meet the needs of the three classes, a system of public education would have to be devised. The aims and content of this educational scheme occupy the central part of the *Republic*.

The *Republic* is thus the result of a critique of the idea of education as social adaptation (the conventional view) or as life adjustment (the Sophists' position). In a series of earlier dialogues between Plato's Socrates and the various leading Sophists and statesmen of the day, Plato had argued that adaptation should be realistic—and, in Plato's philosophy, the forms are a part of reality. Neither uncritical preservation of convention nor powerful control of tools for manipulating public opinion takes account of the true ends of state and individual. The "finishing school" approach of the Sophists, teaching graces and skills to an economic elite, seemed to Plato very unrealistic in its notion of adaptation.

Education and applied intelligence can modify and serve society but such service can be exacted only where the social gains lead to the individual's self-betterment as well. Life gains in vividness and authenticity from being lived in a *polis*. We share experience with our friends, argue in the assembly, applaud in the theater, march in the processions, and have conversations over a bowl of wine. This can enhance, not destroy, our individuality, in Plato's view. He would not understand an idea of education that posited an antagonism between self-realization and social effectiveness: the two are compatible in principle, and in practice can become so if we attend to improving education as a way of improving society.

What conclusions follow from this philosophic analysis? First, since education plays such

a central part in society and since it is through education alone that individual ability and social function can be made to coincide, society should establish free public schools. This mark Plato as the great educational revolutionist of his time. Second, the Director of Education must be one of the most carefully chosen and respected officers of the state. In the *Republic*, the two tasks of the most talented and educated guardian class are legislation and education; the teacher and the legislator are the twin guardians of society. Third, socialization need not be destructive of individuality. Practice in social action will teach certain habits of cooperation and conformity, and perhaps in any actual state that Plato knew, those habits were fatal to self-realization. This, he says in one of the letters he wrote late in his life, is why he has not been an active politician, but an educator. But there is no necessity that forever keeps the good person and the good citizen from being the same, and perhaps this goal will be realized—if not in Athens, soon, then perhaps in some remoter time, in some more distant, foreign country.

We may disagree with Plato's view that a culture or a community is a kind of living reality. We may think that the conditions of modern civilization make socialization more opposed to individuality than an ancient Greek would have imagined. But we can hardly deny that some form of social effectiveness is a legitimate aim of education.

VI. The Concrete Curriculum



... In the present section we will consider the subject matter of an ideal curriculum. This consideration emphasizes the *structure*—definite method, content, and order—of education, looking at the form of education from the standpoint of *dianoia*, the third level of the divided line. Here we expect to find Plato treating the problems, and perhaps sharing the insights, of liberal arts humanism.

The schools in the *Republic* are of three kinds. The elementary school provides a basic general education for everyone. A secondary school offers a more rigorous physical and intellectual training for students with special aptitude for and interest in military, civil service, research, and legislative work. And a center of higher education continues the training of a more highly selected group of students, who will become research scientists, educators, and legislators.

Elementary education has as its content *musikē*, a study of literature, music, and civics, and *gymnastikē*, athletics and the dance. Its aim is to elicit love of grace and beauty, to develop the temperance of the student. "Temperance" is the virtue of moderation and self-control: the recognition that excess in pursuit of pleasure or of wealth is not only bad taste but self-defeating. If we cannot convince our producers and consumers that living graciously is different from luxury and conspicuous waste, creation of new wants and a constant desire to "have more" will make everyone in the community dissatisfied with an individual share of comfort and commodities. The result will be to upset the economic sanity of the state.

The aim of the elementary level of schooling is to teach aesthetic and ethical value. This is to be taught by practice of graceful action and by study of great works of literature which combine excellence of style and form with plots and characters that excite the student's admiration and respect. Our students learn in part by imitation and inspiration: putting

themselves in the place of tragic heroes, of their parents, of great athletes. And the tendency of actions to produce habits means that these students will grow to resemble the things they are imitating. This, Plato believes, imposes a need for the strictest selection and censorship. Far from being the humanist who believes that universality of appeal selects and preserves the best that has come from the past, Plato devotes two books of the *Republic* to criticizing Homer, whose epics were taught in elementary schools at that time as the supreme example of literature, and also as a civics text; Homer's *Iliad* played a role comparable to that of our Bible. The trouble with Homer is that he is able to persuade us, by the beauty of his poetry, that Achilles is a hero worthy of imitation. But Achilles, looked at through the more objective eyes of a Platonic ruler, is often hysterical, vindictive, greedy, undisciplined, and unreliable! The "idea of a gentleman" of the Homeric age was, Plato saw, unsuitable and ridiculous as a model for society of Plato's day.

Although he is willing to take issue with the most universally accepted humanistic value-judgment of the day when he finds Homer unsuitable reading for students, Plato's awareness of the influence of environment on character and his appreciation of form do lead him into an extreme conservatism. He does not want his students to have any occasion for first-hand imitation of intemperance and illiberality, and he supposes that the directors of education can select an environment in which there will be no such temptation or opportunity. From the discoveries in music and poetry, in dancing and craftsmanship, of the past, he proposes to choose only the very best, and by rigid censorship to exclude whatever fails to embody the very highest excellence. By "best" he means *both* most satisfying aesthetically and most noble in ethical effect. Censorship, whether we call it by this name or simply talk about selecting educational materials, is a controversial topic, even now. There are few people who do not believe in some censorship. Shall we have fifth-graders read Henry Miller? The question of censorship is never one of "whether"; it is one of "how much." Like all modern psychologists, Plato believes that the early formative influences are the critical ones. Taking the whole picture into account, however, we feel it necessary to say that Plato here plays the role of classical humanist so vigorously that he is led into philosophic inconsistency. Modern humanism holds that we must not only respect the discoveries of form that are a high point of the past but also see that new forms are needed as culture goes on.

The secondary school in the *Republic* is designed to test and train the intelligence of its students by "ten years of pure mathematics as a mental discipline." (In its context, since Plato seems to have been making several points by exaggeration, one is inclined to take both the ten-year period and the absolute purity of this prescription with several grains of salt, though there is no doubt that the recommendation of mathematics as training in reasoning is quite seriously meant.) They are to learn to look for the permanent patterns and forms by progressive study of arithmetic, plane geometry, solid geometry, theoretical astronomy, and harmonics (ratio theory). This training is intended to develop appreciation of truth as a value: precision, rigor, and consistency in the art of thinking.

From the brief description of the next level of education, it is clear that a primary reason for this discipline is for training in a general method of thinking, which must become automatic and ingrained before the student can go on to a higher education. No discipline should be spared in the training of those on whom the greatest responsibilities will rest. Executives and legislators must use intelligence; they cannot trust to mere guesswork or

short-term “savvy” in their political actions. . . . For the students who do not go on to higher education, and who are to be the army, civil service, public engineers, and police force, the training is not useless, for their problems are precisely those of applying legislative rules, given to them as axioms, to particular situations, without contradictions or inconsistencies in the deduced application. This notion of teaching a method of thought is an attractive idea, and one that has enlisted many defenders in later educational theory. But it supposes that study of empty pattern will be interesting, applicable to life, and automatically transferable; and experience has tended to cast doubt on each of these claims. . . .

The higher education, for future legislators, will consist of “dialectic.” Dialectic is a term with a varied history of meanings, and Plato himself uses it sometimes in the informal sense of directed conversation, sometimes as naming a practical method of inquiry, sometimes for logical precision in defining and classifying. Glaucon asks Socrates to tell him what “dialectic” is, but the answer is rather sketchy. However, if all students are to pursue this as their single course, it is clear that Plato’s idea of “subject matter” on this level is not at all our own notion of departmentalization within the college and division into professional schools within the university. We do get several pieces of information about the intended course, and by putting them together we can see why Plato left the details so incomplete in his discussion of curriculum.

It seems evident that Plato here thinks of dialectic as an application of the clear, logical methods of mathematics to the tangled phenomena of human nature and conduct. The result would be, if this program were carried out, an inquiry into such concepts as “justice,” on the pattern of the “divided line.” . . .

Beyond skill in dialectic lies the vision of the good, the end of all philosophic understanding. The idea of the good permeates all the levels of understanding, providing them with that worth which lures us to self-realization by our knowledge of them. Plato says of this form of all forms that it is like the sun. The sun is the ultimate source of light by which actual things are seen—that is, are known and apprehended. It also sustains them in their very existence. So also the good is what illuminates what we *understand*, and the very reality of these things is dependent upon it.

“The good” is one of Plato’s most difficult ideas, and volumes have been written about it. For our purposes it stands as the apex of value, upon which all other value depends. The educational development of people depends on how far their talents and motivation carry them toward this highest vision. Plato’s highest judgment seems to have been that this vision cannot be translated into a doctrine and presented in textbook or lecture form, though the route of inquiry may be marked out.

Notice that Plato’s idea of higher education is one of synthesis, not of specialization. . . . [T]he higher learning is to be practiced in appreciating and ordering general and expert findings into unified theories. If there is to be research into details of medicine, mathematics, law, or zoology, it should come later, so that the scholar has constantly in mind the ideal of knowledge and can use it as a criterion of importance in work on detail.

Platonic education is thus a training in what he would call “philosophy” and “philosophic vision.” In American higher education today we are still concerned with this question. Should college, all of it, or at least the first two years, be devoted to giving the student a “general education”? If so, can this best be done by wide sampling of detailed courses in

different “areas,” or by specially designed “survey” or “general” courses that cross traditional departmental boundaries? Is the “major” for undergraduate upperclassmen to be considered specialized preprofessional training or a continuation of less specialized liberal education? Is there any necessity for “major” fields to coincide with the existing departments, or should there be flexibility in providing for “divisional” or “interdepartmental” study here? These are vital, immediate questions, and, by implication, they are also important for secondary education. If high school education is to be terminal for some students, does this mean that there should also be some attention to synthesis and synoptic vision on this level? Or is the best we can attain merely competence in socialization and in those instrumental techniques that a citizen needs in order to be “adapted” and “effective”?

There are similar questions posed by the high school and elementary school curricula Plato proposed. . . . [W]e can summarize Plato’s curricular plan by noticing that it is intended to develop each individual’s intellectual powers to choose formal studies which will best make one aware of the beautiful, the good, and the true.