1982

Volume 3, Nos. 3 & 4

Thinking

VOLUME 3, NUMBERS 3&4

THE JOURNAL OF
PHILOSOPHY FOR CHILDREN

THE JOURNAL OF PHILOSOPHY FOR CHILDREN

Volume 3, Numbers 3 & 4

Publisher

Thinking is published by the First Mountain Foundation, for The Institute for the Advancement of Philosophy for Children. The First Mountain Foundation is a non-profit foundation devoted to educational purposes. Support for editorial aspects of *Thinking* has been provided by the Rockefeller Foundation.

Institutional subscription (yearly, 4 issues).....$20.00
Individual subscription (yearly, 4 issues)..... 12.00

Manuscripts and related correspondence should be addressed to the Editor,
Thinking, IAPC,
Montclair State College
Upper Montclair, N.J. 07043

Correspondence dealing with subscriptions should be addressed to The First Mountain Foundation, Box 196, Montclair, N.J. 07042

Postage paid at Montclair State College,
Upper Montclair, N.J. 07043
ISSN #0190-3330

Table of Contents

The Philosophy of Childhood
Robert Louis Stevenson, Child's Play 1
Emile Durkheim, Childhood 6
Randall Jarrell, Introduction to *The Man Who Loved Children* 10
Alastair Reid, The Transformations: Notes on Childhood 15

Reasoning Skills: Analogical Reasoning
J. Robert Oppenheimer 19

Reflections 22

Philosophy in the Secondary School
Jacob Needleman, Teaching Philosophy to Adolescents 26
William Scott, Teaching Philosophy in the Comprehensive School 31

Philosophy in the Elementary School
Lipman, Matthew, Philosophy for Children 35
Lipman, Matthew, Why Aren't Reasoning Skills Being Taught? 45
Joseph Little, Student Responses to a Questionnaire About Their Philosophy Program 47

What Happens in Education
Henry Morley, Rational Schools 50
W.H. Auden and T.C. Worsley, Education Today—and Tomorrow 57
Michael Oakeshott, A Place of Learning 65

Book Reviews
Ellin Scholnick, Donaldson's "Children's Minds" 76
Gareth Matthews, Paley's "Wally's Stories" 78
Michael Pritchard, Matthews' "Philosophy and the Young Child" 81

Transcript of a Class in Philosophy for Children
Telegar Satish, The Relationship Between Knowledge and Emotions: Transcript of a Philosophy for Children Session in St. Paul, Minnesota 84

News Briefs
Inside Back Cover

Credits

Cover photograph and pp. 31, 33, 34, 35, 36, 37, 38, 40, 45, 46, 47, 48, 49, 81, 82, 83: Joseph D. Isaacson; *p. 1:* Paula Modersohn-Becker, *Peasant Child,* Kunsthall, Bremen; *pp. 2, 3, 4, 5, 50, 52, 54, 56:* drawings by William Makepeace Thackeray; *p. 8:* 19th cent. French painting by Charles Chaplin; *p. 57:* "Pair of Sneakers" by Robert Rauschenberg; *p. 58:* Drawing of child by Ben Shahn (artist's collection); *p. 61:* Drawing "Mother and Child," by Russell Drysdale; *p. 63:* Blackboard drawing by an eight-year-old child; *p. 65:* Drawing by unknown 18th-century Chinese artist; *p. 67:* Drawing by Leonardo da Vinci; *p. 68:* "Girl With Doll" by Camille Corot; *p. 70:* Drawing of young girl by Van Gogh; *p. 75:* "Mother and Child" by Rembrandt; *p. 80:* Two drawings by Jean Dubuffet; *p. 84:* Crayon by Charles White, *Skipping,* Collection of George Anton and David A. Brown, Brown Pharmaceutical Company; *p. 85:* Pastel by Mary Cassatt, *Looking at a Picture Book,* Anonymous collection; *p. 90:* Drawing by Pascin: *Mary tired,* 1928, Grenoble Museum; *p. 91:* Pen and ink over pencil by Camille Corot, "Boy in Landscape," Boerlage Collection, Holland.

Child's Play

By Robert Louis Stevenson

While Robert Louis Stevenson is duly renowned for his children's stories and children's verse, he is less well-known as an essayist. But we should not allow ourselves to be too much put off by Stevenson's unassuming manner: he is a keenly perceptive and judicious observer, despite the familiar view of him as a rather bland and sentimental apologist for childhood. This essay reveals Stevenson's ability to enter fully into the child's world and yet to pull back and comment with insight and detachment on what he finds in that world.

The regret we have for our childhood is not wholly justifiable: so much a man may lay down without fear of public ribaldry; for although we shake our heads over the change, we are not unconscious of the manifold advantages of our new state. What we lose in generous impulse, we more than gain in the habit of generously watching others; and the capacity to enjoy Shakespeare may balance a lost aptitude for playing at soldiers. Terror is gone out of our lives, morever; we no longer see the devil in the bed-curtains nor lie awake to listen to the wind. We go to school no more; and if we have only exchanged one drudgery for another (which is by no means sure), we are set free for ever from the daily fear of chastisement. And yet a great change has overtaken us; and although we do not enjoy ourselves less, at least we take our pleasure differently. We need pickles nowadays to make Wednesday's cold mutton please our Friday's appetite; and I can remember the time when to call it red venison, and tell myself a hunter's story, would have made it more palatable than the best of

sauces. To the grown person, cold mutton is cold mutton all the world over; not all the mythology ever invented by man will make it better or worse to him; the broad fact, the clamant reality, of the mutton carries away before it such seductive figments. But for the child it is still possible to weave an enchantment over eatables; and if he has but read of a dish in a storybook, it will be heavenly manna to him for a week.

If a grown man does not like eating and drinking and exercise, if he is not something positive in his tastes, it means he has a feeble body and should have some medicine; but children may be pure spirits, if they will, and take their enjoyment in a world of moonshine. Sensation does not count for so much in our first years as afterwards; something of the swaddling numbness of infancy clings about us; we see and touch and hear through a sort of golden mist. Children, for instance, are able enough to see, but they have no great faculty for looking; they do not use their eyes for the pleasure of using them, but for by-ends of their own; and the things I call to mind seeing most vividly, were not beautiful in themselves, but merely interesting or enviable to me as I thought they might be turned to practical account in play. Nor is the sense of touch so clean and poignant in children as it is in a man. If you will turn over your old memories, I think the sensations of this sort you remember will be somewhat vague, and come to not much more than a blunt, general sense of heat on summer days, or a blunt, general sense of wellbeing in bed. And here, of course, you will understand pleasurable sensations; for overmastering pain—the most deadly and tragical element in life, and the true commander of man's soul and body—alas! pain has its own way with all of us; it breaks in, a rude visitant, upon the fairy garden where the child wanders in a dream, no less surely than it rules upon the field of battle, or sends the immortal war-god whimpering to his father; and innocence, no more than philosophy, can protect us from this sting. As for taste, when we bear in mind the excesses of unmitigated sugar which delight a youthful palate, "it is surely no very cynical asperity" to think taste a character of the maturer growth. Smell and hearing are perhaps more developed; I remember many scents, many voices, and a great deal of spring singing in the woods. But hearing is capable of vast improvement as a means of pleasure; and there is all the world between gaping wonderment at the jargon of birds, and the emotion with which a man listens to articulate music.

At the same time, and step by step with this increase in the definition and intensity of what we feel which accompanies our growing age, another change takes place in the sphere of intellect, by which all things are transformed and seen through theories and associations as through coloured windows. We make to ourselves day by day, out of history, and gossip, and economical speculations, and God knows what, a medium in which we walk and through which we look abroad. We study shop windows with other eyes than in our childhood, never to wonder, not always to admire, but to make and modify our little incongruous theories about life. It is no longer the uniform of a soldier that arrests our attention; but perhaps the flowing carriage of a woman, or perhaps a

countenance that has been vividly stamped with passion and carries an adventurous story written in its lines. The pleasure of surprise is passed away; sugar-loaves and water-carts seem mighty tame to encounter; and we walk the streets to make romances and to sociologise. Nor must we deny that a good many of us walk them solely for the purposes of transit or in the interest of a livelier digestion. These, indeed, may look back with mingled thoughts upon their childhood, but the rest are in a better case; they know more than when they were children, they understand better, their desires and sympathies answer more nimbly to the provocation of the senses, and their minds are brimming with interest as they go about the world.

According to my contention, this is a flight to which children cannot rise. They are wheeled in perambulators or dragged about by nurses in a pleasing stupor. A vague, faint, abiding wonderment possesses them. Here and there some specially remarkable circumstance, such as a water-cart or a guardsman, fairly penetrates into the seat of thought and calls them, for half a moment, out of themselves; and you may see them, still towed forward sideways by the inexorable nurse as by a sort of destiny, but still staring at the bright object in their wake. It may be some minutes before another such moving spectacle reawakens them to the world in which they dwell. For other children, they almost invariably show some intelligent sympathy. "There is a fine fellow making mud pies," they seem to say; "that I can understand, there is some sense in mud pies." But the doings of their elders, unless where they are speakingly picturesque or recommend themselves by the quality of being easily imitable, they let them go over their heads (as we say) without the least regard. If it were not for this perpetual imitation, we should be tempted to fancy they despised us outright, or only considered us in the light of creatures brutally strong and brutally silly; among whom they condescended to dwell in obedience like a philosopher at a barbarous court. At times, indeed, they display an arrogance of disregard that is truly staggering. Once, when I was groaning aloud with physical pain, a young gentleman came into the room and nonchalantly inquired if I had seen his bow and arrow. He made no account of my groans, which he accepted, as he had to accept so much else, as a piece of the inexplicable conduct of his elders; and like a wise young gentleman, he would waste no wonder on the subject. Those elders, who care so little for rational enjoyment, and are even the enemies of rational enjoyment for others, he had accepted without under-

standing and without complaint, as the rest of us accept the scheme of the universe.

We grown people can tell ourselves a story, give and take strokes until the bucklers ring, ride far and fast, marry, fall, and die; all the while sitting quietly by the fire or lying prone in bed. This is exactly what a child cannot do, or does not do, at least, when he can find anything else. He works all with lay figures and stage properties. When his story comes to the fighting, he must rise, get something by way of a sword and have a set-to with a piece of furniture, until he

is out of breath. When he comes to ride with the king's pardon, he must bestride a chair, which he will so hurry and belabour and on which he will so furiously demean himself, that the messenger will arrive, if not bloody with spurring, at least fiery red with haste. If his romance involves an accident upon a cliff, he must clamber in person about the chest of drawers and fall bodily upon the carpet, before his imagination is satisfied. Lead soldiers, dolls, all toys, in short, are in the same category and answer the same end. Nothing can stagger a child's faith; he accepts the clumsiest substitutes and can swallow the most staring incongruities. The chair he has just been besieging as a castle, or valiantly cutting to the ground as a dragon, is taken away for the accommodation of a morning visitor, and he is nothing abashed; he can skirmish by the hour with a stationary coal-scuttle; in the midst of the enchanted pleasance, he can see, without sensible shock, the gardener soberly digging potatoes for the day's dinner. He can make abstraction of whatever does not fit into his fable; and he puts his eyes into his pocket, just as we hold our noses in an unsavoury lane. And so it is, that although the ways of children cross with those of their elders in a hundred places daily, they never go in the same direction nor so much as lie in the same element. So may the telegraph wires intersect the line of the high-road, or so might a landscape painter and a bagman visit the same country, and yet move in different worlds.

People struck with these spectacles, cry aloud about the power of imagination in the young. Indeed there may be two words to that. It is, in some ways, but a pedestrian fancy that the child exhibits. It is the grown people who make the nursery stories, all the children do, is jealously to preserve the text. One out of a dozen reasons why *Robinson Crusoe* should be so popular with youth, is that it hits their level in this matter to a nicety; Crusoe was always at makeshifts and had, in so many words, to *play* at a great variety of professions; and then the book is all about tools, and there is nothing that delights a child so much. Hammers and saws belong to a province of life that positively calls for imitation. The juvenile lyrical drama, surely of the most ancient Thespian model, wherein the trades of mankind are successively simulated to the running burthen "On a cold and frosty morning," gives a good instance of the artistic taste in children. And this need for overt action and lay figures testifies to a defect in the child's imagination which prevents him from carrying out his novels in the privacy of his own heart. He does not yet know enough of the world and men. His experience is incomplete. That stage-wardrobe and scene-room that we call the memory is so ill provided, that he can overtake few combinations and body out few stories, to his own content, without some external aid. He is at the experimental stage; he is not sure how one would feel in certain circumstances; to make sure, he must come as near trying it as his means permit. And so here is young heroism with a wooden sword, and mothers practise their kind vocation over a bit of jointed stick. It may be laughable enough just now; but it is these same people and these same thoughts, that not long hence, when they are on the theatre of life, will make you weep and tremble. For children think very much the same thoughts and dream the same dreams, as bearded men and marriageable women. No one is more romantic. Fame and honour, the love of young men and the love of mothers, the business man's pleasure in method, all these and others they anticipate and rehearse in their play hours. Upon us, who are further advanced and fairly dealing with the threads of destiny, they only glance from time to time to glean a hint for their own mimetic reproduction. Two children playing at soldiers are far more interesting to each other than one of the scarlet beings whom both are busy imitating. This is perhaps the greatest oddity of all. "Art for Art" is their motto; and the doings of grown folk are only interesting as the raw material for play. Not Theophile

Gautier, not Flaubert, can look more callously upon life, or rate the reproduction more highly over the reality; and they will parody an execution, a deathbed, or the funeral of the young man of Nain, with all the cheerfulness in the world.

The true parallel for play is not to be found, of course, in conscious art, which, though it be derived from play, is itself an abstract, impersonal thing, and depends largely upon philosophical interests beyond the scope of childhood. It is when we make castles in the air and personate the leading character in our own romances, that we return to the spirit of our first years. Only, there are several reasons why the spirit is no longer so agreeable to indulge. Nowadays, when we admit this personal element into our divagations we are apt to stir up uncomfortable and sorrowful memories, and remind ourselves sharply of old wounds. Our day-dreams can no longer lie all in the air like a story in the *Arabian Nights;* they read to us rather like the history of a period in which we ourselves had taken part, where we come across many unfortunate passages and find our own conduct smartly reprimanded. And then the child, mind you, acts his parts. He does not merely repeat them to himself; he leaps, he runs, and sets the blood agog over all his body. And so his play breathes him; and he no sooner assumes a passion that he gives it vent. Alas! when we betake ourselves to our intellectual form of play, sitting quietly by the fire or lying prone in bed, we rouse many hot feelings for which we can find no outlet. Substitutes are not acceptable to the mature mind, which desires the thing itself; and even to rehearse a triumphant dialogue with one's enemy, although it is perhaps the most satisfactory piece of play still left within our reach, is not entirely satisfying, and is even apt to lead to a visit and an interview which may be the reverse of triumphant after all.

In the child's world of dim sensation, play is all in all. "Making believe" is the gist of his whole life, and he cannot so much as take a walk except in character. I could not learn my alphabet without some suitable *mise-en-scene,* and had to act a business man in an office before I could sit down to my book. Will you kindly question yur memory, and find out how much you did, work or pleasure, in good faith and soberness, and for how much you had to cheat yourself with some invention? I remember, as though it were yesterday, the expansion of spirit, the dignity and self-reliance, that came with a pair of mustachios in burnt cork, even when there was none to see. Children are even content to forego what we call the realities, and prefer the shadow to the substance. When they might be speaking intelligibly together, they chatter senseless gibberish by the hour, and are quite happy because they are making believe to speak French. I have said already how even the imperious appetite of hunger suffers itself to be gulled and led by the nose with the fag end of an old song. And it goes deeper than this: when children are together even a meal is felt as an interruption in the business of life; and they must find some imaginative sanction and tell themselves some sort of story, to account for, to colour, to render entertaining, the simple processes of eating and drinking. What wonderful fancies I have heard evolved out of the pattern upon tea-cups!—from which there followed a code of rules and a whole world of excitement, until tea-drinking began to take rank as a game. When my cousin and I took our porridge of a morning, we had a device to enliven the course of the meal. He ate his with sugar, and explained it to be a country continually buried under snow. I took mine with milk, and explained it to be a country suffering gradual inundation. You can imagine us exchanging bulletins; how here was an island still unsubmerged, here a valley not yet covered with snow; what inventions were made; how his population lived in cabins on perches and travelled on stilts, and how mine was always in boats; how the interest grew furious, as the last corner of safe ground was cut off on all sides and grew smaller every moment; and how, in fine, the food was of altogether secondary importance, and might even have been nauseous, so long as we seasoned it with these dreams. But perhaps the most exciting moments I ever had over a meal, were in the case of calves' feet jelly. It was hardly possible not to believe—and you may be sure, so far from trying, I did all I could to favour the illusion—that some part of it was hollow, and that sooner or later my spoon would lay open the secret tabernacle of the golden rock. There, might

some miniature *Red Beard* await his hour; there, might one find the treasures of the *Forty Thieves,* and bewildered Cassim beating about the walls. And so I quarried on slowly, with bated breath, savouring the interest. Believe me, I had little palate left for the jelly; and though I referred the taste when I took cream with it, I used often to go without, because the cream dimmed the transparent fractures.

Even with games, this spirit is authoritative with right-minded children. It is thus that hide-and-seek has so pre-eminent a sovereignty, for it is the well-spring of romance, and the actions and the excitement to which it gives rise lend themselves to almost any sort of fable. And thus cricket, which is a mere matter of dexterity, palpably about nothing and for no end, often fails to satisfy infantile craving. It is a game, if you like, but not a game of play. You cannot tell yourself a story about cricket; and the activity it calls forth can be justified on no rational theory. Even football, although it admirably stimulates the tug and the ebb and flow of battle, has presented difficulties to the mind of young sticklers after verisimilitude; and I knew at least one little boy who was mightily exercised about the presence of the ball, and had to spirit himself up, whenever he came to play, with an elaborate story of enchantment, and take the missile as a sort of talisman bandied about in conflict between two Arabian nations.

To think of such a frame of mind, is to become disquieted about the bringing up of children. Surely they dwell in a mythological epoch, and are not the contemporaries of their parents. What can they think of them? what can they make of these bearded or petticoated giants who look down upon their games? who move upon a cloudy Olympus, following unknown designs apart from rational enjoyment? who profess the tenderest solicitude for children, and yet every now and again reach down out of their altitude and terribly vindicate the prerogatives of age? Off goes the child, corporally smarting, but morally rebellious. Were there ever such unthinkable deities as parents? I would give a great deal to know what, in nine cases out of ten, is the child's unvarnished feeling. A sense of past cajolery; a sense of personal attraction, at best very feeble; above all, I should imagine, a sense of terror for the untried residue of mankind: go to make up the attraction that he feels. No wonder, poor little heart, with such a weltering world in front of him, if he clings to the hand he knows! The dread irrationality of the whole affair, as it seems to children, is a thing we are all too ready to forget. "O, why," I remember passionately wondering, "why can we not all be happy and devote ourselves to play?" And when children do philosophise, I believe it is usually to very much the same purpose.

One thing, at least, comes very clearly out of these considerations; that whatever we are to expect at the hands of children, it should not be any peddling exactitude about matters of fact. They walk in a vain show, and among mists and rainbows; they are passionate after dreams and unconcerned about realities; speech is a difficult art not wholly learned; and there is nothing in their own tastes or purposes to teach them what we mean by abstract truthfulness. When a bad writer is inexact, even if he can look back on half a century of years, we charge him with incompetence and not with dishonesty. And why not extend the same allowance to imperfect speakers? Let a stockbroker be dead stupid about poetry, or a poet inexact in the details of business, and we excuse them heartily from blame. But show us a miserable, unbreeched, human entity, whose whole profession it is to take a tub for a fortified town and a shaving-brush for the deadily stiletto, and who passes three-fourths of his time in a dream and the rest in open self-deception, and we expect him to be as nice upon a matter of fact as a scientific expert bearing evidence. Upon my heart, I think it less than decent. You do not consider how little the child sees, or how swift he is to weave what he has seen into bewildering fiction; and that he cares no more for what you call truth, than you for a gingerbread dragoon.

I am reminded, that the child is very inquiring as to the precise truth of stories. But indeed this is a very different matter, and one bound up with the subject of play, and the precise amount of playfulness, or playability, to be looked for in the world. Many such burning questions must arise in the course of nursery education. Among the fauna of this planet, which already embraces the pretty soldier and the terrifying Irish beggarman, is, or is not, the child to expect a Bluebeard or a Cormoran? Is he, or is he not, to look out for magicians, kindly and potent? May he, or may he not, reasonably hope to be cast away upon a desert island, or turned to such diminutive proportions that he can live on equal terms with his lead soldiery, and go a cruise in his own toy schooner? Surely all these are practical questions to a neophyte entering upon life with a view to play. Precision upon such a point, the child can understand. But if you merely ask him of his past behaviour, as to who threw such a stone, for instance, or stuck such and such a match; or whether he had looked into a parcel or gone by a forbidden path—why, he can see no moment in the inquiry, and it is ten to one, he has already half forgotten and half bemused himself with subsequent imaginings.

It would be easy to leave them in their native cloud-land, where they figure so prettily—pretty like flowers and innocent like dogs. They will come out of their gardens soon enough, and have to go into offices and the witness-box. Spare them yet awhile, O conscientious parent! Let them doze among their playthings yet a little! for who knows what a rough, warfaring existence lies before them in the future?

'Childhood'

By Emile Durkheim

Teaching children, Durkheim points out, is very different from teaching adults. They have different needs, and these needs must be respected if a sound education is to take place. Their need for movement, for opportunities to take initiative, for intellectual challenges which are demanding, but not too demanding, for opportunities to develop habits—all these be taken into account in early education. We do children a great disservice not to help them transform their spontaneous, impulsive activity into regulated and coordinated thinkings and doings, which, in turn, can give shape and purpose to their daily lives.

This transformation is a complex affair. It involves not only self-control, but the ability to form ideals and principles that then regulate one's daily life. Self-control assumes the formation of a myriad of intellectual, social and physical habits which respond to the child's need for order and continuity. It is this order and continuity that is an essential component of any moral life.

A love of order is not in itself a love of living one's life in a moral way. But order and continuity are the seeds of this love. It is for this reason that a teacher must pay close attention to the formation of habits in childrens' early lives, while at the same time utilizing their spontaneity and freshness in the development of their intellectual creativity.

First published in France as 'Enfance' with F. Buisson in Nouveau Dictionnaire de pedagogie et d'instruction premaire, *published under the direction of F. Buisson, Hachette, Paris, pp. 552-3.*

Reprinted here by permission of Routledge and Kegan Paul, from Durkheim: Essays of Morals and Education, *ed. by W. S. F. Pickering.*

Childhood, in the strict etymological sense, is the age when the man to be cannot yet speak (from the Latin *infans*, not speaking). But common practice has increasingly been inclined to extend the period to which this word is applied; it should, says Littré, extend 'from birth to approximately the age of seven'; but he adds that in popular usage it extends 'a little further than that, to the age of thirteen or fourteen'. The *Dictionnaire de l'Académie* has 'to the age of twelve or thereabouts'.

From the point of view which concerns us, it is useful to make a clear distinction between these two interpretations, for they correspond to two quite different periods of education. On the one hand, 'early childhood', including only the first three or four years, to which, in recent times, 'child psychology' or the study of the early phenomena of the small child's physical, intellectual, and moral life has turned its attention; and on the other hand, the 'second period of childhood' or childhood in the more usual and general sense of the word, which interpretation leaves aside the very special questions of the physiology and psychology of early childhood and refers to the normal period of education and instruction.

In this article, we shall deal only with the second of these subjects, in other words, we shall discuss childhood in the usual sense of the word.

First, we have to ask ourselves what the characteristics of childhood and the natural laws of that period of life are, and consequently, the quite general conditions that the science of education must satisfy.

All the distinctive features of childhood, and in particular those which education must take account of, derive from the definition of childhood itself. The essential function of this age, the role and purpose assigned to it by nature, may be summed up in a single word: it is the period of *growth*, that is to say, the period in which the individual, in both the physical and moral sense, does not yet exist, the period in which he is made, develops and is formed. What is needed then for growth to take place? What does this phenomenon necessarily suppose in the person where it occurs? Two conditions are assumed, which are always the same in all domains and in the most diverse forms: on the one hand weakness and on the other, mobility. These are, one might say, two aspects of the same situation: the person who grows finds himself in a sort of unstable and constantly changing equilibrium; he grows because he is incomplete, because he is weak, because there is still something he lacks. And he grows because deep in his nature there is a force for change, for transformation or rather formation and rapid assimilation which permits his to undergo constant modification until he attains full development.

In everything the child is characterized by the very instability of his nature, which is the law of growth. The educationalist is presented not with a person wholly formed - not a complete work or a finished product - but with a *becoming*, an incipient being, a person in the process of formation. Everything in child psychology and in educational theory derives from the essential charactistic of this age, which is sometimes manifest in the negative form - as the weakness and imperfection of the young person - and at other times in the positive form as strength and need for movement.

What is the child from the physical point of view? He is the puniest of beings, a small body that the merest blow can break, that the slightest illness imperils, a collection of muscles, nerves, and organs which are, so to speak, made of milk and which only form, develop and increase in strength by their being placed in a wonderful environment of careful attention, of consideration, of favourable circumstances and protective influences. Physical childhood is essentially weakness in itself from birth to well beyond the age of twelve mentioned in the *Dictionnaire de l'Académie*. The child cannot fend for itself and begins and continues to grow only through the ceaseless intervention of the parents or their substitutes. Yet on the other hand, what rapidity of growth, what marvels there are in the development of this weak little body which unfolds its limbs, takes shape, hardens and grows though no man can say how, which changes before one's very eyes and is constantly in process of renewal. There is in all of this a power of movement, of growth and development whose ceaseless progress, intensity and inexhaustible exuberance baffle the imagination.

And if we turn to the mental aspect, the same two characteristics are apparent. Whichever stage in the period of childhood is chosen for consideration, one is always confronted with an intelligence which is at one and the same so weak and fragile, so newly-formed and delicately constituted, endowed with such limited faculties and acting, as it

were, in such a miraculous way, that one cannot help trembling with fear, when one gives the matter thought, for the safety of this delightful but fragile mechanism. And at the same time, the mechanism is never still; from one day to the next it generates, so to speak, new parts; it never stops. Do not ask it to come to rest; rather than remain idle it runs to no purpose at all; it is capable of everything except rest and inertia. It is fickle, changeable, capricious, full of disappointments and pleasant surprises.

Lastly, the moral aspect evinces the same weakness and mobility. The child's expressions of will are the faintest of impressions and are scarcely traces. As a rule, neither good nor evil is very deep-rooted in his nature; he is incapable of great and sustained effort; good resolutions are no sooner made than forgotten. But, at the same time, what eagerness greets every novelty! This diminutive *conscience* is a veritable kaleidoscope. The most varied mental states, the most contradictory passions and attitudes follow one another in succession: laughter gives way to tears, playful submissiveness to stubborn resistance, outbursts of tenderness to explosions of anger. These passions and enthusiasms wane just as quickly as they are aroused. Nothing is ever definitive. Everything is continually made and unmade.

It is the duty of the educationalist to bear in mind this dual character of the child whom he undertakes to train in every aspect of that process. Whether it is the senses, the intelligence or the will which is concerned, he knows that the most fragile of organisms has been placed in his hands, an organism which is scarcely formed and which is so tender and soft that he must always beware of exhausting its strength and of interfering with its growth by wishing to hasten it. And, as important throughout this period to discover what the precise needs are that correspond to it, what powers lie at the child's disposal, and the exact level and true extent of his faculties, the first law of teaching is to adapt the education the child receives as closely as possible to the level of his capabilities. In the most rigorously ideal conditions, the tutor should ask himself, as he embarks on each exercise, each moral or in-

tellectual lesson: has my pupil really reached this stage? might I not be over or underestimating his present capabilities? Without taking this concern too far, one may say that nothing is of more benefit to the tutor than frequently to call to mind the weakness of childhood, the allowances he should make for it and the progress which, taking everything into consideration, the very child who seems to be making the least progress, has already achieved, though this may not be apparent. So much for the first of the two points of view we have distinguished.

The second is no less important, thought the attitude it implies is somewhat more complex and tricky.

On the one hand, it is plainly evident that one must take into account the child's acutely felt need for movement which, to varying degrees, subsists until adolescence. Any attempt at brutal repression of this tendency would incur the risk of extinguishing the flame which must be kindled. It would choke the keen and joyous impusles of a young life, of a strength which is as yet ill-balanced though powerful, in its weakness, by virtue of its very mobility. One must, for the sake of the child, beware of the fatigue which nullifies all efforts, its own as well as its tutor's. And fatigue does not occur only when too much is demanded of the child's faculties, but also when its free development is inhibited. This is not all, for one can get the child to work harder and apply himself more by learning how to yield to this highly imperious natural need of his, by making frequent changes of subject, by ending the lesson at the precise moment attention wanes and by allowing the pupil some degree of initiative, freedom and movement. He should set about his work with the same wholeheartedness he puts into play, with all his being, with that plenitude of activity, that passion and vigour which never tire him so long as they are expended freely, spontaneously and naturally. One can only hope to attain this result from the sort of educational system which makes special allowances for all the child's pleasures, such as varied activity, free movement and unhindered development.

But on the other hand, one should not lose sight of the fact that this lack of continuity and equilibrium is a state which cannot last: it has to be outgrown. The child must learn to regulate and coordinate his actions; he must not remain the victim of circumstances, dependent on the sudden shifts of his mood and the incidents of life outside him; let him learn to control himself, to contain and master himself and formulate his own principles; let him acquire the taste for discipline and order in his conduct. As we have shown in 'Education',[2] self-control, the power to contain, regulate and overcome oneself is one of the essential characteristics of the individual. In this respect a veritable metamorphosis is required. The state that has to be created appears to be at the opposite pole from the one which we set out with.

Happily, nature is of such richness that it provides us with the very instruments of action this transformation requires; we need only learn to apply them. We obtain the remedy from the same source as the trouble.

Whilst the child is a sort of anarchist, ignorant of all the rules, restraints and consequences, he is also a little traditionalist, even a stick-in-the-mud. If he is made to repeat a movement several times over, he will repeat it *ad infinitum*. The stories he knows best and which he has heard the most often are those he clamours for most enthusiastically; he does not tire of hearing them again. He refuses to eat with a different knife and fork from those he is accustomed to and to sleep in any other bed than his own. He would sooner go without food or sleep. Though, in some ways, he seems enamoured of novelties and changes, he would also appear to have a true horror of all change and novelty. These two sentiments, however contradictory, are each effects of one and the same cause: his instability. It is precisely because he never ceases changing that every state, movement or idea which happens to be repeated a certain number of times assumes, by virtue of this repetition, a power - a force of action which cannot be resisted because it has nothing to counterbalance it. Other states have no hold over him, just because they are fleeting and superficial. Hence any state which succeeds in acquiring some fixity, however tenuous it may be, tends of itself to be repeated, and becomes a need which can easily be tyrannical unless care is taken. *For this reason, it is very easy to make the child acquire habits.*

The power which habit has over him as a result of the instability of his psychic life allows such instability to be corrected and contained. The taste for regular habits is already an early form of the taste for order and continuity. It is like an initiation into moral life and can begin very early; for almost as soon as he is born it is advisable to make him acquire set habits in all that concerns the principle circumstances of his existence. If this first seed is nurtured with prudence and wisdom, the child's life will gradually and progressively cease to present the contradictory spectacle of extreme mobility which alternates with an almost manic routine. Its fleeting and mobile aspects will become fixed; it will become regularized and thoroughly ordered. Admittedly, this somewhat mechanical order does not in itself possess any great moral value, but it paves the way for a superior quality of order. The taste for regularity is not yet respect for rule and duty, but it is on the way to becoming so. And, moreover, we have seen in the article entitled 'Education',[3] how it is possible and relatively easy to impart to the child the sentiment of moral authority and discipline, which constitutes the second stage in the formation of character and will. So nature does in fact place in our hands the means necessary for transcending it.

Notes

1 [Ferdinand Edouard Buisson (1841-1932) was largely responsible with Jules Ferry (1832-93) for the organization of primary education. He was director of primary education from 1879 to 1896, then professor of the science of education at the Sorbonne, from 1896 for ten years. In 1902 he was made a member of the Chamber of Deputies and one result was that Durkheim was appointed to the Sorbonne to take over much of his lecturing. Buisson's academic interests were more in psychology than in sociology. -W.S.F.P.]

2 [1911c(1); reproduced in *Education et sociologie* (1922a/t.1956a).-W.S.F.P.]

3 [ibid.]

4 [ibid.]

5 [1911c(3); reproduced in *Education et sociologie* (1922a/t.1956a).-W.S.F.P.]

The Man Who Loved Children

By Randall Jarrell

Randall Jarrell was a distinguished critic and poet, among whose published works are Poetry and the Age *(1953),* Pictures from an Institution, *(1968),* The Lost World *(1966),* Jerome *(1971), and* The Complete Poems *(1969).*

Christina Stead's The Man Who Loved Children *was published in 1940 by Holt, Rinehart and Winston. Although Robert Lowell hailed it as "a classic," adding that "there are very few novels in English that are as large and as beautifully written," and although Hortense Calisher called it "a wonderful book," it did not receive widespread critical acclaim. Perhaps, with time, its flaws will recede in importance as its more positive qualities are better understood. No one recognized those qualities better than Randall Jarrell, who wrote:*

> The Man Who Loved Children *knows as few books have ever known—knows specifically, profoundly, exhaustively—what a family is: if all mankind had been reared in orphan asylums for a thousand years, it could learn to have families again by reading* The Man Who Loved Children. *Tolstoy said that 'each unhappy family is unhappy in a way of its own—' a way that it calls happiness; the Pollits, a very unhappy family, are unhappy in a way almost unbelievably their own. And yet as we read we keep thinking: "How can anything so completely itself, so completely different from me and mine, be, somehow, me and mine?" The book has an almost frightening power of remembrance; and so much of our earlier life is repressed, forgotten, both in the books we read and the memories we have, that this seems friendly of the book, even when what it reminds us of is terrible. A poem says, "O to be a child again, just for tonight!" As you read* The Man Who Loved Children *it is strange to have the wish come true.*

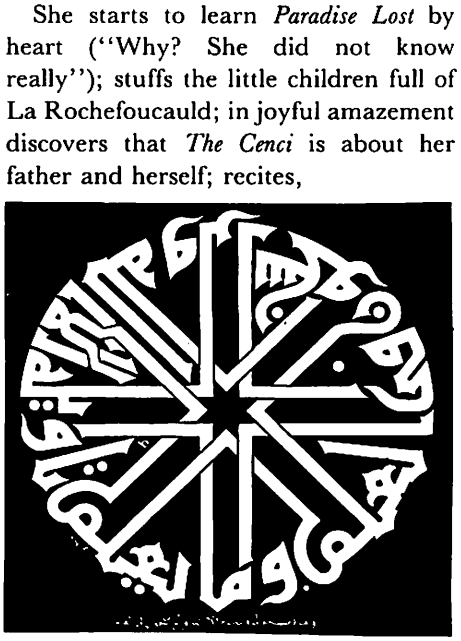
We cannot reprint Jarrell's marvellous introduction (which he entitled "An Unread Book") in its entirety, but we can at least present the portion of that Introduction which deals specifically with Louie and adolescence. If Christina Stead's book is ever reappraised, it will probably not be because critical canons have changed, but because critics will have achieved a better understanding of the relationship between literature and language and childhood.

We are grateful to Mrs. Mary Jarrell for granting permission to reprint this excerpt.

A description of Louie ought to begin with *Louie knew she was the ugly duckling.* It is ugly ducklings, grown either into swans or into remarkably big, remarkably ugly ducks, who are responsible for most works of art; and yet how few of these give a truthful account of what it was like to be an ugly duckling!— it is almost as if the grown, successful swan had repressed most of the memories of the duckling's miserable, embarrassing, magical beginnings. (These memories are deeply humiliating in two ways: they remind the adult that he once was more ignorant and gullible and emotional than he is; and they remind him that he once *was*, potentially, far more than he is.) Stumbling through creation in awful misery, in oblivious ectasy, the fat, clumsy twelve- or thirteen-year-old Louie is, as her teacher tells her, one of those who "will certainly be famous." We believe this because the book is full of the evidence for it: the poems and plays Louie writes, the stories she tells, the lines she quotes, the things she says. The usual criticism of a novel about an artist is that, no matter how real he is as a man, he is not real to us as an artist, since we have to take on trust the works of art he produces. We do not have to take on trust Louie's work, and she is real to us as an artist.

Someone in a story says that when you can't think of anything else to say you say, "Ah, youth, youth!" But sometimes as you read about Louie there *is* nothing else to say: your heart goes out in homesick joy to the marvellous inconsequential improbable reaching-out-to-everything of the duckling's mind, so different from the old swan's mind, that has learned what its interests are and is deaf and blind to the rest of reality. Louie says, "I wish I had a Welsh grammar." Sam says, "Don't be an idiot! What for?" Louie answers: "I'd like to learn Welsh or Egyptian grammar; I could read the poetry Borrow talks about and I could read *The Book of the Dead.*"

She starts to learn *Paradise Lost* by heart ("Why? She did not know really"); stuffs the little children full of La Rochefoucauld; in joyful amazement discovers that *The Cenci* is about her father and herself; recites,



A yellow plum was given me and in return a topaz fair I gave,
No mere return for courtesy but that our friendship might outlast the grave,

indignantly insisting to the grown-ups that it *is* Confucius; puts as a motto on her wall, *By my hope and faith, I conjure thee, throw not away the hero in your soul;* triumphantly repeats to that little tyrant of her fields, Sam-the-Bold:

The desolator desolate,
The tyrant overthrown,
The arbiter of other's fate
A suppliant for his own!

Louie starts out on her own *Faust,* a "play, called *Fortunatus,* in which a student sitting alone in his room in the beaming moon, lifts his weary head from the book and begins by saying,

The unforgotten song, the solitary song,
The song of the young heart in the age-old world,
Humming on new May's reeds transports me back
To the vague regions of celestial space . . ."

For the teacher whom she loves Louie creates "a magnificent project, the Aiden cycle . . . a poem of every conceivable form and also every conceivable meter in the English language," all about Miss Aiden. She copies the poems into an out-of-date diary, which she hides; sometimes she reads them to the children in the orchard "for hours on end, while they sat with rosy, greedy faces upturned, listening." As Henny and Sam shriek at each other downstairs, Louie tells the children, lying loosely in bed in the warm night, the story of *Hawkins, the North Wind.* Most of Louie's writings are so lyrically funny to us that as we laugh we catch our breath, afraid that the bubble will break. At *Hawkins,* a gruesomely satisfying story different from any story we have read before, we no longer laugh, nor can we look down at the story-teller with a grown-up's tender, complacent love for a child: the story is dark with Louie's genius and with Christina Stead's.

Best of all is *Tragos: Herpes Rom (Tragedy: The Snake-Man).* Louie writes it, and the children act it out, for Sam's birthday. It is written in a new language Louie has made up for it; the language-maker Sam says angrily, "Why isn't it in English?" and Louie replies, "Did Euripides write in English?" Not only is the play exactly what Louie would have written, it is also a work of art in which the relations between Louie and her father, as she understands them, are expressed with concentrated, tragic force. Nowhere else in fiction, so far as I know, is there so truthful and satisfying a representation of the works of art the ugly duckling makes up, there in the morning of the world.

Louie reads most of the time—reads, even, while taking a shower: "her wet fingers pulped the paper as she turned." Her life is accompanied, *ostinato,* by *always has her nose stuck in a book . . . learn to hold your shoulders straight . . . it will ruin your eyes.* Louie "slopped liquids all over the place, stumbled and fell when carrying buckets, could never stand straight to fold the sheets and tablecloths from the wash without giggling or dropping them in the dirt, fell over invisible creases in rugs, was unable to do her hair neatly, and was always leopard-spotted yellow and blue with old and new bruises. . . . She acknowledged her unwieldiness and unhandiness in this little world, but she had an utter contempt for everyone associated with her, father, stepmother, even brothers and sister, an innocent contempt which she never thought out, but which those round her easily recognized." The Louie who laconically holds her scorched fingers in the candle-flame feels "a growling, sullen power in herself . . . She went up to bed insulted again. 'I will repay,' she said on the stairs, halting and looking over the banisters, with a frown." When the world is more than she can bear she screams her secret at it: " 'I'm the ugly duckling, you'll see,' shrieked Louie."

Most of the time she knows that she is better and more intelligent than, different from, the other inhabitants of her world; but the rest of the time she feels the complete despair—the seeming to oneself wrong, *all* wrong, about everything, *everything*—that is the other, dark side of this differentness. She is a force of nature, but she is also a little girl. Heart-broken when her birthday play is a shameful failure, like so much of her life at home, Louie "began to squirm and, unconsciously holding out one of her hands to Sam, she cried, 'I am so miserable and poor and rotten and so vile [the words *rotten* and *vile* are natural, touching reminiscences of Henny's tirade-style] and melodramatic, I don't know what to do. I don't know what to do. I can't bear the daily misery . . .' She was bawling brokenly on the tablecloth, her shoulders heaving and her long hair, broken loose, plastered over her red face. 'No wonder they all laugh at me,' she bellowed. 'When I walk along the street, everyone looks at me, and whispers about me, because I'm so messy. My elbows are out and I have no shoes and I'm so big and fat and it'll always be the same. I can't help it, I can't help it . . . They all laugh at me: I can't stand it any more . . .' Coming to the table, as to a jury, she asked in a firmer voice, but still crying, 'What will become of me? Will life go on like this? Will I always be like this?' She appealed to Sam, 'I have always been like this: I can't live and go on being like this?' "

And Sam replies: "Like what? Like what? I never heard so much idiotic drivel in my born days. Go and put your fat head under the shower."

To Louie the world is what won't let her alone. And the world's interferingness is nothing to Sam's: Sam—so to speak—wakes her up and asks her what she's dreaming just so as to be able to make her dream something different; and then tells her that not every little girl is lucky enough to have a Sam to wake her up. To be let alone! is there any happiness that compares with it, for someone like Louie? Staying with her mother's relatives in the summer, she feels herself inexplicably, miraculously given a little space of her own—is made, for a few weeks, a sort of grown-up by courtesy. And since Louie has "a genius for solitude," she manages to find it even at home. Henny may scold her and beat her, but Henny does leave her alone ("It is a rotten shame, when I think that the poor kid is dragged into all our rotten messes"), and Louie loves her for it—when Sam talks to Louie about her real mother, Louie retorts, "Mother is my mother," meaning Henny.

At school Louie "was in heaven, at

home she was in a torture chamber." She never tells anyone outside "what it is like at home . . . no one would believe me!" To the ordinary misery of differentness is added the misery of being the only one who sees the endless awful war between Henny and Sam for what it is: "Suddenly she would think, *Who can see aught good in thee/Soul-destroying misery?* and in this flash of intelligence she understood that her life and their lives were wasted in this contest and that the quarrel between Henny and Sam was ruining their moral natures." It is only Louie who tries to do anything about it all: with a young thing's fresh sense and ignorance and courage she tries to save the children and herself in the only way that she knows—what she does and what she can't quite make herself do help to bring the book to its wonderful climax. It is rare for a novel to have an ending as good as its middle and beginning: the sixty or seventy pages that sum up *The Man Who Loved Children,* bring the action of the book to its real conclusion, are better than even the best things that have come before.

As he looks at Louie Sam "can't understand what on earth caused this strange drifting nebula to spin." By the time we finish the book we have been so thoroughly in sympathy and in empathy with Louie that we no longer need to understand—we are used to being Louie. We think about her, as her teacher thinks: "It's queer to know everything and nothing at the same time." Louie knows, as she writes in her diary, that "everyday experience which is misery degrades me"; she mutters aloud, "If I did not know I was a genius, I would die: why live?"; a stranger in her entirely strange and entirely familiar family, she cries to her father: "I know something, I know there are people not like us, not muddleheaded like us, better than us." She knows that soon she will have escaped into the world of the people better than us, the great objective world better than Shakespeare and Beethoven and Donatello put together—didn't they all come out of it? Louie is a potentiality still sure that what awaits it in the world is potentiality, not actuality. That she is escaping from some Pollits to some more Pollits, that she herself will end as an actuality among actualities, an accomplished fact, is an old or middle-aged truth or half-truth that Louie doesn't know. As Louie's story ends she has gone for a walk, "a walk around the world"; she starts into the future accompanied by one of those Strauss themes in which a whole young orchestra walks springily off into the sunshine, as though going away were a final good.

As you read *The Man Who Loved Children* what do you notice first? How much life it has, how natural and original it is; Christina Stead's way of seeing and representing the world is so plainly different from anyone else's that after a while you take this for granted, and think cheerfully, "Oh, she can't help being original." The whole book is different from any book you have read before. What other book represents—tries to represent, even—a family in such conclusive detail?

Aristotle speaks of the pleasure of recognition; you read *The Man Who Loved Children* with an almost ecstatic pleasure of recognition. You get used to saying, "Yes, that's the way it is"; and you say many times, but can never get used to saying, "I didn't know *anybody* knew that." Henny, Sam, Louie, and the children—not to speak of some of the people outside the family—are entirely real to the reader. This may not seem much of a claim: every year thousands of reviewers say it about hundreds of novels. But what they say is conventional exaggeration—reality is rare in novels.

Many of the things of the world come to life in *The Man Who Loved Children:* the book has an astonishing sensory immediacy. Akin to this is its particularity and immediacy of incident; it is full of small, live, characteristic, sometimes odd or grotesque details that are at once surprising enough and convincing enough to make the reader feel, "No, nobody could have made that up." And akin to these on a larger scale are all the "good scenes" in the book: scenes that stand out in the reader's memory as in some way remarkable—as representing something, summing something up, with real finality. There is an extra-

ordinary concentration of such scenes in the pages leading up to the attempted murder and accomplished suicide that is the climax of the book: Ernie's lead, Louie's play, Louie's breakdown after it, Ernie's money box, Ernie's and Louie's discoveries before Miss Aiden comes, Miss Aiden's visit, Henny's beating of Ernie, the end of Henny's love affair, Henny's last game of solitaire, the marlin, Sam and the bananas, the last quarrel. That these scenes come where they do is evidence of Christina Stead's gift for structure; but you are bewildered by her regular ability to make the scenes that matter most the book's best imagined and best realized scenes.

Without its fairly wide range of people and places, attitudes and emotions, *The Man Who Loved Children* might seem too concentrated and homogeneous a selection of reality. But the people outside the Pollit household are quite varied: for instance, Louie's mother's family, Sam's and Henny's relatives, some of the people at Singapore, Henny's Bert Anderson, the "norphan" girl, Louie's friend Clare. There are not so many places—Washington, Ann Arbor, Harper's Ferry, Singapore—but each seems entirely different and entirely alive. As he reads about Louie's summers the reader feels, "So this is what Harper's Ferry looks like to an Australian!" European readers are used to being told what Europe looks like to an American or Russion of genius; we aren't, and we enjoy it. (Occasionally Christina Stead has a kind of virtuoso passage to show that she is not merely a foreign visitor, but a real inhabitant of the United States; we enjoy, and are amused at, it.) Because *The Man Who Loved Children* brings to life the variety of the world outside the Pollit household, the happenings inside it—terrible as some of them are—do not seem depressing or constricted or monotonous to the reader: "within, a torment raged, day and night, week, month, year, always the same, an endless conflict, with its truces and brething spaces; out here were a dark peace and love." And, too, many of the happenings inside the family have so much warmth and habitual satisfaction, are so pleasant or cozy or funny, are so *interesting*, that the reader forgets for a moment that this wonderful playground is also a battlefield.

Children-in-families have a life all their own, a complicated one. Christina Stead seems to have remembered it in detail from her childhood, and to have observed it in detail as an adult. Because of this knowledge she is able to imagine with complete realism the structures, textures, and atmosphere of one family's spoken and unspoken life. She is unusually sensitive to speech-styles, to conversation-structures, to everything that makes a dialogue or monologue a sort of self-propagating entity; she knows just how family speech is different from speech outside the family, children's speech different from adults'. She gives her children the speeches of speakers to whom a word has the reality of a thing: a thing that can be held wrong-side-up, played with like a toy, thrown at someone like a toy. Children's speech-ways—their senseless iteration, joyous nonsense, incremental variation, entreaties and insults, family games, rhymes, rituals, proverbs with the force of law, magical mistakes, occasional uncannily penetrating descriptive phrases—are things Christina Stead knows as well as she knows the speech-ways of families, of people so used to each other that half the time they only half-say something, imply it with a family phrase, or else spell it out in words too familiar to be heard, just as the speaker's face is too familiar to be seen. The book's household conversations between mother and child, father and child, are both superficially and profoundly different from any conversation in the world outside; reading such conversations is as satisfying as being given some food you haven't tasted since childhood. (After making your way through the great rain-forest of the children's speech, you come finally to one poor broomstick of a tree, their letters: all the children—as Ernie says, laughing—"start out with 'Dear Dad, I hope you are well, I am well, Mother is well," and then they get stuck.") The children inherit and employ, or recognize with passive pleasure, the cultural scraps—everything rom Mozart to *Hiawatha*—that are a part of the sounds the grown-ups make. Father and Mother are gods but (it is strange!) gods who will sometimes perform for you on request, taking part in a ritual, repeating stories or recitations, pretending to talk like a Scot or a Jew or an Englishman—just as, earlier, they would pretend to be a bear.

Christina Stead knows the awful eventfulness of little children's lives. That grown-ups seldom cry, scream, fall, fight each other, or have to be sent to bed seems very strange to someone watching children: a little child pays its debt to life penny by penny. Sam is able to love a life spent with children because he himself has the insensate busy-ness of a child. Yet, wholly familiar as he is, partly child-like as he is, to the children he is monstrous—not the singular monster that he is to us, but the ordinary monster that any grown-up is to you if you weigh thirty or forty pounds and have your eyes two feet from the floor. Again and again the reader is conscious of Christina Stead's gift for showing how different *anything* is when looked at from a really different point of view. Little Evie, "fidgeting with her aunt's great arm around her, seemed to be looking up trustfully with her brown eyes, but those deceptive eyes were full of revolt, mistrust, and dislike"; she averts her gaze from her aunt's "slab cheeks, peccary skin . . . the long, plump, inhuman thigh, the glossy, sufficient skirt, from everything powerful, coarse, and proud about this great unmated mare . . . "Oh,' thought Evie to herself, 'when I am a lady with a baby, I won't have all those bumps, I won't be so big and fat, I will be a little woman, thin like I am now and not fat in front or in the skirt.' "

One of the most obvious facts about grown-ups, to a child, is that they have forgotten what it is like to be a child. The child has not yet had the chance to know what it is like to be a grown-up; he believes, even, that being a grown-up is a mistake he will never make—when *he* grows up he will keep on being a child, a big child with power. So the child and grown-up live in mutual love, misunderstanding, and distaste. Children shout and play and cry and want candy; grown-ups say *Ssh!* and work and scold

and want steak. There is no disputing tastes as contradictory as these. It is not just Mowgli who was raised by a couple of wolves; any child is raised by a couple of grown-ups. Father and Mother may be nearer and dearer than anyone will ever be again—still, they are members of a different species. God is, I suppose, what our parents were; certainly the giant or ogre of the stories is so huge, so powerful, and so stupid because that is the way a grown-up looks to a child.

Grown-ups forget or cannot believe that they seem even more unreasonable to children than children seem to them. Henny's oldest boy Ernie (to whom money is the primary means of understanding and changing the world; he is a born economic determinist, someone with absolute pitch where money is concerned) is one of Christina Stead's main ways of making us remember how mistaken and hypocritical grown-ups seem to children. Ernie feels that he sees the world as it is, but that grown-ups are no longer able to do this: their rationalization of their own actions, the infinitely complicated lie they have agreed to tell about the world, conceals the world from them. The child sees the truth, but is helpless to do anything about it.

The Pollit children are used to the terrible helplessness of a child watching its parents war. There over their heads the Sun and the Moon, God the Father and the Holy Virgin, are shouting at each other, striking each other—the children contract all their muscles, try not to hear, and hear. Sometimes waked in darkness by the familiar sounds, they lie sleepily listening to their parents; hear, during some lull in the quarrel, a tree-frog or the sound of the rain.

Ernie feels the same helpless despair at the poverty of the family; thinking of how *many* children there already are, he implores, "Mothering, don't have another baby!" (Henny replies, "You can bet your bottom dollar on that, old sweetness.") But he does not really understand what he is saying: later on, he and the other children look uncomprehendingly at Henny, "who had again queerly become a large woman, though her hands, feet, and face remained small and narrow." One night they are made to sleep downstairs, and hear Henny screaming hour after hour upstairs; finally, at morning, she is silent. "They had understood nothing at all, except that mother had been angry and miserable and now she was still; this was a blessed relief." Their blank misunderstanding of what is sexual is the opposite of their eager understanding of what is excremental. They thrill to the inexplicably varying permissiveness of the world: here they are being allowed to laugh at, as a joke, what is ordinarily not referred to at all, or mentioned expediently, in family euphmisms!

The book is alive with their fights, games, cries of "You didn't kiss me!"—"Look, Moth, Tommy kissed you in the glass!" But their great holidays so swiftly are gone: the "sun was going down, and Sunday-Funday was coming to an end. They all felt it with a kind of misery: with such a fine long day and so many things to do, how could they have let it slip past like this?" And summer vacation is the same: the indefinite, almost infinite future so soon is that small, definite, disregarded thing, the past!

On a winter night, with nothing but the fire in the living room to warm the house, the child runs to it crying, "Oo, gee whiz, is it cold; jiminy, I'm freezing. Moth, when are we going to get the coal?" (Anyone who remembers his childhood can feel himself saying those sentences—those and so many more of the book's sentences.) And as the child grows older, how embarrassing the parent is, in the world outside: "Louie looked stonily ahead or desperately aside." And, home again, the parent moralizes, sermonizes—won't he *ever* stop talking?—to the child doing its homework, writing, writing, until finally the parent reads over the child's shoulder what is being written on the page of notebook paper: *Shut up, shut up, shut up, shut up* . . . The book follows the children into the cold beds they warm, goes with them into their dreams: when you read about Louie's hard-soft nightmare or the horseman she hears when she wakes in the middle of the night, you are touching childhood itself.

Alastair Reid is a poet and translator who is presently on the staff of The New Yorker. *This article is reprinted, with his permission, from his book* Passwords *(Boston: Little, Brown and Co.).*

The Transformations: Notes on Childhood

By Alastair Reid

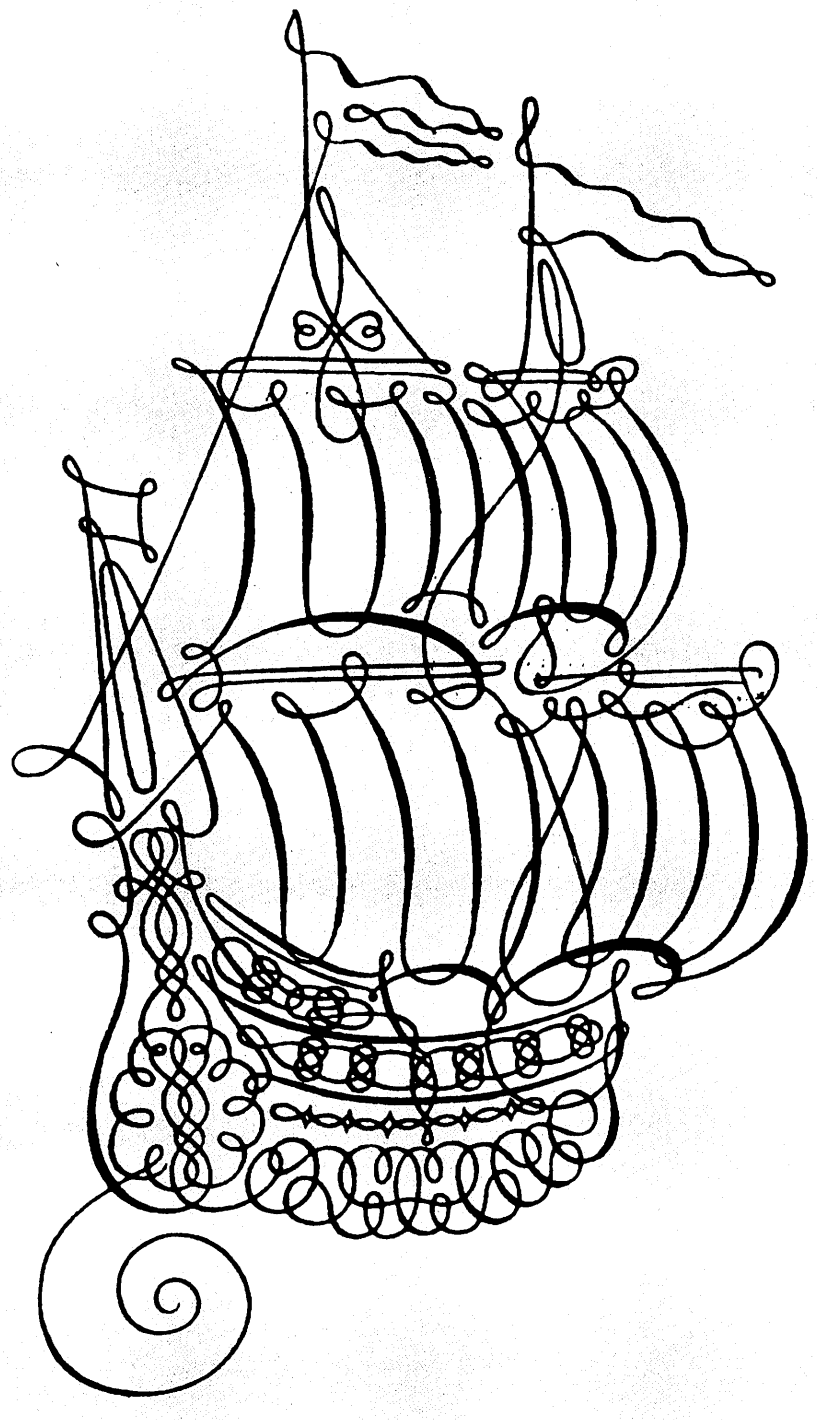
Childhood, especially for a poet, is irresistible; his preoccupation with it would be completely incomprehensible to a child. From the vantage point of his aging consciousness, he finds himself, either through the eyes of his own children or through sudden green transformations of memory, dissolving into these states of pure trance (states which he can never forgive children for being unaware of), in which a single day is a clear, prismatic present, when a glass of water, instead of being a complex molecular structure, or a lucid piece of punctuation in a disordered chain of consequences, or an image in which the whole world is somehow reflected, stands on the table as nothing more or less than a glass of water, wondrously, needing no reason or excuse for its existence. I like nothing more than to listen to people talking about their childhood. Bit by bit, they work their way through a morass of judgment and sophisticated afterthought, psychiatric blah, and scholastic roughage until they reach, if they are lucky, an unencumbered point of pure memory—a day, an instance, a happening, tragic perhaps, comic more likely, but quivering with sheer life, pure and inexplicable, like the glass of water.

What, in fact, do we save from childhood? On the surface, a miscellaneous collection of odds and ends: birth certificates, because they are so permanently necessary to prove that we exist at all, baby shoes, perhaps, because we cannot otherwise conceive of having been no more than eighteen inches tall; fluffy photographs of our bald, naked beginnings; stamps, shells, feathers, skeletons; thumbed books about gnomes, brownies, and heroes; tickets, scraps, lists, dried leaves. These are the relics and the gravestones, and are meant, in their tiny, wizened way, to evoke an aura, to suggest a state of grace; yet how shrivelled they are, as they lie in a curiously smelling drawer, waiting for the day when we are courageous enough to cremate them.

Childhood is by definition a never-never land, a place where we have unaccountably been without knowing it, a nowhere which took up all our time before we realized what time was. Children drift through their sky-blue days without any feeling of being in motion; landmarks like birthdays loom on the faraway, blurred horizon, and move so slowly that it seems they will never arrive. When I was a child, even to wait for the next day was agonizing to me; in prospect, the night seemed so long and impassable, until I grew into a faith in the fact that I *would* wake up in a different, new-made day. For children, the

future is so remote that it scarcely exists at all; the odd thing about growing up is the way in which the landmarks begin to move, faster and faster, until they are whizzing past like telephone poles. And the principal irony of childhood lies in the fact that we wander through it in an almost complete daze, unselfconscious, open-eyed, until we find ourselves gawking back at it from an age of realization, as somewhere we have been without noticing, wondering how we managed to pass the unwitting time.

But still, when we come to look at childhood, at the remove of judgment, do we see it at all? Or, instead, do we somehow accommodate it into the life we have later arrived at, trimming it to fit, forgetting its oddness and contradiction? I listen to people telling their childhood, and wonder, not just at the fact that they ever were children, but more, whether the versions of their own childhood they have come to believe in bear any relation to the small, vanished selves they have left behind. Childhood seems to them no more real than old movies, the aftermath of a story they were once told but of which they have only the vaguest recollection.



What most people do, I suspect, is save for their later, full-grown days a few places, a few set pieces, a welter of anecdote (which over the telling years grows more and more original) to serve as memory whenever it becomes necessary to explain away the unconscious, missing years. Of the original, in its original form, little remains. It is, after all, better to decide that one had a happy childhood than to admit one had a relatively unconscious one, better to select the choicest places, the most fruitful occasions, and make of them a serviceable tapestry to suit the blandest of biographers. Or it may be just as serviceable to look back on childhood as the point where everything went wrong, to find, under the unruffled surface, monsters and nightmares. No wonder psychoanalysts take so long to get to the bottom to find the early secret, the original sin — childhood is in fact bottomless, and has its own strange scale.

The principal difference between childhood and the stages of life into which it invisibly dissolves is that as children we occupy a limitless present. The past has scarcely room to exist, since, if it means anything at all, it means only the previous day. Similarly, the future is in abeyance; we are not meant to do anything about it until we reach a suitable size. Correspondingly, the present is enormous, mainly because it is all there is — a garden is as vast as Africa, and can easily become Africa, at the drop of a wish. Walks are dizzying adventures; the days tingle with unknowns, waiting to be made into wonders. Living so utterly in the present, children have an infinite power to transform; they are able to make the world into anything they wish, and they do so, with alacrity. There are no preconceptions, which is why, when a child tells us he is Napoleon, we had better behave with the respect due to a small emperor. Later in life, the transformations are forbidden; they may prove dangerous. By then, we move in a context of expectations and precedents, of past and future, and the present, whenever we

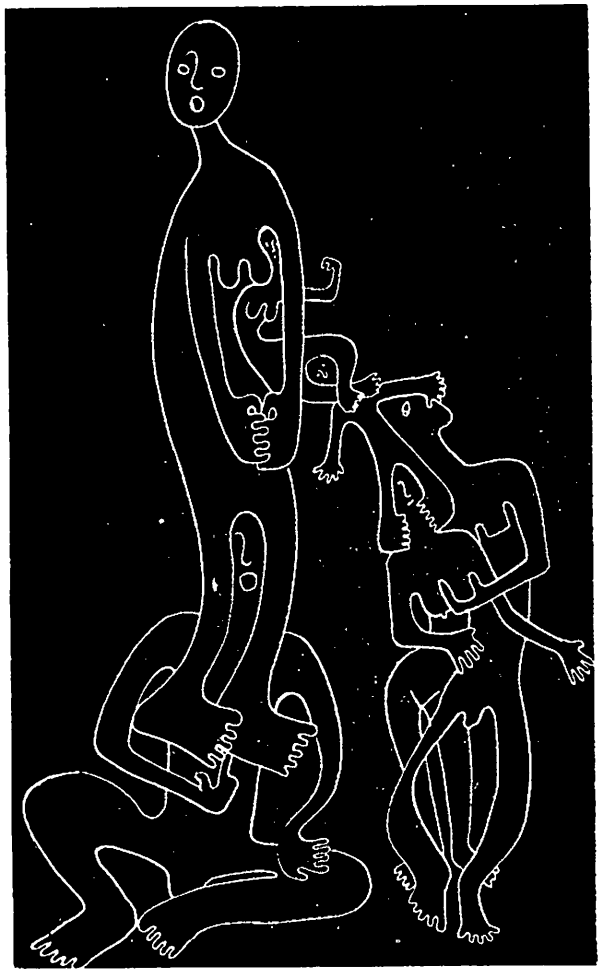
manage to catch it and realize it, is a shifting, elusive question mark, not altogether comfortable, an oddness that the scheme of our lives does not quite allow us to indulge. Habit takes over, and days tend to slip into pigeonholes, accounted for because everything has happened before, because we know by then that life is long and has to be intelligently endured. Except that, every now and again, one of these moments occurs, so transcendent in its immediacy, so amazing in its extraordinary ordinariness, that we get a sudden glimpse of what childhood was all about and of how much the present has receded before a cluttered past and an anxious future. In these odd moments, the true memory of childhood dawns. The glass of water is, amazingly, a glass of water.

Quite often, there comes a time when we try deliberately to recover childhood, revisiting a place, a house, a garden. Perhaps it would be better not to; almost inevitably it is a puzzlement, if not a downright disappointment. How wizened it is, how shrunken, how small, how unlike the mysterious nowhere we imagined we inhabited! I recall once revisiting a seaside village in Scotland where I lived as a child, a small harbor town I had gone over lovingly in what I thought was my memory, telling it house by house, hearing the high tides thud against the seawall in my sleep. Yet, when I walked around the harbor, I wondered how I could ever have been carried away by it, even in dream, so ordinary, small, and grubby it was, so unglowing, a poor stage for the wonders I remembered as having happened there in my small, broody days. The particular tree I made a profession of climbing had become only one in a series of trees, not, as it was then, the only tree in the world, Ygdrasil. And the people who remembered me now had to take their place in the context of time; they no longer belonged to the towering world of unchanging legend that my child's eyes and ears had appointed them to. They were mortal, "Don't change unless I tell you to!" cries the child to the world; and the world, instead of replying, goes quietly about its business of changing us, of turning what once was called growing up into growing old.

My own childhood, now that I look back on it with the proper distrust, seems to have been not extraordinary, for all childhoods are that, but a peculiar mixture of earth and air, of the practical and the impossible. My father was a minister of the church and moved and breathed with an extraordinary reverence for things, a reverence we absorbed simply by being in the same house with him. He did not speak often; when he did, I used to listen to him with the proper astonishment. My mother, on the other hand, was a doctor of medicine, and ran her doctoring and her household with a ribald, go-ahead, down-to-earth directness. They were, for us children, like the North and South Poles. Heaven knows what strange equilibrium they achieved, but we children were the fruit of it, and we spun dizzily from one to the other, from the no-nonsense bustle of the kitchen and surgery at one end of the house to the quiet, smoke-laden, book-lined study at the other. In between was a long corridor, our limbo. Outside was the world. Even now, I simplify, for it was never so neat; I cannot even remember whether or not there was a corridor, but there should have been. Along it, we were always in motion, disobedient this side of disaster, but busy with the odd variety of our existence.

Nevertheless, for all our participatory joy, we looked up at our parents as if we were underwater and they in the air, seeing them from below, larger than life, through the wavering prismatic surface, yet unable to call from our swaying, crystal-clear world to theirs. Our elements were separate, different. My mother was too busy to reach us, my father too shy; and we, for our part, with wonder bubbling from our mouths, did not know how to speak the first word. Even across time, nothing has broken that thin, taut meniscus, that soundless, separating glass. There comes a time when it is too late to begin talking, even to oneself.

Scotland we hardly noticed; it was no more than weather and landscape, and we lived, if we lived anywhere at all, between garden and water, in a mud-stained leaf-smelling round of errands and holidays, our feet on the ground, our heads firmly in the clouds. At school, among our friends, we spoke the local dialect bluntly and boisterously; at home, we clipped it to suit the household. As a minister's family, we had an odd immuity from the strata of local society. We know — and played with — everyone from the snotty-nosed farm children to the starched and proper county families, who envied us our worldliness. We knew worse words than they did, and used them judiciously. At the same time, however, we were foreigners, never quite belonging anywhere; we had books at home, and things obviously went on as a matter of



course in our house which never would have occurred in the rest of the town — blood and sermons, blessings and bandages.

I hovered for years between the surgery and the study, trying to decide whether I was cut out for the pulpit or the operating room; but I solved my dilemma by plunging into the mysterious countryside and by playing endless fantastic games over which, at least, I had control. The poles were noise and silence; I ran wild during the day, and in the evening I crept into the deep silence of books, unreachable. All of us kept passing and repassing one another along the length of the corridor, some on their way to burst, hungry and shouting, into the kitchen, others to tiptoe into the study, breath held, shoes in hand.

And yet, none of this is quite what I remember; it is rather the context and setting for my remembering. I recall, some years ago, taking a long voyage under sail across the Atlantic and passing the night watches — which we took alone at the wheel, under the enormous processes of the sky — by applying my memory to a particular place, a particular day, a particular time. With time — and there was plenty — I found I could recover whole periods of my life which I had not thought of since they happened. I remembered the names of those who had been in my school classes; and, with practice, I could take long walks over stretches of lost country, scrutinizing farms, trees, landmarks on the way; so that, night after night, perched alone in the middle of the Atlantic, I replayed most of my childhood like an endless movie, not for the sake of finding anything out, but, as the English say, just because it was there. It seemed particularly appropriate, for then I had no context, save for the sea, the dark, and the innumerable repetitive stars; and I sat under them, saying over to myself long lists of names I was not aware I knew — Kirkmaiden, Catyins, Linglie, Yarrowford, Pirnmill, Altgolach, Imacher, Windygates — amazing myself with their sound, seeing each place vividly in my mind's eye. It was then I realized that my childhood was not lost; all that was required to recover it was the dimension of amazement.

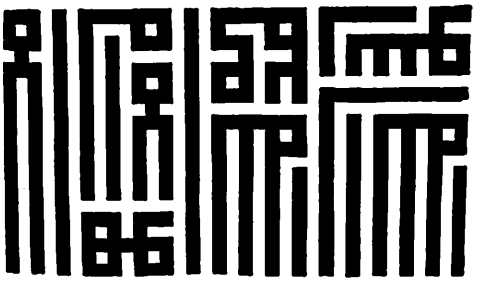
In the eyes of children, anything can happen, for so little has happened before; for us, at a remove, we know what is likely and what impossible, and so our propensity to astonishment is much less. Moreover, we tend to forget, as Christopher Fry says, that we were born naked into a world of strange sights and sounds, not fully clothed, in a service apartment, with a copy of the *Times* in our hand. This is why some of the afterthought we apply to the world of children — the books they ought to read, the things they should be interested in, the ways in which they should pass their time — is often preposterous and seems to assume that children are our idea, not theirs. Children are interested in anything except, possibly, the things they are expected to be interested in; and we might as well lay our world open to them and let them make off with whatever improbable treasure they discover for themselves.

I suppose the difficulty lies in deciding exactly who children are, in seeing them mistakenly as small replicas of ourselves, or as raw material, or as undersized animals, or as a race of miniature entertainers, or trainees, or even as income-tax deductions. I prefer to regard them — and, indeed, they demand to be regarded — as sudden visitors from an unlikely planet, frail, cogent messengers from a world which we know by name but have lost sight of, little people who are likely not only to amuse and amaze us but to remind us that life is long, and that they, as much as we, have a right to their own version of it. The mistake we mostly make is to encumber children with the versions we retain of our own childhood, to imagine that what would have been good for us, as we think we were then, will be good for them, as we think they are now. Children are entitled to their otherness, as anyone is; and when we reach them, as we sometimes do, it is generally on a point of sheet delight, to us so astonishing, but to them so natural.

J. Robert Oppenheimer was director of the Institute for Advanced Study from 1947 to his retirement in 1966. Previously he had been on the faculties of the University of California at Berkeley and California Institute of Technology at Pasadena.

Analogical Reasoning in the Scientific Community

By Robert Oppenheimer



What I am going to talk about is analogy as an instrument in science and, to a much lesser extent, some slight traits of analogies between the sciences; mostly the second theme has led to misunderstanding and limitation; as for the first theme, analogy is indeed an indispensable and inevitable tool for scientific progress. Perhaps I had better say what I mean by that. I do not mean metaphor; I do not mean allegory; I do not even mean similarity; but I mean a special kind of similarity which is the similarity of constellation between two sets of structures, two sets of particulars, that are manifestly very different but have structural parallels. It has to do with relation and interconnection. I would like to quote you a scholastic comment on analogy. It is a translation of Penido, "In a very general sense every analogy presupposes two ontological conditions; one, a plurality of real beings and thus among them an essential diversity. Monism is the born enemy of analogy. And, two, at the very heart of this multiplicity, of this inequality, a certain unity."

It is a matter about which we could argue whether these structural elements are invented by us, or whether they are discovered in the world. I find it very artificial to say that they are invented, in the sense that they are more of an artifact than the particulars which they unite and describe. I may tell one incident in the long history of astronomy and physics, which makes this very vivid for me. For practical purposes, for prophecy and ritual, the Babylonians worked out a method of predicting what days the moon would first be visible, of predicting lunar eclipses and certain rarer astronomical events. They did this by purely mathematical methods. They observed when things happened, and they got the pattern of it. They were very good. They got so good that their methods were in use in the last century in India to predict eclipses within some thirty minutes, using these two thousand year old methods. The Babylonians not only became very good, but they enjoyed it very much and they did it for fun; long after the practical reasons had gone away they published these tables, apparently as we publish articles on the internal constitution of the stars, because it is interesting. They did all of this without any celestial mechanics, without any geometry; nothing moved; there were no objects circulating around in orbits; there were no laws of motion; there was no dynamics; this was just in the field of the numbers.

You know how today we predict eclipses and first risings. It would seem to me very wrong to pretend that the mathematical regularities which were the basis of the Babylonian predictions were something they invented; it would seem to me equally wrong not to recognize in celestial mechanics as we now know it, a far deeper and more comprehensive description of regularities in the physical world. I think that not only because it is a little more useful, I think that not only because it unites more subjects, but because it reveals an aspect of the regularities of the world which was wholly unseen by the Babylonians.

Perhaps I need now to quote from Charles Peirce, and get on: "However, as metaphysics is a subject much more curious than useful, the knowledge of which, like that of a sunken reef, serves chiefly to enable us to keep clear of it, I will not trouble the reader with any more Ontology at this moment."

Whether or not we talk of discovery or of invention, analogy is inevitable in human thought, because we come to new things in science with what equipment we have, which is how we have learned to think, and above all how we have learned to think about the relatedness of things. We cannot, coming into something new, deal with it except on the

basis of the familiar and the old-fashioned. The conservatism of scientific enquiry is not an arbitrary thing; it is the freight with which we operate; it is the only equipment we have. We cannot learn to be surprised or astonished at something unless we have a view of how it ought to be; and that view is almost certainly an analogy. We cannot learn that we have made a mistake unless we can make a mistake; and our mistake is almost always in the form of an analogy to some other piece of experience.

This is not to say that analogy is the criterion of truth. One can never establish that a theory is right by saying that it is like some other theory that is right. The criterion of truth must come from analysis, it must come from experience, and from that very special kind of objectivity which characterizes science, namely that we are quite sure we understand one another and that we can check up on one another. But truth is not the whole thing; certitude is not the whole of science. Science is an immensely creative and enriching experience; and it is full of novelty and exploration; and it is in order to get to these that analogy is an indispensable instrument. Even analysis, even the ability to plan experiments, even the ability to sort things out and pick them apart presupposes a good deal of structure, and that structure is characteristically an analogical one.

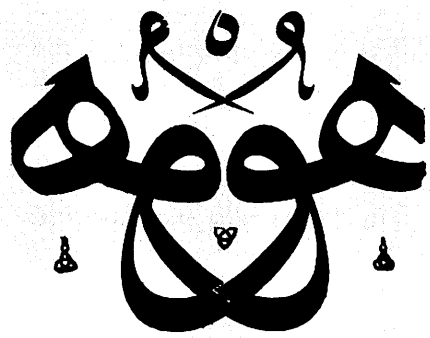
Let me read you now a few relevant and eloquent words of William James. He wrote them in one of his later accounts of pragmatism, at a time when his own good sense and shrewd observation and wisdom and humanity made him aware of the fact that to say only that an idea was true because it worked was a rather poor description of what went on in science, that something was missing from that account. This is what he wrote:

> The point I now urge you to observe particularly is the part played by the older truths. Failure to take account of it is the source of much of the unjust criticism levelled against pragmatism. Their influence is absolutely controlling. Loyalty to them is the first principle — in most cases it is the only principle; for by far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconception is to ignore them altogether, or to abuse those who bear witness for them. . . .

The analogies in physics may very well be misleading for biologists and psychologists, because of the enormous part that rather rigid formal structure plays in physics. This structure is not perhaps necessarily quantitative, though in fact much of it is quantitative. Our ability to write down synoptic relations in symbolic form, our use of formulae, enables us to talk of vast amounts of experience, very varied experience, very detailed experience, in a shorthand way; and to point sharply to mistakes, to correct error on occasion by altering only one letter, that changes everything. These examples are thus not meant as paradigms, but rather as an illustration of the fact that, in what is regarded as one of the most rigorous and certain of the sciences, we use an instrument which has been in great disrepute, because uncritically used it can confuse invention with confirmation and truth....

But for all of that I would like to say something about what physics has to give back to common sense that it seemed to have lost from it, not because I am clear that these ideas are important tools in psychological research, but because it seems to me that the worst of all possible misunderstandings would be that psychology be influenced to model itself after a physics which is not there any more, which has been quite outdated.

We inherited, say at the beginning of this century, a notion of the physical world as a causal one, in which every event could be accounted for if we were ingenious, a world characterized by number, where everything interesting could be measured and quantified, a determinist world, a world in which there was no use or room for individuality, in which the object of study was simply there and how you studied it did not affect the object, it did not affect the kind of description you gave of it, a world in which objectifiability went far beyond merely our own agreement on what we meant by words and what we are talking about, in which objectification was meaningful irrespective of any attempt to study the system under consideration. It was just the given real object; there it was, and there was nothing for you to worry about of an epistemological character. This extremely rigid picture left out a great deal of common sense. I do not know whether these missing elements will prove helpful; but at least their return may widen the resources that one can bring to any science.



What are these ideas? In our natural, unschooled talk, and above all in unschooled talk about psychological problems, we have five or six things which we have got back into physics with complete rigor, with complete objectivity, in the sense that we understand one another, with a complete lack of ambiguity and with a perfectly phenomenal technical success. One of them is just this notion that the physical world is not completely determinate. There are predictions you can make about it but they are statistical; and any event has in it the nature of the surprise, of the miracle, of something that you could not figure out. Physics is predictive, but within limits; its world is ordered, but not completely causal.

Another of these ideas is the discovery of the limits on how much we can objectify without reference to what we are really talking about in an operational, practical sense. We can say the electron has a certain charge and we do not have to argue as to whether we are looking at it to say that; it always does. We cannot say it has a place or a motion. If we say that we imply something about what we ourselves — I do not mean as people but as physicists — are doing about it.

A third point is very closely related to this; it is the inseparability of what we

are studying and the means that are used to study it, the organic connection of the object with the observer. Again, the observer is not in this case a human; but in psychology the observer sometimes is a human.

And then, as a logical consequence of this, there is the idea of totality, or wholeness. Newtonian physics, classical science, was differential; anything that went on could be broken up into finer and finer elements and analyzed so. If one looks at an atomic phenomenon between the beginning and the end, the end will not be there; it will be a different phenomenon. Every pair of observations taking the form "we know this, we then predict that" is a global thing; it cannot be broken down.

Finally, every atomic event is individual. It is not, in its essentials, reproducible.

This is quite a pack of ideas that we always use: individuality, wholeness, the subtle relations of what is seen and how it is seen, the indeterminacy and the acausality of experience. And I would only say that if physics could take all these away for three centuries and then give them back in ten years, we may well say that all ideas that occur in common sense are fair as starting points, not guaranteed to work but perfectly valid as the material of the analogies with which we start.

The whole business of science does not lie in getting into realms which are unfamiliar in normal experience. There is an enormous work of analyzing, of recognizing similarities and analogies, of getting the feel of the landscape, an enormous qualitative sense of family relations, of taxonomy. It is not always tactful to try to quantify; it is not always clear that by measuring one has found something very much worth measuring. It is true that for the Babylonians it was worth measuring — noting the first appearances of the moon—because it had a practical value. Their predictions, their prophecies, and their magic would not work without it; and I know that many psychologists have the same kind of reason for wanting to measure. It is a real property of the real world that you are measuring, but it is not necessarily the best way to advance true understanding of what is going on; and I would make this very strong plea for pluralism with regard to methods that, in the necessarily early stages of sorting out an immensely vast experience, may be fruitful and may be helpful. They may be helpful not so much for attaining objectivity, nor for a quest for certitude which will never be quite completely attained. But there is a place for the use of naturalistic methods, the use of descriptive methods. I have been immensely impressed by the work of one man who visited us last year at the Institute, Jean Piaget. When you look at his work, his statistics really consist of one or two cases. It is just a start; and yet I think he has added greatly to our understanding. It is not that I am sure he is right, but he has given us something worthy of which to enquire whether it is right; and I make this plea not to treat too harshly those who tell you a story, having observed carefully without having established that they are sure that the story is the whole story and the general story.

It is of course in that light that I look at the immense discipline of practice, that with all its pitfalls, with all the danger that it leads to premature and incorrect solutions, does give an incredible amount of experience. Physics would not be where it is, psychology would not be where it is if there were not a great many people willing to pay us for thinking and working on their problems.

If any of this is true there is another thing that physicists and psychologists have in common: we are going to have quite a complicated life. The plea for a plural approach to exploration, the plea for a minimal definition of objectivity that I have made, means that we are going to learn a terrible lot; there are going to be many different ways of talking about things; the range from almost understood practice to recondite and abstract thought is going to be enormous. It means there are going to have to be a lot of psychologists, as there are getting to be a lot of physicists. When we work alone trying to get something straight it is right that we be lonely; and I think in the really decisive thoughts that advance a science loneliness is an essential part. When we are trying to do something practical it is nice to have an excess of talent, to have more sailors than are needed to sail the ship and more cooks than are needed to cook the meal; the reason is that in this way a certain elegance, a certain proper weighing of alternatives, guides the execution of the practical task.

We are, for all kinds of reasons, worrying about how our scientific community is to be nourished and enough people who are good enough are to come and work with us. And then on the other side we are worried about how we are to continue to understand one another, and not get totally frustrated by the complexity and immensity of our enterprises.

I think there are good reasons of an inherent kind, beside the competitive compulsion of the communist world, why we would do well to have more and better scientists. I know that exhortation, money, patronage, will do something about this; but I do not think that is all that will be needed. I think that if we are to have some success it must be because, as a part of our culture, the understanding, the life of the mind, the life of science, in itself, as an end as well as a means, is appreciated, is enjoyed, and is cherished. I think that has to be a very much wider thing in the community as a whole, if we are to enjoy with the community as a whole the healthy relations without which the developing powers of scientific understanding, prediction, and control are really monstrous things.

It may not be so simple, to have in the community at large some genuine experience of the pleasures of understanding and discovery. It may not be simple because what this requires is not merely that this experience be agreeable, but that it have a touch of virtue; that not only the consideration of ends, of products, of accomplishments and status, but the texture of life itself, its momentary beauty and its nobility, be worth some attention; and that among the things that contribute to these be the life of the mind and the life of science. Let us try to make it so.

This article is reprinted from the *American Psychologist,* Vol. 11, March, 1956, pp. 127-135.

Reflections

childhood . . . education . . . philosophy . . .

An eight-year-old exacts justice with a red herring

A huntsman, named George Bradley, who was huntsman to Mr. Smither, of Hale, very wantonly gave me a cut with his whip, because I jumped in amongst the dogs, pulled a hare from them, and got her scut, upon a little common, called Seal Common, near Waverley Abbey. I was only about eight years old; but my mind was so strongly imbued with the principles of natural justice, that I did not rest satisfied with the mere calling of names, of which, however, I gave Mr. George Bradley a plenty. I sought to inflict a just punishment upon him.

Hounds (hare-hounds, at least) will follow the trail of a red herring as eagerly as that of a hare, and rather more so, the scent being stronger and more unbroken. I waited till Bradley and his pack were trailing for a hare in the neighbourhood of that same Seal Common. They were pretty sure to find it in the space of half an hour, and the hare was pretty sure to go up the Common and over the hill to the south. I placed myself ready with a red herring at the end of a string, in a dry field, and near a hard path, along which, or near to which, I was pretty sure the hare would go. I waited a long while; the sun was getting high; the scent bad; but, by and by, I heard the view-halloo and full cry. I squatted down in the fern, and my heart bounded with the prospect of inflicting justice, when I saw my lady come skipping by, going off towards Pepper Harrow; that is to say, towards the south. In a moment, I clapped down my herring, went off at a right angle towards the west, climbed up a steep bank very soon, where the horsemen, such as they were, could not follow; then on I went over the roughest part of the common that I could find, till I got to the pales of Moor Park, over which I went, there being holes at the bottom for the letting-in of hares. That part of the park was covered with short heath; and I gave some twirls about to bemuse Mr. Bradley for half an hour. Then off I went, and down a hanger at last, to the bottom of which no horseman could get without riding round a quarter of a mile. At the bottom of the hanger was an aldermoor, in a swamp. There my herring ceased to perform its service. The river was pretty rapid: I tossed it in, that it might go back to the sea and relate to its brethren the exploits of the land. I washed my hands in the water of the moor; and took a turn, and stood at the top of the hanger to witness the winding-up of the day's sport, which terminated a little before dusk in one of the dark days of November. After over-running the scent a hundred times; after an hour's puzzling in the dry field, after all the doubles and all the turns that the sea-born hare had given them, down came the whole posse to the swamp; the huntsman went round a millhead, not far off, and tried the other side of the river: 'No! damn her, where can she be?' And thus, amidst conjectures, disputations, mutual blamings, and swearings a plenty they concluded, some of them half-leg in dirt, and going soaking home.

—from *The Autobiography of William Cobbett* (1835)

Deductive Surprise

It is essential to distinguish the psychological novelty which a conclusion may have from any logical novelty it may be supposed to have. A conclusion may be surprising or unexpected even though it is correctly implied by the premises. Certainly to most men all the consequences of Euclid's assumptions are not present to their minds when they contemplate the assumptions. Even in less complex arguments psychological novelty is very frequently the rule. The following is a frequently cited story of Thackeray's. "An old abbé, talking among a party of intimate friends, happened to say, 'A priest has strange experiences; why, ladies, my first penitent was a murderer.' Upon this, the principal nobleman of the neighborhood enters the room. 'Ah, Abbé, here you are; do you know, ladies, I was the Abbé's first penitent, and I promise you my confession astonished him!'" The reader may add that the conclusion of the syllogism no doubt surprised the ladies. In a puzzle invented by C. L. Dodgson about two clocks, the unexpectedness of the conclusion from premises freely granted is clearly illustrated. "Which is better, a clock that is right only once a year, or a clock that is right twice every day? 'The latter,' you reply, 'unquestionably.' Very good, now attend. I have two clocks: one doesn't go *at all*, and the other loses a minute every day: which would you prefer? 'The losing one,' you answer, 'without doubt.' Now observe; the one which loses a minute a day has to lose twelve hours, or 720 minutes, before it is right, and is therefore right about once every two *years*, whereas the other is evidently right as often as the time it points to comes around, which is twice a day. So you've contradicted yourself *once*."

—Morris R. Cohen and Ernest Nagel, *An Introduction to Logic and Scientific Method*

Other species as other nations

No aspect of nature on this beach is more mysterious to me than the flights of these shorebird constellations. The constellation forms, as I have hinted, in an instant of time, and in that same instant develops its own will. Birds which have been feeding yards away from each other, each one individually busy for his individual body's sake, suddenly fuse into this new volition, and flying, rise as one, coast as one, tilt their dozen bodies as one, and as one wheel off on the course which the new group will has determined. There is no such thing, I may add, as a lead bird or guide. Had I more space I should like nothing better than to discuss this new will and its instant origin, but I do not want to crowd this part of my chapter, and must therefore leave the problem to all who study the psychic relations between the individual and a surrounding many. My special interest is rather the instant and synchronous obedience of each speeding body to the new volition. By what means, by what methods of communication does this will so suffuse the living constellation that its dozen or more tiny brains know it and obey it in such an instancy of time? Are we to believe that these birds, all of them, are *machina,* as Descartes long ago insisted, mere mechanisms of flesh and bone so exquisitely alike that each cogwheel brain, encountering the same environmental forces, synchronously lets slip the same mechanic ratchet) or is there some psychic relation between these creatures? Does some current flow through them and between them as they fly? Schools of fish, I am told, make similar mass changes of direction. I saw such a thing once, but of that more anon.

We need another and wiser and perhaps a more mystical concept of animals. Remote from universal nature, and living by complicated artifice, man in civilization surveys the creature through the glass of his knowledge and sees thereby a feather magnified and the whole image in distortion. We patronize them for their incompleteness, for their tragic fate of having taken form so far below ourselves. And therein we err, and greatly err. For the animal shall not be measured by man. In a world older and more complete than ours they move finished and complete, gifted with extensions of the senses we have lost or never attained, living by voices we shall never hear. They are not brethren, they are not underlings; they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendour and travail of the earth.

—from Henry Beston, *The Outermost House* (by permission of Mrs. Beston)

Teaching logic through games

"What about formal education?" Will now asked. "What about indispensable information and the necessary intellectual skills? Do you teach the way we do?"

"We teach the way you're probably going to teach in another ten or fifteen years. Take mathematics, for example. Historically mathematics began with the elaboration of useful tricks, soared up into metaphysics and finally explained itself in terms of structure and logical transformations. In our schools we reverse the historical process. We begin with structure and logic; then, skipping the metaphysics, we go on from general principles to particular applications."

"And the children understand?"

"Far better than they understand when one starts with utilitarian tricks. From about five onwards practically any intelligent child can learn practically anything, provided always that you present it to him in the right way. Logic and structure in the form of games and puzzles. The children play and, incredibly quickly, they catch the point. After which you can go on to practical applications. Taught in this way, most children can learn at least three times as much, four times as thoroughly, in half the time. Or consider another field where one can use games to implant an understanding of basic principles. All scientific thinking is in terms of probability. The old eternal verities are merely a high degree of likeliness; the immutable laws of nature are just statistical averages. How does one get these profoundly unobvious notions into children's heads? By playing roulette with them, by spinning coins and drawing lots. By teaching them all kinds of games with cards and boards and dice."

—from Aldous Huxley, *The Island* (N.Y.: Harper & Row, 1962)

Education as cultivation of the power to think

Academic courses which teach men to manipulate laboratory apparatus but not to think scientifically, to carry out intricate computations but not to think mathematically, to remember dates but not to think historically, to summarize philosophical arguments but not to think critically—these advance no man toward liberal education. To be perfectly honest, one must admit that higher education has lost repute because so many offerings in the liberal arts and sciences have failed to provide the intellectual discipline which they promise. But the answer, surely, is not to abandon the ideal of disciplined intelligence in favor of an educational program that even on the surface offers nothing to liberate and strengthen men's minds. The answer is not to banish the scholarly and scientific disciplines, but to hold them rigorously to their task.

Liberal education means deliberate cultivation of the power to think. Because clear thinking is systematic thinking, liberal education involves the logical organization of knowledge. Students must be brought to see the structure of the science they are learning. To know a few facts about lines and angles and triangles is not to know plane geometry; the essential thing is to grasp the orderly process by which a group of postulates can be made to reveal their implications in theorems of increasing complexity. To know a few episodes in the past is not to know history; the essential thing is to comprehend the forces that are at work through a long sequence of events, and to incorporate the perspective of time into one's day-to-day judgments. Instruction need not always follow a strictly logical or chronological order. But to leave a subject without having understood the order inherent in it, is to leave it without seizing hold of the most significant and the most useful of its characteristics.

—from Arthur E. Bestor, *Educational Wastelands* (Urbana: U. of Illinois Press, 1953).

Reflections

childhood . . . education . . . philosophy . . .

On seeing jokes and thinking

The man who sees a joke straight off is using, but not exerting, his wits. He does not try to see it, since he does not need to try. The man who has to try, and perhaps tries in vain to see a joke, is thinking or wondering. Both seeing the joke without hesitation or effort, and trying to see it, i.e. thinking it over, exemplify intelligence or, if you like, rationality, in the most hospitable sense of the words. But it is the former, not the latter which exemplifies it at its best. For to ponder is to be still unsuccessful, and to have to ponder is to fall short of complete facility. But still, effortless gettings and accomplishings presuppose the prior occurrence of effortful gettings and effortful accomplishings. Facility now is the harvest of difficulty then. The qualities of a man's wits are shown both by his effortless gettings and accomplishings and by his effortful gettings or missings, accomplishings or failures. But it is the latter which have made the former possible. If I can now very often detect misprints at a glance, it is only because in childhood I industriously and interestedly struggled with the recalcitrant mysteries of spelling.

In short, if a person has, without the slightest difficulty or hesitation, seek or joke or a misprint, then it is true of him that he has used his wits, yet false that he has been wondering or pondering. He has found something without having to rummage for it.

—Gilbert Ryle, "A rational animal," in R.F. Dearden, P.H. Hirst and R.S. Peters (eds.), *Reason.*

Thinking as pure energy

March 17, 1901. Tuesday—Hartley looking out of my study window fixed his eyes steadily & for some time on the opposite prospect, & then said—Will yon Mountains *always* be?—I shewed him the whole magnificent Prospect in a Looking Glass, and held it up, so that the whole was like a Canopy or Ceiling over his head, & he struggled to express himself concerning the Difference between the Thing & the Image almost with convulsive Effort.—I never before saw such an Abstract of *Thinking* as a pure act & energy, of *Thinking* as distinguished from *Thoughts.*

—S. T. Coleridge, *Notebooks,* I, 923 (Hartley Coleridge at this time was about 4 years of age.)

When Simple Induction is not the Answer

Does anyone realise, unless he takes the trouble to recollect, the perplexity in a child's mind before the question: "Am I wanted, or am I not wanted. What do they expect of me now?" and the confusion produced by an attempt to solve the problem by induction.

—Joyce Cary, in *A House of Children*

Is the capacity to lie essential to humanity?

Both [Hotspur and Falstaff] conceal nothing from others, Falstaff because he has no mask to put on, Hotspur because he has so become his mask that he has no face beneath it. Falstaff says as it were, "I am I. Whatever I do, however outrageous, is of infinite importance because I do it." Hotspur says: "I am Hotspur, the fearless, the honest, plain-spoken warrior. If I should ever show fear or tell lies, even white ones, I should cease to exist." If Falstaff belonged to the same world as Hotspur, one could call him a liar, but, in his own eyes, he is perfectly truthful, for, to him, fact is subjective fact, "what I am actually feeling and thinking at this moment." To call him a liar is as ridiculous as if, in a play, a character should say, "I am Napoleon," and a member of the audience should cry, "You're not. "You're Sir John Gielgud."

In Ibsen's *Peer Gynt,* there is a remarkable scene in which Peer visits the Troll King. At the entertainment given in his honor, animals dance to hideous noises, but Peer behaves to them with perfect manners as if they were beautiful girls and the music ravishing. After it is over, the Troll King asks him: "Now, frankly, tell me what you saw." Peer replies: "What I saw was impossibly ugly"—and then describes the scene as the audience had seen it. The Troll King, who has taken a fancy to him, suggests that Peer would be happier as a troll. All that is needed is a little eye operation, after which he will really see a cow as a beautiful girl. Peer indignantly refuses. He is perfectly willing, he says, to swear that a cow is a girl, but to surrender his humanity so that he can no longer lie, because he cannot distinguish between fact and fiction, that he will never do. By this criterion, neither Falstaff nor Hotspur is quite human, Falstaff because he is pure troll, Hotspur because he is so lacking in imagination that the troll kingdom is invisible to him.

—W. H. Auden, in *The Dyer's Hand* (New York: Random House, 1948) p. 192.

Can Institutions Promote Individual Growth?

The contrast usually assumed between the period of education as one of social dependence and of maturity as one of social independence does harm. We repeat over and over that man is a social animal, and then confine the significance of this statement to the sphere in which sociality usually seems least evident, politics. The heart of the sociality of man is in education. The idea of education as preparation and of adulthood as a fixed limit of growth are two sides of the same obnoxious untruth. If the moral business of the adult as well as the young is a growing and developing experience, then the instruction that comes from social dependencies and interdependencies is as important for the adult as for the child. Moral independence for the adult means arrest of growth, isolation means induration. We exaggerate the intellectual dependence of childhood so that children are too much kept in leading strings, and then we exaggerate the independence of adult life from intimacy of contacts and communication with others. When the identity of the moral process with the processes of specific growth is realized, the more conscious and formal education of childhood will be seen to be the most economical and efficient means of social advance and reorganization, and it will also be evident that the test of all the institutions of adult life is their effect in furthering continued education. Government, business, art, religion, all social institutions have meaning, a purpose. That purpose is to set free and to develop the capacities of human individuals without respect to race, sex, class or economic status. And this is all one with saying that the test of their value is the extent to which they educate every individual into the full stature of his possibility. Democracy has many meanings, but if it has a moral meaning, it is found in resolving that the supreme test of all political institutions and industrial arrangements shall be the contribution they make to the all-around growth of every member of society.

—John Dewey, *Reconstruction in Philosophy*

Reflections

childhood . . . education . . . philosophy . . .

On discovering one can read a book

Perhaps it is only in childhood that books have any deep influence on our lives. In later life we admire, we are entertained, we may modify some views we already hold, but we are more likely to find in books merely a confirmation of what is in our minds already: as in a love affair it is our own features that we see reflected flatteringly back.

But in childhood all books are books of divination, telling us about the future, and like the fortune-teller who sees a long journey in the cards or death by water they influence the future. I suppose that is why books excited us so much. What do we ever get nowadays from reading to equal the excitement and the revelation in those first fourteen years? Of course I should be interested to hear that a new novel by Mr. E. M. Forster was going to appear this spring, but I could never compare that mild expectation of civilized pleasure with the missed heartbeat, the appalled glee I felt when I found on a library shelf a novel by Rider Haggard, Percy Westerman, Captain Brereton or Stanley Weyman which I had not read before. It is in those early years that I would look for the crisis, the moment when life took a new slant in its journey towards death.

I remember distinctly the suddenness with which a key turned in a lock and I found I could read—not just the sentences in a reading book with the syllables coupled like railway carriages, but a real book. It was papercovered with the picture of a boy, bound and gagged, dangling at the end of a rope inside a well with the water rising above his waist—an adventure of Dixon Brett, detective. All a long summer holiday I kept my secret, as I believed: I did not want anybody to know that I could read. I suppose I half consciously realized even then that this was the dangerous moment. I was safe so long as I could not read—the wheels had not begun to turn, but now the future stood around on bookshelves everywhere waiting for the child to choose—the life of a chartered accountant perhaps, a colonial civil servant, a planter in China, a steady job in a bank, happiness and misery, eventually one particular form of death, for surely we choose our death much as we choose our job. It grows out of our acts and our evasions, out of our fears and out of our moments of courage. I suppose my mother must have discovered my secret, for on the journey home I was presented for the train with another real book, a copy of Ballantyne's *Coral Island* with only a single picture to look at, a coloured frontispiece. But I would admit nothing. All the long journey I stared at the one picture and never opened the book.

—from Graham Greene, "The Lost Childhood," in *Collected Essays* (New York: Viking Press, 1969).

Jacob Needleman teaches philosophy at San Francisco State College. His published works include The New Religions *(1972) and* A Sense of the Cosmos *(1975). He also edited* The Sword of Gnosis *(1974) and was co-editor of* Religion for a New Generation.

Teaching Philosophy to Adolescents

". . . a process takes place in every serious person . . . a process of intellectual separation in which one recognizes the asking of fundamental questions as the activity of one's own real self."

By Jacob Needleman

In recent years, the crisis in American education has been perceived in two fundamental ways. A great many critics, observing the apparent decline in the intellectual training of young people, have urged a movement "back to basics" in order to strengthen fundamental academic skills. Other observers have with similar urgency argued for a form of "character education," deploring the level of moral development in young people, their uncertainty and confusion about values and the meaning of living itself. All critics, however, agree in their anxiety about the preparation contemporary young people receive for life, as evidenced by the problems of drugs, cults, psychiatric disorders and crime.

Twenty years of teaching philosophy at the college level and nearly as many years studying the religious ferment of American youth, have convinced me that critics of modern education, almost without exception, have neglected an essential factor in their analyses: the role of philosophical ideas in both the intellectual and moral development of a normal human being. This neglect of the role of ideas in human development may be traced back to the origins of modern psychology itself, which directed its attention almost exclusively to the emotional and sexual aspects of psychodynamics and which treated ideas as, in general, a by-product, result or even an epiphenomenon of what it took to be the more basic affective and instinctual components of the human structure. On the scale of mankind in the collective, explanations of human behavior and programs for the amelioration of the human condition, such as those of Marxism, gave equally little importance to ideas as such; concepts of liberty, fulfillment and happiness all centered around the satisfaction of the material, i.e. physical and emotional needs of man. In sum, for the past half century at least, it has been considered the mark of hardheaded realism to think of human needs solely in terms of a fairly well-defined and narrow band of bodily and emotional aspects. No doubt this point of view reflected a perception of the powerlessness of intellectual training, as it was being pursued in the schools and universities, and moral training, as it was being pursued by the established religious institutions of the west, to bring mankind closer to happiness or a life of

". . . critics of modern education, almost without exception, have neglected an essential factor in their analyses: the role of philosophical ideas in both the intellectual and moral development of a normal human being."

meaning. But whatever the ultimate causes, ideas have not been considered essential to growth and human fulfillment.

I undertook the experiment of teaching philosophy to young people of high school age because my observation of college-age students, and other observations made under a variety of life conditions, convinced me that certain kinds of ideas correspond to a structural need in the human being. To put it in simple terms: there is an aspect of human nature, as organic and innate as anything postulated by modern psychology, that can only be nourished by the sort of "food" provided by universal ideas about man and his place in the cosmic scheme. Such ideas, when approached with the necessary guidance, support a specific activity of the human mind which might be characterized as "the need to ponder and question the meaning of human life and one's part in it." In the contemporary era, the lifting of emotional and sexual repression, salutary as it has been, has been accompanied by a hidden, but nevertheless effective, repression of another kind which has consequences perhaps even more disastrous than the earlier repression of sexuality and emotion. This new repression is directed at man's relationship to philosophical ideas.

One result of this repression, though of course it has many other causes as well, has been the turning of increasing numbers of young people to new religious movements, political idealogies and gurus of many kinds and many degrees of authenticity. Our system of education and social milieu has been turning out a nation of "philosophical illiterates," easy prey for teachings and teachers, ideologies and ideas, that come to them "from the street." This is not to pass blanket judgment on new religious or philosophical movements that now abound in our culture— it is only to illustrate the existence in young people of a deep need that has gone unsatisfied in our culture. This unsatisfied and unrecognized need expresses itself in a particular sort of restlessness and vulnerability to ideas of all kinds dealing with ultimate questions.

I selected San Francisco University High School for my experiment. San Francisco University High School is a private school, located in the affluent Pacific Heights section of San Francisco. The faculty and staff are excellent and thoroughly committed to high academic standards; the student body represents the "cream" of high-school age students in the city—generally from well-to-do families and with excellent academic preparation. The course of study is rigorous, somewhat conservative and generally geared to preparing young people for college.

Entitled "The Crisis of the Modern World," the course was described in the catalogue as follows:

> Beyond the massive problems of the modern era—problems of natural resources, war, crime, the family, social justice—there lies a deep confusion about the meaning of human life itself. Who am I? Why was I born? What is the purpose of human life on earth? These questions have been asked since the beginning of time, but never have the answers been harder to find than now and here at the end of the twentieth century. The aim of this course is to connect the problems of the day with the questions of the ages. This is a course in philosophy, the art of looking for the real world behind the appearances.
>
> Issues to be treated may include:
> —the new religious movements;
> —the cosmos: a great machine or a living organism?
> —work as a human activity;
> —good technology and bad technology;
> —the problem and the mystery of death.
>
> Readings that will serve as the basis for both our discussions and our writings will be drawn from both ancient and modern, Eastern and Western sources. The aim of the course is to do philosophy, not just to learn about it.

Thirteen students registered for the course, the number that I suggested as a maximum to the administrative officers of the school. The class met three times a week at the end of the school day. Students were to be graded on a credit/no credit basis. I did not want grades to be an issue. I wanted the demand to come from the ideas themselves and the questions they evoked in the minds and hearts of the students. Readings were xeroxed as the course proceeded, the selection depending on the line of inquiry being pursued. These readings included selections from Plato's *Republic,* Samuel Dresner's "Man, God and Atomic War," a selection from *Her-Bak* by I. Schwaller de Lubicz, Schumacher's "Buddhist Economics," Plato's *Apology* and other brief readings Numerous books were placed on library reserve and each student was asked to select one as his principle responsibility for the course. These texts included the following:

Plato: *Collected Dialogues*
The Bhagavad Gita
Will Durant: *The Story of Philosophy*
C. S. Lewis: *The Screwtape Letters*
Hume: *Dialogues on Natural Religion*
Castaneda: *The Teachings of Don Juan*
Isha Schwaller de Lubicz: *Her Bak* (Vol. 1)
Rene Daumal: *Mount Analogue*
Lizelle Reymond: *My Life With a Brahmin Family*
Jan van Wettering: *The Empty Mirror*
P. D. Ouspensky: *Strange Life of Ivan Osokin*

"In my opinion, great ideas are the first instrument of awareness; questioning of a certain kind is another word for awareness."

John G. Neihardt: *Black Elk Speaks*

From the outset of the course, and throughout the semester, I was struck by one overriding observation: philosophical questions come very naturally to young people of this age, but they do not recognize such questions as qualitatively distinct from all the other problems and questions which they face in their lives and in their academic work. I saw that it is not only fundamental ideas about man and the universe that are undervalued in our culture. Even more important is the corresponding failure of the social environment to honor the attitude of questioning that is normally evoked by such ideas.

What I therefore witnessed in these students was a process that takes place in every serious person at one time or another in his life, both in and outside of the academic environment: a process of intellectual separation in which one recognizes the asking of fundamental questions as the activity of one's own real self. In the contemporary academic environment, however, this process and this recognition is immediately covered over by premature demands to argue for points of view, solve problems, evaluate and construct theories, seek practical applications, or find conceptual and historical comparisons. In the non-academic environment it is also covered over by social and personal exigencies that demand immediate resolution, and indirectly through a cultural value system and implicit theory of human nature that emphasizes pleasure, achievement or conventional forms of service to others. The modern individual is irresistibly forced from an early age, to identify his "real self" with such elements of human nature as the need for affection, prestige, "belonging," etc. The subtle "taste" of philosophical self-interrogation, the sense that in some way this activity is the most intimate and authentic aspect of oneself, is obliterated.

I take it as the principal aim of what is called the study of the "humanities," to reverse this trend in the education of young people. By the term "humanities" I mean more than simply the study of literature, the arts, philosophy and cultural history. I mean an attitude toward learning itself that can also be communicated in other fields, not excluding mathematics and the hard sciences. It is a question of distinguishing between two radically different types of intellectual effort—one that drives for practical applications, conceptual resolutions and the amassing of information; and another that moves toward some entirely different goal for which we no longer have an adequate terminology, but which involves an aspect of human nature that grows only through seeking out the meaning of living itself.

The phrase "the meaning of life" is no joke to young people. There is a highly sensitive, delicate, but ineradicable yearning associated with this question. It is, however, easily bruised and suppressed by so-called "tough-mindedness" or by equally destructive "psychologizing" (as though the meaning of life had more to do with "getting along" than with why man is on earth at all). This yearning has been severely suppressed in our culture and this suppression, as I have stated, is even more pathogenic than the suppression of sexual energy which the early psychoanalysts identified as the chief cause of neurosis in man. There is a metaphysical neurosis that is more destructive than psychological neurosis, and more basic.

The humanities have typically been taught in the same way that the sciences have been taught, which reflects the fact that in modern culture the techno-scientific approach has been the dominant model of knowing. The humanist and the scientists are not opposed in any fundamental way in our society—C. P. Snow's "two cultures" is, in my opinion, a vastly overrated distinction. By and large, both the humanist and the scientist employ the same aspect of the mind, the same general forms of knowing and intuiting, the same reliance on inference and formal patterns of thought, comparative judgment, weighing evidence, associative connections—with the same aim of arriving at theoretical models and practical applications leading toward the solution of ephemerally interesting or pressing problems. Both the humanities and the sciences rely on technical reasoning. The humanist studies ideas, art, culture, religion, language; the scientist studies chemicals, atoms, organisms, planets. The object is different, but the mode of inquiry is the same. In both, the act of metaphysical questioning is suppressed because such questioning must continue in a direction that is *both* conceptually wider and internally deeper (where it touches a subtle feeling of wonder or even a certain kind of silence). In the humanities and the sciences, this movement of metaphysical questioning typically stops the moment a new synthesis is reached, a new concept, a new idea; because it stops at such a point, our philosophy of education implicitly conveys the point of view that inquiry is only a means to satisfy the needs of the social self; whereas metaphysical questioning when it is pursued long enough is seen to be the exercising of an entirely different faculty of the mind, and represents the movement toward a new and higher quality of attention.

Very early on in the semester, I was able to communicate to my students that it was safe for them to ask ultimate questions. They were obviously helped in this by the perception that their instructor was also personally concerned with such questions. They eventually came to see the act of philosophical pondering as a fully "grown-up" thing to do. At the same time, the ideas that were being presented—such as Plato's theory of the Forms, the Buddhist doctrine of the relativity of the ego, St. Augustine's dis-

". . . inquiry is only a means to satisfy the needs of the social self; whereas metaphysical questioning when it is pursued long enough is seen to be the exercising of an entirely different faculty of the mind, and represents the movement toward a new and higher quality of attention."

tinction between time and eternity—were presented without much simplification. From the outset, therefore, students were faced with the juxtaposition of their own intimate questions about the meaning of life and a set of ideas of great power and difficulty. At first it was a struggle to keep the "question-making" aspect of the class from becoming a sort of personal rap-session. The presence of difficult and serious metaphysical ideas, however, had the ultimate effect of drawing the student's attention to the philosophical aspects of personal problems. Many were astonished to see that what they took to be personal problems were actually related to great issues that have been written about by great thinkers of all times.

My aim here was to instill in them a sense of participation in a larger scale of reality merely by the act of questioning at a certain level of humanly relevant abstraction. What is needed, I believe, in many of us, young and old, is a kind of faith in abstract reasoning—abstract, not in the sense of abstract mathematics or abstract logic, but in the sense that there are questions and ideas which abstract or separate out the perennial search for man for meaning, and which reflect the structural aspects of human nature which can be called "the love of wisdom."

Initially I took many wrong directions along these lines, however. For example, it took me quite a while to understand that the respect for philosophical questioning requires a very long time to take hold. Each day it had to be re-established practically from zero. There were times when my effort to free the students from the "problem-solving" mentality resulted only in sort of amused passivity on their part. How to communicate the rigor of great ideas and great questions without at the same time provoking the psychological tension associated with fear of not succeeding according to external, social standards? How to communicate the voluntary nature of the search for understanding without at the same time encouraging laziness or self-indulgent subjectivity? Eventually, I learned to measure their relationship to ideas on the basis of intangible factors such as postures, courtesy, tones of voice, silences—as well as on the basis of more obvious factors of individual content and work done on reading assignments. The love of wisdom does not always manifest itself through the instrumentality of the intellect.

Only after it was clear that, to some extent, the students were beginning to be "haunted" by philosophical questions did I begin to bring in questions of widespread current concern, such as the problem of war, ecology, the nature of the family, authority, sexuality, cults and drugs. By the term "haunted," I mean something very specific having to do with what I call the need to honor philosophical self-interrogation in our society. I wanted the students to be haunted by great ideas not in the sense of a debilitating or opinionated criticizing of life, but in the sense of an increased and expanded sensitivity of perception of themselves and their experience. In my opinion, great ideas are the first instrument of awareness; questioning of a certain kind is another word for awareness. As I see it, moral power begins with sensitivity of perception, and sensitivity of perception begins with real ideas that are brought to bear on the experiences of life. I do not think one can "teach virtue" in the contemporary world without encouraging the growth of perception.

I go further: moral action is a result of the perception, in feeling as well as thought, of facts under the light of metaphysically true ideas. The love of wisdom is the seed of moral behavior. That aspect of the self which seeks truth is the very aspect which, in its later stage of development, becomes the agent of moral action. I wanted these young people to be haunted by philosophy in the sense of being *attracted* more and more often to the feeling for great ideas and universal questions. I am not speaking here about merely thinking, intellectually, about abstruse issues. This kind of intellectualization has shown itself to be morally powerless in human life and was justly derogated by modern psychology. On the other hand, the *feeling* for ideas and universal question does, in my observation, have potentially immense moral power in an individual's life. When I say I wanted my students to be haunted by philosophy, I am referring to the engendering and support of this feeling for ideas, rather than encouraging a habit of premature philosophical intellectualization which, as Plato long ago observed, results in suppression of emotion and a neurotic form of "self-consciousness."

"On the other hand, the feeling *for ideas and universal question does, in my observation, have potentially immense moral power in an individual's life."*

Encouraging excessive intellectualization is damaging, this is understood. But the question is how to avoid this danger without at the same time discouraging the feeling for truth that often lies at its foundation, however covered over and distorted it may become? The feeling for truth is, in short, a principle moral power in human nature. Avoiding intellectualization by swinging over to encouraging preoccupation with emotional expression does little or nothing toward the authentic development of moral power in human nature. Neither psychotherapy nor academicism contributes enough toward the moral and spiritual growth of the human being. Nor does religion when it becomes only a mask for psychotherapeutic techniques or only a form of organized righteous indignation under the banner of spiritual ideas.

A third approach is needed corresponding to this "third thing" in human nature—the feeling for truth, the love of wisdom, *"eros"* (in the Platonic meaning of the term)—that has not been seen in modern times as a distinct and organically essential element in human nature. Egoistic impulses toward violence, fear, hatred, greed cannot be dissolved or mastered by the intellectual absorption of concepts, no matter how great, simply because the cerebral intellect is powerless to influence the emotions. Therefore, a man cannot become truly

moral merely by amassing knowledge or by acquiring intellectual sophistication. A bridge is needed between the convictions of the intellect and the impulses of the body and emotions. This bridge is the feeling for truth which can be nourished by ideas that engender a certain quality of self-interrogation, of which the feeling of wonder is the most familiar example in our general experience.

Having repeatedly attempted to touch this feeling in the students—with respect to the relationship between great ideas and the details of personal life—I was ready to introduce discussion of issues of general widespread concern. In discussing the ecological crisis, for example, an extremely broad range of ideas was introduced—including the concept of nature as found in Christian thought, Platonic thought, Taoism, the Renaissance, Freud and modern science. At the same time, it was made clear—and the students themselves soon began to make their own discoveries in this context—that every great cosmological system was intimately connected with a psychological teaching; every concept of nature carried with it a concept of human nature and therefore a statement about oneself! This was clear and explicit, for example, in the case of Freud and the biological theory of human nature. If nature is fundamentally an awesomely powerful, but indifferent collection of blind forces, then man's own nature is also fundamentally a reservoir of blind, organic energies. Students were quick to see the parallel between scientism's view of nature and man's own vision of himself. The question arose: if it is wrong and dangerous to manipulate nature for egoistic purposes, must it not also be necessary to live in harmony with one's inner nature as well? Moreover, if there is no God out there, can there be a God "in here," inside oneself? Is manipulative man the "ego" of the planet earth? Can the ecological problem be resolved without first facing the question of one's own ego?

In short, the crises of the modern world were transformed from problems about what to do into questions about the understanding of reality and oneself. Seeing the question behind the problem did not communicate a sense of helplessness. On the contrary, this effort tended to dissolve the subjective violence that accompanies the tense impulse to do something without deeply understanding the realities of a situation. I call that the beginning of a morality. A different sort of hope peeked through the surface from time to time: the hope that out of the work of serious questioning there could arise an understanding that could touch more of ourselves than the attractive theories and fashionable concepts which often prompt well-intentioned but hasty and immature action. Out of such an understanding, another quality of action might be possible, quieter but more effective because emanating from more of oneself. The hope that I am speaking of can be stated as a vision of the possible evolution of the wish for truth into the power to act. If the wish for truth represents a material force within human nature, then the hope consists in the possible development of that wish into what could rightfully be termed *will.*

It was the same with the problem of war. The tense urgency to engage in some action in order to "put an end to war," was balanced by pondering the awesome question of origins of war in human nature itself. This question was informed by ideas dealing with *the psychology of virtue* as developed in Rabbi Samuel Dresner's powerful little essay on the meaning of atomic war as seen from the perspective of the Jewish mystical tradition. Dresner interprets the ancient Judaic idea that man on earth is a cosmic experiment the success of which "is not guaranteed." The idea that survival depends on virtue shocked each student into recognizing the effect on human life itself of ideas about being, nature, time, order and purpose in the universe. As one student put it, "I never realized that war is a consequence of a certain kind of philosophy." "Or the lack of it," said another student.

I am at present completing a book treating in full the nature of all these discussions which throw considerable light on the need for a return to "gut-level" philosophical inquiry in the everyday life of contemporary man. I can say here, however, that this experiment in teaching philosophy in high school has proved to me both the possibility and the necessity for opening such issues to young people. I believe proposals by educators to introduce "value-clarification," or "character education" in the schools cannot go far without this component. In my judgment, the sense of wonder is the real, effective seed of moral perception and action. This sense of wonder needs to be nourished and developed because for most young people it, and it alone, represents the impulse toward truth and value that comes from within the depths of the individual himself. Attempts to encourage intellectual analysis of moral questions will fail if this delicate love of truth is not the main factor addressed in young people. Attempts to "inculcate" moral or religious values will fail if it is done in a way that seeks to impose values on developing minds; this can be only a sort of "higher brainwashing," which will eventually result in another round of youthful rebellion and confusion in a world that in fact is rapidly jettisoning all traditional patterns of living.

"The sense of wonder grows not so much by the addition of information or theories, but by the awakening of questioning in the light of great ideas."

The sense of wonder grows not so much by the addition of information or theories, but by the awakening of questioning in the light of great ideas. Information about the world and man is necessary, but principally as material for pondering. Information and skills needed for functioning vocationally in the world must also be taught, but this aspect of education needs first to be separated to some extent from the aim of nourishing the seed of moral perception in the growing human being.

Teaching Philosophy in the Comprehensive School

By W. Scott

This article was originally published in The Times Educational Supplement - Scotland, *and is reprinted here with the permission of* The Times. *Readers familiar with the Philosophy for Children approach and the problems of bringing philosophy to American schoolchildren may want to contrast Mr. Scott's approach with their own experience in this area. Certainly there are significant differences in both curriculum and pedagogy; but there are significant similarities too. Perhaps the most suitable comparison would be with efforts to offer American secondary school students some version of philosophy as traditionally taught on the college level. And here the American experience can be instructive, for if we have learned anything over the past decade or so, it is that philosophy can be conveyed to elementary school students in many ways, but not on the model of traditional, college-level philosophy. It is only on the secondary school level that the alternative approaches are equally feasible, and the same may be true on the college level.*

W. Scott teaches in the Mathematics Department of Belmont Academy, Ayr.

The grades S5 and S6 to which he refers are equivalent to our grades 11 and 12.

For the past three years, I have been teaching philosophy in a comprehensive school. I think it might be of interest to describe and try to evaluate what I have been doing.

The Class

A typical class consists of 6-10 pupils drawn from S5 and S6. Although they are not usually the ablest, (the best pupils are fully occupied with certificate courses) some do go to university. At first two hours were allocated. Last year a whole block of four hours was possible. The amount of time devoted is effectively left to me to decide. My decision depends on the number of staff available and the needs of my department as a whole. This year I have had to reduce the time to one hour.

Why is philosophy desirable in school?

There is in schools generally an obsession with examinations which has the practical effect that each subject teacher follows a prescribed course without much deviation. There is scarcely any common ground between the subjects, no liaison between them and no critical examination of the methods and procedures employed within them. Conse-

quently, by the end of his school career, the typical pupil will have absorbed a certain amount of information (albeit in separate compartments!), he may have learned how to solve certain types of problems (I mean this in the widest possible sense: even painting a picture may be conceived as solving the problem of representing an object or idea) and he may have learned how to respond to examination questions.

What he will not have is any idea of the relationship between the different forms of knowledge or whether or to what extent they are true. The information he has acquired he will regard as holy writ. The idea that what one is learning is in some sense 'uncertain' may be psychologically counterproductive to the student about to take important exams in it, so few teachers would encourage this view. However, it seems to me to be desirable at the end of his school life to try to draw together all the separate strands of knowledge and to examine them so as to have a view of knowledge as a whole and the process whereby it may be acquired.

His success or failure in learning to solve the problems within his subjects will depend to a large extent upon whether he has succeeded in pleasing his teachers. There is, I believe, in the teaching of 'arts' subjects in schools a self complacent contentment with the individual response as the criterion of excellence. No doubt one function of the teacher is to educate the child's response by pointing out its inadequacies and revealing additional insights. Yet there is an inevitable tendency either to impose a response upon the pupil or, what is just as bad, adopt the position that his response, being at least his own, is all sufficient. The one is likely to produce an acquaintance with art without appreciation, the other results in almost anything being called art and even the abandonment of the most excellent examples of art.

Undeniably, school pupils have so little experience of art that it is futile in the early stages to investigate the meaning of it. But they have not been well served by the school if they leave without having considered the process by which art is judged: whether, for example, their response or their teacher's response is enough. This, like the status of different forms of knowledge lies within the province of philosophy.

There is another important issue. Whatever may be said about the quality of vocational guidance in schools, it is a fact that the majority of school leavers have no idea of what they want to do in adult life. The question of what they *ought* to do is therefore particularly poignant at this time. Yet this question traditionally is not discussed in school. At school, senior pupils spend their time working towards examinations. A half an hour with a careers officer once a year rarely accomplishes very much. The questions 'What ought I to do with my life?', 'How ought I to live my life?' and 'Why should I live it in this or that way?' are closely allied. Senior pupils are very interested in these questions when they have been posed and a class in philosophy is the natural forum in which they should be discussed.

Another question which deserves consideration is whether or not there is a god. For the answer to this question will almost certainly affect our view of what we ought to do in life. I believe that schools have pretended for some time that the issue is not in doubt. In this case the writ is truly holy! And this difficult matter has been left in the hands of the theists, atheists and others being happily relegated to the sidelines. There is a need to create a forum for the discussion of these questions outside the confines of the class in R.E. with all its established assumptions. Again, the natural place is the philosophy class. (Interestingly enough, although an atheist, I often find I must defend the idea of God against my sceptical pupils and sometimes I almost convince myself that there is one.)

There is generally also a need for the pupil who is about to leave school to take stock, to formulate a view of himself in the context of society and in the world. To try to answer the questions: Who am I? How did the world come to be? and What ought I to do in it? There is nothing new in this. Independent schools like George Watson's College where I was first encouraged to teach philosophy, have been for some time conducting an annual investigation of these questions for the benefit of their sixth formers and with some success.

The truly regrettable fact is not that in the comprehensive school there is no provision for discussing matters of this sort but that most students complete university courses without ever having been awakened to them let alone be given the opportunity to examine some of the possible answers.

What are the aims of my course?

(1) *A practical aim:* there are questions (philosophical questions) such as those mentioned, which are of fundamental importance to every person. We investigate these (i) by reading the answers given by some of the great philosophers of the past, (ii) by critically examining these in discussions and trying to come to our own conclusions as individuals

(2) *An intellectual aim:* there are examples of thought and argument in philosophical literature which are excellent; and, even if we do not agree with their conclusions, are amongst the best intellectual constructions of the human mind. We should read them because they are of enormous interest in themselves whatever their practical consequences may be. We also take the opportunity to begin to take part in a debate which continues throughout life about the problems of existence.

(3) *A technical aim:* in the course of the foregoing, my pupils should come to understand the procedures of philosophy: what a philosophical argument is like, how it should be conducted; the need for definition; the precise use of language and the effort towards clarity. I hope they will have an improved facility in argument and at resisting other people's arguments.

What do I do in the classroom?

First, it is necessary to generate an interest in the subject. As some pupils join the class because their timetables are insufficiently full and as all in any case have (for the first time in a school classroom) absolutely no idea about what is to take place, it is essential to motivate them. I usually begin by raising some of the more sensational questions first. Even the least able of them are interested in learning how to 'prove' that there

is a god or that mathematics and science are not 'certain' or that justice, freedom and even one's own existence may be in some sense illusory. The last is perhaps the most difficult: it is not immediately obvious that there is a problem, but ten minutes of questioning usually resolves that. They all have a vested interest in answering the question 'what ought I to do?' and most are painfully aware that they are in need of an answer.

Having aroused their interest by asking questions (but supplying no answers) I then provide a series of hour long talks, during which they take notes, which are designed to illustrate the scope of philosophy, how it differs from other disciplines, what its methods are and how progress in it is possible. I usually provide one or two definitions of philosophy. Although these are of course inadequate, and their inadequacies exposed by me, they serve as useful working hypotheses.

Long before the process could ever be regarded as complete, the pressure to try to answer some of the fascinating questions which continue to be raised is so great that it is not wise to resist it. What we investigate is a matter that I always leave them to decide. We invariably read together in class several different philosophers' views. Often I have to explain not only the meanings of words but the essence of the argument itself. This is, to me perhaps the most challenging and the most rewarding activity of all. I try to simplify the argument into

three or four statements. After it has been understood, we then argue about whether it is valid or not. Sometimes, but not often, the class is defeated. Last year, they found Kant's writings on religion fairly impenetrable. I do not however, regret having encouraged them to read Kant. They are not alone in finding him difficult! At least their knowledge that he is is first hand.

The class writes one or or two essays during the year and I usually supply them with a written effort of my own on the same subject. Their essays are invariably badly done. The type of pupils I have are interested and will take part in discussions but they find it very difficult to communicate effectively on paper. I would like to think that by the end of the year they have improved in this respect but I have no reason to suppose that this is so.

Often we simply take a question that is of interest and argue about it without reference to any philosopher.

Introducing Psychology.

While reading the allegory of the cave in the Republic it became clear that my pupils had not understood Plato's distinction between the world of appearances and the world of reality. I decided to try to demonstrate that all is not as it seems, by repeating in class some well known psychological experiments. The most sensational was:-

On the board were drawn 18 sets of 4 lines, each set consisting of 3 yellow and one white. In each case, 1 yellow line was obviously the same length as the white one. The class were then asked which yellow line was the same length as the white one in each case. They were told to tell the truth for the first six and to tell the same lie for the next twelve. An 'innocent' volunteer from another class was now invited 'to take part in a test'. Initially, he like the others, responded correctly to all the questions by raising his hand. But, for the last twelve questions, because of group pressure, he nearly always responded as the group did, incorrectly! This is, he continually acted against the evidence of his senses.

My pupils were astounded by this and much to their surprise could see that they would probably have behaved in the same way as the innocent volunteer. Thus although they thought they knew themselves and how they would have responded, the reality was quite different. There may be quicker ways of demonstrating the point but there cannot be many that are more striking.

Whether this is morally desirable from the point of view of the volunteer who was a little upset by the experience is an interesting question. Afterwards, the whole thing was explained, there were no complaints and everyone was conscious of having learned to beware of being unwittingly manipulated by a group, a useful lesson of another kind.

Once esconced in psychology it seemed worthwhile to do a little more. We read some of Freud's writings and also some of his interpreters. The opportunity was also taken to read the research on remembering; and on methods of study with a view to improving their skills in these respects. It has always seemed to me to be a pity that the techniques of learning are not studied until university when it is too late to make the most of them. For the same reason we read some pieces on the nature of personality.

Activities.

On one occasion, when discussing the question 'what meaning and what purpose can be found in life?' I suggested that perhaps we should consult some other people. In particular we might ask some monks at the monastery at Nunraw why they had chosen, as it seems, to give up life as we know it. The class were enthusiastic about this and having obtained permission from the Abbot, we drove across country one morning and spent the afternoon in conversation with the monks.

The reason for their remarkable lifestyle, it emerged, was that they wished to devote as much time as possible to getting to know God. Withdrawal from the world was necessary because of the distractions it provided. How can you concentrate on reading a book, we were asked, if there is a constant noise in the background? Also, when charged that their aims were essentially selfish, they replied that they did a lot of good in the community.

The class certainly enjoyed the visit in spite of a round trip of about 200 miles, and were impressed and enriched by

what they found. The most entertaining moment occurred when one girl asked: "Why do you 'wear' a tonsure?" "Actually, my dear, it's because I'm bald", was the reply.

On another occasion when discussing what criteria must be satisfied for a work to be classifiable as a work of art, we visited an art gallery. Later they came to my house and we set about trying to paint a picture (in oils on daler boards that they provided). I paint as a hobby, although I am no artist, and I had the idea in any case that it would be interesting for them if before leaving school they could paint a picture. None of them had ever done this at school, having given up art at an early age. Also, in making the effort to paint I felt that their appreciation of good painting would be enhanced. In so saying, I did not think that this woud arise because the difficulties would be seen to be overwhelming. On the contrary, I believed that they would be able to do anything that I could do. Inevitably this turned out not to be. We all sat down in my study and painted the same scene. As I painted one part I tried to explain what I was doing. At length, all the boards were covered in paint. The results were not brilliant but they were not too bad. Most of the class were delighted by this their first effort and no doubt some of their efforts adorn their homes. Of course a few paintings were abysmal. Still, viewed as abstracts, even they were not too bad!

By the end of the session one class had begun to feel that some aspects of the school organisation could be improved. They were given the task of changing the school by:

(a) deciding what changes were necessary and producing a written argument in their favour.

(b) persuading the school management that change was necessary. The former was an exercise in philosophy, the latter in politics.

Qualifications.

I do not have a qualification to teach either art or philosophy. Perhaps, my enthusiasm for them is undimmed because I have not been subject to the formal training in either. I made my acquaintance with philosophy while doing a Dip. Ed. and an M. Ed. in Edinburgh. I had the good fortune to be taught by Richard Hamilton, a most inspiring teacher. Thus, while nominally studying education, I was for several years secretly feasting on the delights of philosophy, arguing with Richard and others, writing essays and a thesis which was mainly philosophical and attending the Gifford lectures. I have contined to read philosophy for interest ever since.

Every year that I do philosophy, my course changes to suit the class, although some things are common. For example, I always explore Russell's Paradox. The fact that it is still unsolved

endows it with a special attraction.

Whether a certificate in philosophy should be introduced has occupied my attention. In France there is a certificate and the problems it raises are well known. Success in philosophy Baccalaureate seems to depend upon the regurgitation of received opinion. This is the opposite of what is intended. Philosophy is investigative, speculative and critical perhaps, but not dogmatic. There would always be a tendency for schools to err in this respect, much as they do within other subjects. Unquestionably, there are plenty of unemployed philosophers around who would be only too willing to teach schoolchildren. Whether it would as taught, be more than a technical exercise is questionable. In a school, philosophy must be practical, sensational and immediate. On balance, I think it might be better to leave philosophy without the letters of a syllabus so that the enthusiast and his class can go in any direction which interests them. Unless, of course, the syllabus could be left in a relatively free state. The only requirements one would insist on are:

1. Some important questions should be discussed, including psychological ones.

2. The pupil should make the acquaintance of some examples of excellence in philosophy. He should know about some of the great philosophers, psychologists and analysts and what they thought.

3. He would be encouraged to think for himself and to learn to communicate effectively.

There is a need to offer philosophy and psychology in schools. If there were a certificate the best pupils would probably take it and they would have both a reward and an incentive for their labours.

How successful is this?

Perhaps the best evidence I can give to show that some of my pupils find the course interesting is that on several occasions copies of the 'Republic' have been borrowed over the holidays after the end of the course. Also, once, a pupil who was leaving school asked if he could borrow a copy of our class notes and readings over the summer. Of course, I was delighted that he wished to do this. Two months later he appeared at my door to say that he had lent them to a friend who was not at our school and was that all right? What could I say but of course; and I will not be too upset if they don't reappear. At least they will have been stolen from the best of all possible motives!

Not all my pupils enjoy philosophy. A few never see the point. There is an ingrained philistinism in them which resists all attempts at motivation. "Does this course have a recognised certificate?" they say.

"No."

"Will it enable me to get a job?"

"No."

"Consign it then to the flames for it is of no practical value whatever!"

Philosophy for Children

By Matthew Lipman

One of the things which Thinking *attempts to do is to chronicle the fortunes of reflective education as an historical movement, and to depict philosophy for children as the current upsurge of that movement. In keeping with that objective, relevant articles are reprinted in order to make them available to readers who may have missed them when they first appeared, or to whom such articles are not now readily accessible. The article that follows appeared originally in Vol. 7, No. 1 of* Metaphilosophy *(January, 1976), ed. by Terrell Ward Bynum and Matthew Lipman, and is reprinted here with the permission of* Metaphilosophy. *It will be noted that Part One was written in 1970, Part Two in 1973, and the Introduction in 1975. The author of these pages does not reread them unabashed at the polemical tone of some of the passages—but then, they are part of the record. More embarrassing is the omission of acknowledgement of the importance of the consultative and advisory role of Joseph D. Isaacson, both in seeing the educational problems of the late 1960's and in considering how philosophy for children might be a constructive response to those problems. Joe Isaacson, who also happens to be the Staff Photographer for* Thinking, *continues to be the program's most far-sighted and sagacious advisor, and any record of the development of the Philosophy for Children curriculum should clearly indicate the extent to which his good thinking has contributed to children's better thinking.*

Introduction

Sometime in 1968 it occurred to me that we might do a better job of teaching children to reason than we were already doing. I had very little knowledge of the sort of research that had already been done in this area, and the whole conception of what was involved in "teaching reasoning" was quite unclear to me. Was teaching the rules of inference teaching reasoning? Was teaching children to recognize and perform certain inferential patterns teaching reasoning? Could reasoning actually be taught at all — or could we at best merely sensitize children to distinguish certain forms of inference as awkward or sloppy, much as we sensitize them to recognize "bad grammar" without actually teaching them grammar?

I recall writing to Monroe Beardsley about the possibility of doing something about the problem at that time, and I believe I also discussed it then with Justus Buchler. Both were encouraging.

But I didn't want to teach children logic in the way we taught (or pretended to teach) college students logic. The children would certainly object to having one more nauseating subject crammed down their throats — and they'd have been right. Someone suggested to me that I somehow present logic in the form of a children's story. The possibility intrigued me: a story telling, almost as a child would relate it, of the discovery by a group of children of how their own thought processes work, and how more effective thought processes could be distinguished from less effective ones.

In 1969, I applied to the National Endowment for the Humanities for a pilot project grant. I proposed to write the children's book and to teach it in a true field experiment. The grant was approved, and I wrote the book and carried out the project in the 1970-71 academic year. The teaching was done at the Rand School, Montclair, New Jersey.

The Endowment then gave me a two-year grant, covering 1971-73, for amplification of the project, under the auspices of the Department of Philosophy, Columbia University. During this period I developed a teacher's manual, arranged for the preparation of a children's workbook, and made it possible for several teachers of grades 5-8 to try working with the children's materials. I also wrote a story for high-school students, in the form of a novel.

Part One of the following paper was written in 1970, at the time the pilot project was being organized. It sets forth the rationale of the project, and the hopes I then had for it.

Part Two is an account of the pilot project itself.

Part One

1. Why Johnny can't reason

American education has been indicted often and eloquently. Some of the charges are correct, some are not. In many cases the critics may be found to share common assumptions with the educational system they seek to criticize. For example, critics are often found complaining that children reason poorly because reading and mathematics are taught badly, and the schools respond by frantically searching for ways to teach these subjects better. It seldom seems to occur to either party that, while reading and mathematics are disciplines that contribute usefully to good thinking, they cannot *suffice* to produce it. The fact that Johnny adds, subtracts, multiplies, divides, and can race through a Danny Dunn book doesn't mean he can reason. It doesn't mean he is developing habits of efficient thinking or of arriving at independent judgements. Something more is needed.

Perhaps the above statement is too drastic. It's not that Johnny can't reason. It's just that he can't reason as well as he should. And it's doubtful that the present educational system can take much credit for the reasoning he does perform. No one ever seems to bother to instruct the child in the hygiene of thinking. It's just something he picks up by himself, or something he quietly and unconsciously absorbs through the pores of his skin. (On the rare occasions in which he is taught "critical reading", it seems to be done quite unsystematically.)

Alongside the lack of attention given to reasoning in today's curriculum is the equally deplorable trivialization of content. The moment we consider discussing a matter of some importance with the child, a thousand scruples emerge to inhibit us. The spectre of an outraged PTA is invoked; the casual manner disappears, and we become once again models of didactic pedantry. Those who recognize the banality and stodginess of much of the current content often seek to correct it, not by substituting materials that would be of genuine importance to the child, but by sensationalizing the trivial so as to compel the child's interest in what remains fundamentally inane. Obviously, instead of the lurid presentation of banalities, we need to develop attractive modes of presenting matters of intellectual substance without compromising the integrity of that substance. The objective here is not to confront the child with two isolated entities, the structure of logical thought on the one hand, and a mass of baffling profundities on the other, but to allow the child to discover how thought can play upon its subject-matter, how reasoning about issues of importance can be satisfying even if it does no more than formulate the basic questions.

But what does the school system do to stimulate the child's reasoning capacities?

He receives training in mathematics. It would of course be absurd to deny that mathematics involves reasoning. But it is reasoning that is so highly abstract, so incredibly *sui generis,* that it has yet to be demonstrated satisfactorily that the capacity for mathematical deduction is transferable in any significant way to conceptual deduction. Hardly a semester goes by in which a teacher fails to discover students who are excellent in mathematics but deplorable in English, or vice versa. Apparently the referential and connotative aspects of language, its richness of meaning, its nearness to everyday actuality, are precisely what frighten off certain students who prefer only the manipulation of pure symbols. It would appear that educators have been greatly oversold on the power of mathematical training to improve children's abilities to draw logical inferences from what they have heard or read, or to make appropriate logical distinctions.

Secondly, the child is given courses in science, and a certain portion of such courses is often devoted to "inference". But the inference referred to is not the relatively rigorous deductive inference. It is instead the much more suppositious process known as "inductive inference". It may be granted that one type of induction — generalization — is a fairly rudimentary intellectual operation. But another type, the forming of hypotheses, is a process of extreme subtlety. It is far closer to art than to mere craft. Just as we really cannot *teach* anyone how to invent new and worthwhile sculptural or painting or musical compositions (although we can create an environment which is more conducive to inventive and more hostile to non-inventive behavior than are most environments), so it is unlikely that we can teach children or adults how to invent worthwhile hypotheses. There is no known method for producing new ideas. But the point is that it is unreasonable to believe complacently that we are teaching children all they need to know about inference just because we teach them to draw probable inferences from their *perceptions.* (One recalls that often, when Sherlock Holmes would come out with one of his hypotheses, Watson would compliment him on his magnificent *deduction*! But whether the difficulty lay with Watson or with Conan Doyle is rather difficult to say.)

Thirdly, the young student is taught to "read for meaning", or at least such teaching is attempted. At first glance, it might seem that "reading for meaning" does involve precisely those logical mechanisms on which deductive inference and our verbal judgments depend. Un-

fortunately, this is only partially correct. For if the inferences involved in mathematics are generally too abstract to be transferred efficiently to verbal thought, the contrary is often true with literary inference: it is too *concrete* to permit such transfer.

No doubt each work of literature has a "logic" of its own. But it is not (thank heavens!) the deductive logic of formal thought. And what is true of literature is true to a lesser degree of all expository writing. Verbal meanings depend upon connotation and suggestion, upon all sorts of nuances other than what can logically be deduced from a given set of statements in a given context. What one teacher will call "the" meaning of a given literary passage, another may dismiss as "far-fetched interpretation". A good case in point would be the enigmatic directions to the exercises in almost any of today's children's textbooks. They frequently seem to be masterpieces of befuddlement. Many children still manage to perform the exercises correctly, but this is in spite of the directions rather than because of them.

In other words, we expect the pupil to find clear and unambiguous meanings in contexts which are rich in indirection and allusiveness. That children frequently develop a knack of telling us what they suspect we want to hear should not delude us into thinking we have improved their powers of deduction regarding the written materials in question.

Fourthly, there is the attention given in some schools to the process of "problem-solving". But in order to solve problems, a stage of formulation is needed, and prior to formulation, it is necessary that crucially relevant questions be raised. The doubts that are symptomatic of the problems themselves should be utilized in this stage of question-raising. I can recall the dean of a large medical school remarking that today's medical students wish to rush immediately into prognosis and treatment; they have little time for careful diagnosis. But this is an attitude we have encouraged with our stress upon "problem-solving", without an equal stress upon the need for independent thinking, careful attention to one's doubts, importance of question-raising, and other such significant aspects and phases of the *preliminaries* of inquiry.

Quite possibly, the complacency we exhibit regarding the developing of reasoning in children has been increased rather than diminished by our increasing familiarity with the work of Piaget. The *inevitability* of logical development which Piaget seems to imply in his descriptive (but rarely pedagogical) studies tends to lull many readers into believing that it is not necessary to *push* the child up the inclined plane of improved reasoning in the way we acknowledge we must push him in other disciplines.

According to Piaget, children begin to function logically even before they acquire language. It is evident that their reasoning capacities remain rather rudimentary in the earlier phases of their development. Until they are 11 or 12, Piaget believes, they remain wrapped up in the more concrete aspects of experience; perception, sensation, imagination and insight are prevalent, but abstract thought is rare. Then suddenly they take off, and in a year or so they reach a new and rarefied plateau, where they perceive and manipulate abstract relationships, and even understand that they are doing so.

Apparently, all that Piaget can suggest to educators is that they tailor the child's education to conform to the phases of his logical development. Yet, as I shall contend later in more detail, even this meager advice is either erroneous or subject to erroneous interpretation. It does not allow for acceleration of education in thinking. And it suggests that because the child thinks concretely in a certain sense in his early years, that his instruction during this period should likewise be concrete. Methodologically this is highly questionable.

2. *The Child and the Educational Establishment*

The intellectual possibilities of the American school child remain largely unrecognized and unexplored. We teach him to think *about* various subjects — English, history, social studies, and so on. But we do not teach him to think about thinking, although he is capable of doing so and would be interested in doing so. We do not sufficiently encourage him to think for himself, to form inde-

pendent judgments, to be proud of his personal insights, to be proud of having a point of view he can call his own, to be pleased with his prowess in reasoning. Reacting against our Puritan heritage once again, the fashion is now to encourage the child to feel, to be sensitive — having first armored him against feeling and anaesthetized him against sensations. But we do not trust him to think.

Outside the school, things are no better. Although television is everybody's whipping boy, it is doubtful that the often chaotic patterns of stimuli it offers are more destructive than the bland physicality of *Boy's Life* or the cynicism and nihilism of *Mad* magazine. Television treats the child as a potential consumer; the children's magazines treat the boys as potential soldiers and the girls as potential housewives. In both media, "idea" is a four-letter word. Indeed the ambiguities and ambivalences which pour in pell-mell upon the television viewer are often closer to the paradoxical or ambiguous qualities of actual life in today's world than the rather mindless and innocuous but totally coherent existence which children are portrayed as having in elementary school textbooks.

What the school does succeed in introducing into the child is a negative charisma, a gratuitous belief in his own intellectual impotence, a distrust of any intellectual powers of his own other than what it takes to cope with problems formulated and assigned to him by others. The lively curiosity that seems to be an essential part of the child's natural impulse is sooner or later beaten or battered out of him by the intransigencies of the educational system.

The child should be taught to distinguish among different types of situations, and he should be equipped with a battery of methods so that he can adapt the appropriate method to the situation he encounters and recognizes. But the child is not presently equipped to discern such situational differences, nor is he made aware of the differences among modes of response and methods of treatment. There are situations which call for precise and disciplined thinking, but he is not given any indication of what such rigor involves. There are other situations that call for insight and structuring, others which call for questioning and defining, still others which call for cretive thinking as to the possibilities of transforming what presently exists into something more satisfactory. He needs many methods; he is given barely one.

The child distrusts not only his own intellectual capacities, but those of his classmates as well. He does not have a set or attitude which would permit him to accept and learn from *their* experience, because learning is seldom presented to him as a cooperative enterprise; it is seldom shown to him that inquiry is a matter of communal activity. He does not realize what discoveries are possible in dialogue and discussion — discoveries of another's ideas and of another's person.

Indeed, the child's negative charisma is the inverse of the educational establishment's positive charisma. He can attribute uncanny wisdom and infallible insight to the establishment only by first robbing himself of his belief in his own possession of them. Laing is on very sound ground when he observes that a child (or an adult) often *becomes* that which we say he *is*. Children whose belief in their own intelligence is confirmed by others subsequently behave more intelligently.

3. *Mind and Thinking in the Curriculum*

Over the years, the sciences have marched relentlessly into the classroom: first the natural sciences, then the biological sciences, and most recently the social sciences. Certainly the physical environment is a fit subject for the child to study. The human body is a fit subject. The structure of society is a fit subject. Why then is the human mind not a fit subject? Children are as much aware of and as keenly interested in their thoughts as they are in the bodily functions. But nowhere is *mind* in the curriculum. We have begun to teach elementary school children about sex. Why? Because we are afraid that if we do not, they will make "mistakes", i.e., behave in ways that are socially if not individually disadvantageous. But mistakes in thinking can be no less socially disadvantageous. Why then do we not teach the principles of thought in the same way we teach the principles of sex? One cannot help suspecting the reason: mindlessness does not seem to threaten the established order; thoughtfulness might. An irrational social order is threatened far more by rationality than by irrationality.

We teach care of the body — hygiene and physical education. What do we teach children regarding the care of their minds? Indeed, Piaget has somewhere remarked that asethics is the logic of conduct, so logic is the morality of thought. From this point of view, it would seem that if we teach (whether at home or at school) what is "right" and "wrong" about action (i.e., morality), then we should seek to teach what is "right" and "wrong" about thought (i.e., logic).

There are two major questions to be answered here: is logic what is really needed, and if it is, can it be taught?

Much of what goes by the name of "logic", as taught on the college level, is certainly teachable to children. Take that portion of it known as "informal logic". It is almost wholly appropriate to elementary school English courses, and indeed, some of the materials of informal logic have long been parts of the elementary curriculum in some schools. Teaching such material to college students is largely a waste of time, both the student's and the teacher's.

This is not to say that all logic could or should be eliminated from the college curriculum. Certainly symbolic logic should continue to be taught at that level. Yet, even if symbolic logic could be unpacked, disassembled, and taught in tiny steps, as has been done with the "new math", it is so abstract that it would improve *verbal* reasoning little more than mathematics courses do, if at all.

Another component of most introductory courses in college logic is "scientific method". The materials here are appropriate to a high school level, although some could be introduced much earlier.

This brings us to the question of "formal logic". For most college students, the trouble with formal logic is that it merely makes them conscious of habits of thinking which they adopted long, long ago, and have used more or less faithfully ever since. But either they already have such mental habits, in which case logic is unnecessary for them, or else they lack such habits, in which case the formation of new mental habits is an overwhelmingly formidable task. If the student's thought processes are muddled, the rigor of logic appears to him intolerable. But if his thought processes are swift and individualistic, he is likely to conclude that he has no need at all for the seeming inanities of the syllogism.

Yet, year after year, college philosophy departments agonize over *how* logic should be taught on the college level. It never seems to occur to the disputants that the question cannot be answered because it rests upon the unreasonable assumption that logic must be taught exclusively on the college level.

Formal logic can, and should, be taught much earlier.

It is not the fault of mathematics or inductive science that educators have tended to employ them as *the* models of excellence in reasoning. The fault lies wholly with the educators themselves, who have employed techniques that go directly against the grain of childhood thought processes. The child tends to think in terms of wholes rather than isolated details. The organization of a painting is a much simpler task for him than for an adult; form seems to flow from him quite naturally; only the details give him trouble. It would seem therefore that if we are to relocate formal logic by placing it in the elementary school curriculum, we should place it at about the fifth grade level, where thinking begins to move from the "concrete" (yet general, global) to the "formal" (yet particular and specific).

Instead of beginning the study of deductive reasoning by isolating logical elements — atomic parts to be fitted together into molecular wholes, we might do better to seek to acquaint the child at first with some of the more general aspects of reasoning. We could try to sketch out the system at first in broad brushstrokes — immediate inference, informal fallacies, categorical and hypothetical syllogisms, etc., while postponing the details of the system until subsequent semesters.

At this point it should be suggested that logic will have value for the fifth-grade child only if it is embedded in a context of *ideas*, against which it can constantly be applied. What kinds of ideas? Ideas, I would say, such as can be usefully borrowed from the various fields of philosophy: ethics, political and social philosophy, aesthetics, metaphysics, and so on. In short, ideas of what men consider *important.*

Now if anything is axiomatic about American education, it is that children and philosophy don't mix. Not even high school children. But this is in keeping with Laing's thesis, mentioned earlier. Children are treated as if they were incapable of philosophical deliberation, therefore they behave as if they were incapable of philosophical deliberation. And this is said of children who, with their constant inclination to ask "Why?" behave far more philosophically than most adults! In fact, we discount children's philosophical inquisitiveness because it so often calls into question things we prefer to take for granted. In our anxiety to preserve our beliefs as they are, we classify inquisitiveness with scepticism, and scepticism with outrageous disbelief. "Ah," the child says, "if in the beginning God created the world, then it wasn't really the beginning after all, was it?" — and we're prepared to throttle him for his unanswerable presumptuousness.

Granted, children probably find abstract philosophical concepts to be almost devoid of significance. They mumble through "with liberty and justice for all", "let freedom ring", and even insist on "one nation invisible", but the words are so much mumbo-jumbo to them. Yet let them feel unfairly treated, and a fierce resentment will flare up. They cannot explain it in terms of "injustices"; they find it very difficult to give reasons for their feeling as they do. But that *something* they profoundly believe in has been violated, there can be no doubt. And it is my guess that, if they were encouraged to do so, they could discuss among themselves what that something might be, and seek to isolate it, to define it, and to justify it. What is at present lacking is our willingness to create the climate and environment which would provide such encouragement.

It is useless for us to complain that ours is a nation of sheep as long as we do not develop the capacity of independent judgement in children. So long as sheep are what we really want, sheep are what we'll get. (This is one of the few areas in which our hidden desires are fully rewarded.) On the other hand, if we begin a course in "Mind" in the fifth grade, what reason would we have for stopping it there? It would make more sense to continue it through high school, at which time the reality-testing theories of epistemology could be brought in to gladden the hearts of adolescents, for whom appearance-reality problems are completely tantalizing. In addition to moving into new areas, the course could move more deeply through old ones. The material is almost inexhaustible.

4. *How Can Reasoning be Taught in the Fifth Grade?*

But now the crucial question: how is all this to be taught? The didactic method employed in many classrooms would be, in this instance, little short of a disaster. On the other hand, it would be naive to expect a fifth-grade teacher to be able to assist and guide the children in improvised discussions; such efforts at "discovery through dialogue" are both rare and difficult on the college level, even with highly experienced teachers and highly motivated students, although they can be tremendously impressive when they do succeed.

Improvisational discovery involves

further difficulty, in that the children are quite unclear as to what is expected of them. Some of them suspect that it is to find out what the teacher already knows, without being explicitly told what that is. Some believe it to be an elaborate way of wasting time, because they cannot see precise and concrete results. In short, the children lack a *model* of discovery-in-practice. But instead of providing such a model, educators have contented themselves with devising stratagems and lures which might provoke the child into a discovery response.

The construction of discovery models is not a simple matter. But it can be done. Using the techniques of children's storytelling, it should be possible to relate idealized instances of cooperative, participatory discovery, not only of the principles of logic, but of ideas in a wide variety of philosophic domains. The stories need be no more "over the heads" of fifth grade students than Plato's *Republic* is over the heads of college students. All that is necessary is that they should serve as springboards for intellectual discussions, and that these discussions should serve in turn to promote a heightened awareness of and understanding of the world these children inhabit, as well as of their own identities in that world.

But discovery as a method can be only as important as the product that is discovered. If discovery techniques were to be restricted to trivial or banal materials, the result would be to disenchant students as to the possibilities of a technique that turned out always to be so fruitless and unrewarding. Bruner's dictum, that "any subject can be taught to anybody at any age in some form that is honest", is deservedly famous. But the fact that any subject *can* be taught does not commit us to the belief that any subject is as good for the child as any other, or that we need no discriminations as to the relative importance of different subjects. No doubt it is important that children should play with lenses and discover how convex lenses differ from concave ones; that they should play with magnets and discover the difference between positive and negative poles. But by what criterion do we decide that discovery of these particular distinctions is more important than the discovery of, say, the distinctions between valid and invalid, between true and false, between right and wrong, between good and bad, or between beautiful and ugly?

In the greatest portraits of the discovery of understanding, young men are shown together with old Socrates (or young Socrates with old Parmenides) exploring problems together. Socrates is portrayed as neither beautiful, in any conventional sense, nor again, in any conventional sense, is he shown to be wise, or as a dispenser or purveyor of wisdom. In the great portraits of civilized conversation, ranging from Euripides to *Emma* and *Portrait of a Lady,* speech and thought are so wedded that the reader participates in the ebb and flow of ideas simultaneously with the ebb and flow of feeling. Our future educational materials must be devised with such works of art, literature and philosophy as their models — or rather, as their inspiration, for the period which we are coming to in the area of education can no more use models based on the past than the major architects of the 13th or the 20th centuries could use them.

Educators have underestimated the amount of preparation necessary to arouse a child's curiosity. Anyone can pique it. There are countless gimmicks that fascinate children and enchant them. But to get to the deeper levels of their curiosity (their curiosity about what is important), we must do more than merely titillate their interest. We need to construct instructional materials and instruments that contain intellectual shock and surprise. We can hardly expect to arouse the real resourcefulness and spontaneity of the child without presenting him with striking ideas of some kind. And at the same time we must be prepared to guide his responsiveness so that he can see its rewards, rather than that he should become disenchanted as a result of the fruitlessness of his own ramblings. There are times that call for structuring discussions and times that call for allowing them to proceed improvisationally; there are times that call for didacticism and times that call for discovery techniques. An effective teacher does not put his trust in any one technique, but relies upon his tact and sensitivity to determine which of his armory of methods he should select and employ on any given occasion.

A curious child is like a coiled spring in that he contains his own energy, his own dynamism, his own way of opening or unfolding. But one must find the proper trigger mechanism to release that energy. This is not just an idle figure of speech. Experimenters have shown how

much faster a cat will get out of a box if the release mechanism is connected to a dangling string rather than to a lever, latch, wheel, etc. This is of course because the cat instinctively responds to the string and not to the other stimuli. Similarly, in sexual behavior, what a caress provokes is not merely an isolated response, but a biologically structured process of behavior leading to its own culmination or fulfillment.

In our pedagogical thinking, we have tended to be remarkably narrow. We have puritanically separated instruction from entertainment (much as we have separated work from play — except in the area of art). Instruction is serious, grim and rational. Entertainment is light-hearted and irrational. And then we're amazed to find our children repelled by cognitive activities! What did we expect?

Occasionally we pay lip-service to non-verbal or non-assertive techniques. "Aristotle knows, but Plato shows", we sigh, conveniently forgetting that what Plato demonstrated or (to use Buchler's term) "exhibited" was quite different from what Aristotle, in his dry fashion, was satisfied to assert. For exhibitive techniques are not just entertainment. They are also instruments of disclosure and communication, and they can convey what a standard textbook approach cannot hope to convey.

All of this is an apology for presuming to experiment with the teaching of deduction to 10 and 11 year-olds through the medium of a fictional account of the discovery by a group of children of some of the principles of reasoning, and how they subsequently continue their thinking about thinking. *Harry Stottlemeier's Discovery* is only a beginning (if it is a beginning at all). But if it should develop into something more, even Harry himself might begin to ponder the significance of his own name — minus, of course, its last two syllables.

Part Two

The Pilot Project, whose ostensible aim was to determine the feasibility of teaching reasoning to fifth-grade children, was carried out in the Rand School, Montclair, New Jersey, during the 1970-71 academic year. The design of the experiment was devised by Milton Bierman, Director of Pupil Services of the Montclair school system.

The Rand school is located in an area populated largely by low-income and lower-middle-income black families. But it had just been paired with the Watchung school, so that two-thirds of its pupils were now drawn from a neighbourhood that is primarily white and middle-income. The population of the school was consequently quite heterogeneous.

Bierman established two groups of twenty children each, through randomization. The control group was assigned to a professor from N.Y.U. who was engaged in a social science experiment. Unfortunately his project collapsed after three weeks, and so the remainder of the period of the experiment was devoted to social science instruction in the case of the control group.

The pilot project group was taught by myself, with the assistance of two aides, who were then graduate students in Developmental Psychology: Jerry Jaffe and Jim Harte. We met with the students twice a week (each meeting lasted 40 minutes) for nine weeks. The class was never identified to the students as being "logic" or "philosophy" or any other such term. When necessary, it was referred to as "Dr. Lipman's class". The students asked fairly soon if grades would be given, and they were told that none would be.

Wherever possible during the course, the use of technical terms was avoided, on the assumption that they carry with them, at least to the mind of the child, a negative charisma: they are intimidating, "power" words, the kind used by "People in Positions of Authority". It was this impression we wished to avoid making by avoiding the terms that leave such an impression.

Although I had taught logic and philosophy on a college level since 1952, I'd had no experience with teaching fifth-grade students, and my two assistants had had no teaching experience whatsoever. No doubt the students found us a bit odd. I began by reading a chapter of Harry Stottlemeier at a session, but I soon found that they preferred to read for themselves. I was hesitant, because I thought that the class would become impatient with the slow readers. To my surprise, they were patient until the very end with the haltings and stumblings of the slow readers. (The fast readers would often try to read *more* than their share, but they would have resented my limiting a slow reader to less than his share.) Later on, they were delighted when I let them play roles in those chapters which were designed to permit role-playing. And they loved the video recording session we had — but only when it was introduced suddenly, without prior announcement. On the occasion on which I asked them to prepare for a video taping, they were quite self-conscious and inhibited.

I would like to cite my notes which I wrote at the end of the first week of the project:

> Friday, October 16:
>
> Today was the second day for Harry Stottlemeier, and we've already gone through two chapters. But I think we'll slow down once we hit the discussion materials in Chapter 3.
>
> On Wednesday, when we first saw the students, we were more apprehensive than ever: they looked so small! I read the first chapter to them with virtually no explanation of what we were doing. They listened very quietly, turning the pages in unison while I read. Then I asked what Harry had discovered. I expected some halting, fumbling replies. In fact, we already had prepared some very elementary exercises (e.g., different ways of filling in blanks: "All _____ are fish", and "All kittens are _____," etc.).
>
> What we didn't expect was that the very first answer was lucid and absolutely complete: that Harry had discovered that if you take a sentence beginning with 'all', and turn it around then if it was true at first, it will be false when you turn it around. But if you take a sentence beginning with 'no', and turn it around, it'll still be true. We were astonished! The remainder of the class did as well. We went down the rows and asked them to illustrate the rule, and they had no difficulty at all. (We found today that some of them had difficulty *writing out* the rule, but they have no problem applying it.) This is all the more interesting when we recall that these kids are from levels C and D — average and below average.
>
> Moreover, they brought out certain deficiencies in the chapter: the need to turn adjectival predicates into noun phrases (e.g., to turn "All kittens are frisky" into "All kittens are frisky things", so that it can be reversed without awkwardness).
>
> Also, it became clear that they wanted to know about sentences that began with 'No' and were false — did they stay false when reversed? I was so surprised that they'd caught on to something omitted from the chapter that I didn't at first have the courage to answer. But later I told them

that such a sentence, when reversed, could be either true or false.

Today's story went well, except that many or most of the children hadn't yet studied fractions, so they didn't know about lowest common denominators. This portion of Ch. 2 will have to be changed.

One thing we noted about both days was that the kids really relish having some tangible results to write down in their notebooks. I had thought originally that the logical rules would be what they would resist, and would have to be coaxed into accepting by the bonus of pleasure from the stories. But that doesn't seem to be how it works. They seem to look upon the rules as the tangible, visible profits of the enterprise, the rewards they can take home and show. The pleasure they get from the stories themelves is somehow of a different order.

We administered three quizzes in reasoning during the nine-week course. When the experiment was concluded, Jerry, Jim and I went our separate ways, but I received a computer printout from Jerry indicating that the results of one of the tests showed a difference between the two groups of .28, which he did not consider significant. Somehow I erroneously interpreted this to be the result of the post-test rather than merely the final quiz. I suspect that I was resigned to believing that the experiment might produce important changes in the children's attitudes, but since these probably could not be demonstrated, I didn't really expect significant improvements in achievement. Call it a defeatist attitude, but the fact is that I accepted the presumed result with resignation.

I didn't learn until the summer of 1973 what the actual results of the post-test had been. This is a quotation from Jerry's report.

"Both groups (the pilot study group and the control group) were initially tested for their knowledge of logic and logical reasoning through the use of four specific test parts of the California Test of Mental Maturity (1963 Revision Long Form). . . . No significant differences occurred between the two groups prior to the start of the program although both groups demonstrated above average scores in the results.

"At the end of nine weeks, both groups were again tested for their knowledge of logic and logical reasoning. The same four tests of the California Test of Mental Maturity were used except that the items were extracted from the Short Form (1963 Revision) of the test.

"The pilot study group showed significant gains over the control group in the area of logic and logical reasoning (p % .01). The computed mental ages (as related to logic and logical reasoning ability of the pilot study group and the control group) were 167 months (13 years 11 months) and 140 months (11 years 8 months) respectively. The control group showed no significant advance over their initial test scores."

It took me several days to digest this information. How significant was the reported difference of .01? Bierman informed me that it was an unusually high degree of significance. This became fairly evident when one considered the increase of 27 months in mental age of the pilot study group at the end of the 9-week program.

I could hardly believe we'd made such an impact on the kids in the study. After all, we'd not made much of a fuss about teaching logic: there was no homework, no grades, no written classwork — it was all discussion, and the discussions usually got far away from the subject of deductive inference. On the other hand, we had taken the kids seriously and they seemed to take us in the same way. We promised them nothing, and we felt they were satisfied that what they were doing was meaningful. After all, children don't like being told, when they ask what something means, or why they have to do something, "Wait, you'll see". To them, that's so much pie in the sky. They want meaning now. They want meaning to be intrinsic, not extrinsic. So maybe we did something right!

I called Jerry. He told me that the results were quite as he had set them down in his report. Unfortunately, he no longer had the data, which meant that our findings couldn't be substantiated.

This was getting to be a roller-coaster ride of successive elations and disappointments. I discussed the matter with Bierman, so as to put things in perspective. All right, so the principles of logic (from immediate inference on through the categorical and hypothetical syllogisms) could be taught to children. So what? The important thing was, what effect would this have on their general achievement levels? And would such an effect be a lasting one? I suggested to Bierman that we compare the Iowa scores of the two groups for the years 1971 and 1973. The crucial scores would be the reading scores. It seemed very improbable, however, that a nine-week course in logic and philosophy taken late in 1970 would influence the reading scores of a group of children in 1973.

But when I glanced over the raw scores, I was convinced we were on to something. Bierman's calculations confirmed my suspicion: the difference was indeed significant — in fact, it was the identical high level of significance, .01, which Jerry had discovered in his post-test.

This is Bierman's report:

A PILOT STUDY IN THE TEACHING OF LOGIC
RESEARCH CONCLUSIONS

by Milton L. Bierman, Director of Pupil Services
The Public Schools,
Montclair, N.J. 07042

I . *Hypothesis*

Fifth grade students who are taught aspects of logic will score significantly higher on a test designed to measure proficiency in the use of logic than will fifth grade students who are not so taught.

The null hypothesis is that students who are taught logic will score equal to or significantly lower on the test than students not so taught.

In statistical terms, this is a type two test which can be stated in the following way:

$$H_0: \mu 1 \leqslant 2\,\mu 2 \text{ with } H_1: \mu_1 > \mu_2$$ *

*cf. Edwards, Allen L. *Experimental Design in Psychological Research*, Third Edition, 1968. Holt, Rinehart & Winston, Inc., New York, pp. 88-91.

II. *Operational Definitions*

A previous researcher used four sub-tests (inferences, opposites, analogies and similarities) of the California Test of Mental Maturity (1963 Revised Long Form) to determine that the two treatment groups which were randomly chosen were in fact equivalent. Extracted items from the same sub-tests of the Short Form of the California Test of Mental Maturity (1963 Revision) were used as a post-test.

Unfortunately, the previous researcher did not report and apparently cannot produce the data on the basis of which he came to certain conclusions.

The present researcher was left with the problem of either re-testing the students using the California Test of Mental Maturity almost three years after the experiment or of determining a different test for measuring the two groups. The school district in which the experiment was conducted tested all of its students in grades three through eight with the Iowa Test of Basic Skills. An examination of the test revealed that the reading sub-test though not as adequate as the California Test of Mental Maturity might be an adequate measure particularly beginning with the grade seven test. The present researcher decided to use grade equivalency scores of the students on the reading sub-test of the Iowa Test of Basic Skills (Form Six) given in May 1973 when the students were seventh graders. Implicit in this decision were certain value judgments, namely, that the grade seven reading test was a more adequate instrument for the purposes of this research than were the fifth and sixth grade reading tests, that the need for the more sensitive instrument was a more important consideration than the two and a half years separating the testing of the students for the experiment, and that any significant results still evident after two and a half years would strengthen the results of this pilot study.

III. *Treatments*

The experimental treatment was designed and implemented by Dr. Matthew Lipman. He has described his method and materials adequately elsewhere. Suffice it to say here, that the treatment consisted of 18 sessions, twice a week, for nine weeks in the Fall of 1970.

The control treatment was designed to be an experiment in the use of games in the teaching of social studies. After six sessions this approach was abandoned; the consultant left; and the students received formal instruction in social studies for the following twelve sessions from their regular teachers.

The control treatment as originally conceived was an attempt to define a second treatment that could be as appealing to the students as the experimental treatment. This attempt was made to minimize the halo effect.

All sessions were about 40 minutes in length.

IV. *Randomization*

At the time the original research was designed, the present researcher, because of his position in the school system involved, randomly assigned the students in two fifth grade classes to the two treatments, having first blocked them on their functional reading level as demonstrated in their reading class. The method of randomization was a table of random numbers. Nineteen students were assigned to each treatment with one extra student being assigned to the experimental group.

The previous researcher confirmed the equivalency of the two groups by the results of his administration of the California Test of Mental Maturity as a pre-test.

The question is whether or not these two groups were still equivalent two and a half years later. The theory of randomization argues that they would be. However, a check of the students indicated that all the students originally assigned to the experimental group took the Iowa Test of Basic Skills in May of 1973. According to the theory of randomization an equivalent number from both groups should have moved and not taken the post test. No students missing in the experimental group and five missing in the control group suggests that the groups if random once upon a time were no longer random in May 1973.

To try to determine whether it was reasonable to assume that the two groups were still random, a second sub-test on the Iowa Test of Basic Skills was examined. It was determined by Dr. Lipman and this researcher that there was no reason to believe that the results of the experiment on the control treatment should affect students' ability to spell. Therefore, if the groups were random, they should have equivalent scores on the spelling sub-test of the Iowa Test of Basic Skills.

An examination of the data on Chart II indicates that the two groups were essentially equivalent on the test. The researcher therefore drew the conclusion that the two groups were still equivalent when the block containing the missing students was eliminated. The research design was still valid.

V. *Statistical Designs and Results*

The statistical model used was that of a randomized block design utilizing a t test rather than analysis of variance. The data and the results are included as Chart I.

The computed value of t in the comparison of the two treatment mean is 2.8. The tabled value of t with a level of significance of .01, with a one-sided test, and with thirteen degrees of freedom is 2.650.

Because the computed value of t is higher than the tabled value, the null hypothesis can be rejected. This suggests that there is only one chance out of a hundred that the experimental group did not score significantly higher on the reading

sub-test of the Iowa Test of Basic Skills than the central group.

The conclusion to be drawn is that the experiment conducted positively affected the reading scores of the students two and half years later.

This result confirms that found by the original researcher. His statement of results follows:

> The pilot study group showed significant gains over the control group in the area of logic and logical reasoning ($p < .01$). The computed mental ages (as related to logic and logical reasoning ability) of the pilot study group and the control group were 167 months (13 years 11 months) and 140 months (11 years 8 months) respectively. The control group showed no significant advance over their initial test scores.*

VI. *Discussion*

These results strongly suggest:

(1) that the students in the experimental group learned something that was very useful to them
(2) that this was accomplished in a relatively short period of time
(3) that the effects probably still distinguish these students from their control counterparts
(4) that the teaching of logic affected their ability to read which is a subject of vital concern in education
(5) that the experiment is worthy of replication to confirm internal validity and to build external validity.

*Jaffe, Jerry. "Misapplication of Piaget's Developmental Model." Unpublished and undated class paper. Developmental Psychology. Montclair State College. Page 8.

I am now convinced that philosophy can and should be a part of the entire length of a child's education. In a sense this is a kind of tautology, because it is abundantly clear that children hunger for meaning, and get turned off by education when it ceases to be meaningful to them. And philosophical discussions are precisely the proper medium for putting things in perspective, getting a sense of proportion, and achieving some kind of insight into the direction of one's life. So to want meaning and to require a philosophical dimension to one's education amount to pretty much the same thing. As Kant says, who wills the end, wills the means: if we really want children to find their educations meaningful, we'll devise a suitable philosophical component. And if we don't devise such a component, it's because we really don't want them to wonder what it's all about.

CHART I

READING

Randomized Block Design

	Exp.			Control				
Block	X	x	x^2	Y	y	y^2	D	D^2
1	111	25	625	98	9	81	+13	169
2	114	28	784	100	21	441	+14	196
3	102	16	256	100	21	441	+ 2	4
4	94	8	64	92	13	169	+ 2	4
5	95	9	81	93	14	196	+ 2	4
6	98	12	144	95	16	256	+ 3	9
7	87	1	1	89	10	100	− 2	4
8	81	− 5	25	88	9	81	− 7	49
9	77	− 9	81	67	−12	144	+10	100
10	78	− 8	64	76	− 3	9	+ 2	4
11	70	−16	256	72	− 7	49	− 2	4
12	65	−21	441	50	−29	841	+15	225
13	67	−19	361	50	−29	841	+17	289
14	65	−21	441	39	−40	1600	+26	676
Σ	1204		3624	1109		5249	95	1737
μ	86			79				
σ^2	259			375				
σ	16.1			19.4				

$$\Sigma(D-\overline{D})^2 = \Sigma D^2 - \frac{(\Sigma D)^2}{n} = 1092.4$$

$$\sigma_{\mu_1-\mu_2} = \sqrt{\frac{\Sigma(D-\overline{D})^2}{n(n-1)}} = 2.5$$

$$\chi = \frac{\mu_1-\mu_2}{\sigma_{\mu^1-\mu^2}} = 2.8$$

with $\alpha = .01$, a one-side tested df = 13, the tabled $t = 2.650$ therefore the null hypothesis, $\mu_1 \leqslant \mu_2$ is rejected.

CHART II

SPELLING

Randomized Block Design

	Exp.			Control				
Block	X	x	x^2	Y	y	y^2	D	D^2
1	112			116				
2	103			88				
3	96			94				
4	99			88				
5	93			86				
6	93			83				
7	86			85				
8	90			80				
9	76			65				
10	65			80				
11	72			63				
12	51			60				
13	44			63				
14	25			57				
	1105			1108				
	79			79				

By inspection of the treatment mean, the null hypothesis, $\mu_1 \leqslant \mu_2$ is not rejected.

Why Aren't Thinking Skills Being Taught?

This article is reprinted, with permission, from Comment, *Vol. I, No. 1, December, 1981, pp. 9–11.*

By Matthew Lipman

A recent report on children's reading performance, issued by the National Assessment of Educational Progress, indicates "13-year-olds as well as 17-year-olds declined in the inferential category. . . . This is the skill that enables students to draw conclusions, to form judgments and to create new ideas." (*New York Times,* April 29) In the *Times* the following day, Gene I. Maeroff concluded that "a crucial transition between what is defined as reading in the early years and what constitutes reading in the later years is evidently not being made. Students are not acquiring the critical thinking skills that underpin advanced reading in literature, social studies, science and other subjects."

Almost instinctively, one looks for a group of delinquent teachers at whom one can point one's finger. But which teachers? There is no subject called reasoning in elementary or secondary schools. Consequently there are no teachers of reasoning as such.

For a long time it was common to claim that one learns reasoning when one learns arithmetical operations. Somehow the host of thinking skills required for the effective use of language, and especially for successful inference, was supposed to carry over from mathematical to linguistic activities. The claim was supported by precious little evidence, and one may speculate that those who advocated it were well-intentioned, but got the matter backwards: it was not that the study of mathematics produced good reasoners, but that the acquisition of reasoning skills would likely improve academic performance in mathematics and in many other subjects as well.

Nevertheless, the claim that reasoning was already being taught as a discipline goes part of the way towards explaining why it was *not* taught as a discipline. (This is not to deny that children do learn some degree of reasoning just through reading and conversation. The teacher who writes a question on the board and then says, "I don't see any hands" is supplying a minor premise to the unspoken major premise, "If you know the answer, raise your hand." The children emulate the teacher's reasoning with ease, and draw the implied conclusion. This is a good example of teaching a valid reasoning pattern, and it is done every day by teachers, parents and peers.)

But teachers do not teach reasoning as a formal discipline. They do only what they are taught to do, and they try to avoid doing what they are not taught to do. Would we not therefore be more logical to blame the schools of education?

It turns out that they too, unfortunately, are doing only what they were taught to do—and so on down the line among the academic regiments. One is tempted to thow up one's hands, blame it all on the system, and turn one's attention to other matters. But this strange case of a crucial gap in the educational process cries out for explanation, and once we recognize its existence, it is difficult to turn away from it.

Any thoroughgoing inquiry into the problem will have to take a close look at texts and tests. That is, when we ask how the minds of each emerging generation are shaped, we should look at the curricula to which students have been exposed, and at the criteria by which their performances have been measured. It would be difficult to exaggerate the power that is quietly wielded in our society by the curators of curricula and criteria.

Those who manufacture curricula, like those who manufacture cars in Detroit, generally take their guidance from the wisdom and certainties of market research. This explains at least in part why their products are so often mediocre, and so seldom generate searching reflection on matters—especially intellectual or ideological matters—of importance to students. Moreover, to a much greater extent than we suspect, teacher education is shaped by the curricula to be taught rather than by professional considerations of the nature of education.

So the absence of reasoning in the curriculum may be due to nothing more than the mindlessness and greed that prevail no less among publishers than elsewhere. There are no reasoning texts for elementary education because there is no demand for them, and there is no demand for them because they are believed to be superfluous.

Is the matter any different with regard to criteria? Here the picture is much different, for here, it turns out, there are overwhelming *professional* reasons for not teaching children reasoning.

Those who measure intellectual performance believe they must do so by focusing on a single, extraordinary aspect of that performance—one that is so essential that it can serve as a reliable predictor of future academic success but which, at the same time, is itself *incapable of being taught.* (The latter requirement is claimed to be crucial, for if the factor to be measured could itself be taught, students could improve their performance on the tests by studying.)

Reasoning, of course, is precisely the magic factor which the measurers have denied could be taught in order to keep it from being taught. (When they think of reasoning, they generally think primarily of inference, with the result that inference questions make up a larger and larger proportion of questions on such tests as the Graduate Record Examination. But it is reasoning as a whole that is the key predictor.)

As yet not referred to is the role played by philosophers, those curators of the other kind of criteria—the criteria of successful inference, also known as logic—in keeping reasoning from being taught in elementary and secondary education. Perhaps it was just an ivory tower disdain for dirty hands. Perhaps it was simply turfmanship: philosophers have for centuries protested vigorously at every confusion of logic with the psychology of reasoning, and at every conflation of philosophy and pedagogy. Whatever the reasons, the absence of reasoning instruction in the schools aroused few voices of protest from philosophers, although no group was in a better position to realize the catastrophic consequences of not teaching reasoning systematically and sequentially at every grade level.

It remains to be seen whether reasoning will be allowed to play a significant role in elementary and secondary education. But the story of its not having played such a role until now remains as a tantalizing chapter in some future history of our fumbling efforts to evolve a workable educational system and a thoughtful citizenry.

Joseph Little is Administrative Supervisor, Totowa Public Schools. This is a report, dated June 22, 1981, made to Dr. Nat Giancola, Totowa Superintendent of Schools. The questionnaires were returned unsigned by the students in the Philosophy for Children Program.

Student responses to a questionnaire about their philosophy program

by Joseph Little

Number of students enrolled in the Philosophy for Children Program 455

Enrollment Analysis

TEXT	5TH	6TH	7TH	8TH	TOTAL
"HARRY"	119	53	31	35	238
"LISA"	0	53	27	18	98
"SUKI"	0	9	0	0	9
"MARK"	0	0	56	54	110
TOTAL	119	115	114	107	455

TEXTS "Harry Stottlemeier's Discovery" - Basic Reasoning skills
"Lisa" - Reasoning in Ethics
"Suki" - Reasoning in Language Arts
"Mark" - Reasoning in Social Science

RESPONSE TO STUDENT QUESTIONNAIRE

A. Has this Philosophy course helped you to understand other points of view even though they may be different from yours?

Yes	-	**77.16%**
No	-	18.52%
Sometimes	-	.61%
Blank	-	3.70%
Total	-	99.99%

B. Did you ever think about thinking before?

Yes	-	**51.23%**
No	-	45.06%
Sometimes	-	.61%
Blank	-	3.08%
Total	-	99.98%

C. Do you feel that you are a better thinker now?

Yes	-	**61.72%**
No	-	31.71%
Sometimes	-	2.48%
Blank	-	3.08%
Total	-	99.98%

D. Has Philosophy changed you in any way?

Yes	-	**54.94%**
No	-	43.20%
Sometimes	-	1.23%
Blank	-	.61%
Total	-	99.98%

E. Has this course helped you improve in:

	MATH	READING	SCIENCE
Yes	- 17.90%	**57.40%**	12.34%
No	- 81.48%	41.97%	**86.41%**
Blank	- .61%	.61%	1.23%
Total	- 99.99%	99.98%	99.98%

	SOCIAL SCIENCE	EXPRESSING YOUR THOUGHTS
Yes	- 20.37%	**85.18%**
No	- **78.39%**	14.19%
Blank	- 1.23%	.62%
Total	- 99.99%	99.98%

F. Has this course given you a better way to make a decision or arrive at a conclusion?

Yes	-	**65.43%**
No	-	30.86%
Blank	-	3.70%
Total	-	99.99%

G. Are you happy that you did not receive a grade for this Philosophy course?

Yes	-	**69.13%**
No	-	29.62%
Blank	-	1.23%
Total	-	99.98%

H. Are things always as simple as they appear?

Yes	-	.61%
No	-	**99.38%**
Total	-	99.99%

I. What I liked about Philosophy was...

"Freedom to express my thoughts and opinions to someone who would listen".
"Time to share my feelings".
"Made me aware of life's real problems and how I might deal with them".
"It was fun and I learned things about life besides".
"The teacher, she was great".

What I would change is...

"Less reading".
"More reading".
"Additional audio-visuals to complement the book".
"Nothing! I like it just the way it is".
"The time period. Make it longer".
"Everything. I was bored (sic)".

Each item on the questionnaire asked for an explanation or clarification of the "yes - no" response. To list all the responses on this report would be monumental. Selected quotes are listed below. Parentheses indicate the question of the response.

1 (A) "It helped me to understand that what some people may take as a joke, others may take as a serious insult".
2 (B) "Not until now".
3 (C) "Because I know how to think for myself in my own way".
4 (D) "No I'm still the same lovable me".
5 (D) "Before I used to take one idea and think that was the solution to the problem. Now I don't do that".

6 (D) 'It made me realize that other people have feelings too and shouldn't be criticized for what they believe is wrong".
7 (F) "Yes, because it explains things in a way a kid would understand".
8 (G) "I don't think we should get a grade for expressing our thoughts and being open".
9 (G) "It wouldn't be right if we were to receive a grade because I don't think someone should grade our thoughts".
10 (H) "They never have been".
11 (I) 'I was totally bored with this class because I don't think about thinking-just think".
12 (I) "The teacher made the class fun, but I don't understand why we took this test".

POINT OF INTEREST

Those students who indicated boredom in the class all stated reasons for it. That is the *purpose* of the course: to allow expression of thought backed by reasons. They were actually applying philosophical thought to their negative responses. They were philosophizing.

SUMMARY

A marked level of sophistication has been indicated as students progress through the novels of this program. This may be partly due to age level advances, bur also due to exposure to degrees of philosophical thought.

The longer a child is in the program, the more reasonable he or she seems to become. This was evidenced by the questionnaire. Those who had "Harry", backed their responses with one maybe two supporting statements and indicated limited carry over to other subject areas. Those having "Lisa", "Suki" or "Mark", listed many statements reflecting logical thought and showed a high level of carry over.

The Philosophy for Children Program for the 1980-1981 school year was a substantial asset to the children in our schools and shows great promise in future years.

Rational Schools

By Henry Morley

Charles Dickens was intensely interested in both childhood and education, but the descriptions of educational situations that occur in his novels (e.g., Hard Times*) tend more toward the lampooning of existing practices than toward the identification of educational practices which might be found in an ideal educational setting. Dickens was a man of profound sensibility and a marvellous satirist, but it is unlikely that the working out of schemes of social reconstruction were his personal forte. On the other hand, his powerful sense of fact and his strong journalistic flair pointed him in the direction of being a magazine editor, and the first issue of* Household Words *appeared in 1850. It proposed from the start to deal with "the important social questions of the time," and with this in mind, it gave its attention on repeated occasions to the problem of education.*

A regular staff member of Household Words *and the one who contributed the largest number of articles to it was Henry Morley, who had been a doctor, a teacher in charge of his own school, an editor, and would later become professor of English language and literature at University College. In an article ("School-Keeping," January 21, 1854) on his own experience as a schoolmaster, Morley sketches out some of his views on the nature of teaching, on children, and on punishment, and then proceeds to recount a day in one of his own classrooms.*

Dr. Q. called on us one Monday morning before his own Christmas holidays were over—ours being short—and he made a grimace when he found us very snugly seated about the room, one stirring the fire, and all talking about the news of the day. I was insane enough to devote every Monday morning to that sort of study, and the Doctor candidly confessed before he left, that it was not altogether folly. Boys accustomed to discussions upon history, looked at contemporary events from points of view that appeared quaint to him and not entirely useless. They bewildered him by their minute acquaintance, with the recent discoveries at the North Pole, which they had acquired while their hearts were full of sympathy for Sir John Franklin. There was a new scientific discovery of which they were endeavouring to understand as much as possible, and they were criticising social movements in a startling way. The Doctor observed too, how the tempers and the humours of the children were displayed in this free talk, and how easy it became, without effort or ostentation, to repress in any one an evil tendency—the tendency, perhaps, to pass summary and contemptuous opinions—and to educate the intellects of all. A great deal may be done when all seem to be doing nothing. When news was scarce, and time was plentiful, we filled that morning with a lesson upon what we entitled "common knowledge." That topic recurred two or three times a week, and was concerned with reasons and explanations on the commonest of everyday words and things.

We divided the day into two very distinct parts. Half was spent upon book-study, as of languages, arithmetic and mathematics; the other half upon history and science. I began to struggle—through the history of man—fully enough to occupy over the task five or six hours a week, and get to the end in about three years. In the same time, we were to get through the story of the world about us, and complete the circle of the sciences. Geography we learnt insensibly with history and science, filling up our knowledge of it with the reading of good books of travel. In these studies, the interest taken by the children was complete, but partly because I felt that there was insecurity in oral teaching by itself, partly because I wished to see how we were getting on, a practice was established of mutual examination in all things taught verbally to the whole school together. All were parted into two sides, matched pretty evenly, whose work it was to puzzle one another. The sides were often shifted, for the eagerness of competition became sometimes greater than was wholesome: though it

was a pure game of the wits, in which there was no tangible reward held out to the victor. Very proud I felt at the first trial when I heard questions asked and answered upon facts in history or natural history, or explanations of familiar things taught verbally, in some cases, twelve months ago. It was felt to be of no use to ask anything told within a month or two, because that probably would not have been forgotten. I got a book and entered every question that was asked, wording it in my own way, but altering or prompting nothing; and the book now lies before me, an emphatic proof of the degree and kind of interest that children, taught without compulsion and allowed to remark freely upon all that they are doing, can take in the acquisition of hard knowledge. They began curiously with thoughts rather than things, and with thoughts, too, that had not been discussed among us for a twelvemonth. "Why does China stand still in her civilisation?" was asked first; that being answered, the other side returned fire with the same kind of shot, "Why did our civilisation begin on the shores of the Mediterranean?" That was remembered, and there was a return question ready, "Upon what does the advance of civilisation depend chiefly?" That, too, was known, and there was a shot more in the locker, "Why is England so particularly prosperous—why not some other island?" Then, there was a change of theme; a demand for the habits of the sexton-beetle was returned again in kind by a demand for ditto of the ant-lion, and upon the white ants there was a retort made with the gad-fly and the Bosphorus. Then, one side grew nautical, and wanted a description of all the parts of an ancient ship of war. They were remembered—for the topic was but a few months old—and the retort was "Describe the spyboats of the ancient Britons." That day's engagement ended with the question, "Why is it close and warm in cloudy weather?" to which the return inquiry was, "Why is it colder as you rise into the air, though you get nearer to the sun?" Every question asked that day was fairly answered. On the next day of battle I find one side asking to be shown the course of the chief ocean currents, and the other demanding to be told what causes ebb and flow of tide, spring and neap tides, and to be shown the course of the tide wave. I find questions in the same day on the wars of Hannibal, the twinkling of the stars, the theory of coral reefs, the construction of the barometer and thermometer, the tide in the Mediterranean, and how one branch of a fruit tree can be made to bear more than the rest. Farther on, I find such questions asked as the difference between ale and porter, between treacle and molasses, how a rope is made, how spines are formed on shells, when linen was first used in Europe, and what is the use of eye-brows and eye-lashes.

After this system of mutual examination was established, a new phase of our school life displayed itself. The oral teaching which had evidently not been thrown away was cultivated with new care; a great system of note-taking arose; all kinds of spontaneous efforts were made to retain things in the memory; and the result was, that, as I read before I taught and could not remain always so full of information on a topic as I was while teaching it, the children over and over again remembered more than I did. I soon needed all my wits not to be nonplussed myself, when they were labouring to nonplus one another.

Now if work of this kind can be done merrily, stopping at the end of every hour for five minutes of play, and throughout without any employment of a harsh restraint; if over work of this kind faults of character or temper can be easily and perfectly corrected—as with us in two or three instances they were—a spirit of inquiry can be begotten. That done, a boy can be made to feel the use and enjoy the exercise of education, and in the end will turn out eager to go on acquiring knowledge for himself. Surely if this be so, there must be something rotten in existing school systems, planned upon the models set up in the middle ages! Truly, I think there is great room for a Luther among school-masters; and I do marvel greatly at the pertinacity with which society adheres, in these days, to scholastic usages whereof familiarity breeds in it no contempt.

One has a sense of intellectual ferment at Morley's school, and while it may not be philosophical ferment, there may still follow from it the "spirit of inquiry" of which Morley speaks in the last paragraph. Although there are many other articles which Morley wrote on education, one that is particularly worthy of our attention is his account, which was co-authored by H. W. Wills, and which appeared in* Household Words *on December 25, 1852, of a visit to one of the Birkbeck schools. Whatever their limitations, the Birkbeck schools were innovative in a number of ways, including an insistence that the social sciences by taught Socratically. Morley's article provides a vivid picture of the classes he observed there.

It is but a stone's throw from the High Court of Chancery—High, as we say also of venison or pheasant, when it gets into very bad odour—to the London Mechanics' Institution in Southampton Buildings. After a ramble among lawyers in their wigs and gowns, and a good choke in the thick atmosphere of Chancery itself, we stepped in at once, one day not long ago, among a multitude of children in pinafores and jackets. There they were, one or two hundred strong, taking their time from a teacher, clapping their hands and singing, "Winter is coming," and a great many more songs. They suggested much better ideas of harmony than the argument of our learned brother, whom we had left speaking on the question, whether money bequeathed to be distributed in equal shares to John and Mary Wilson and James Brown—John and Mary being man and wife—was to be divided into two parts or into three.

The children, when we went among them, were just passing from one class into another, and met in the great lecture room to sing together while they were about it. Some filed in, and some filed out; some were on the floor, some in the gallery; all seemed to be happy enough, except one urchin at the extreme corner of a gallery. He displayed an open copy-book before him to the public gaze, by way of penance for transgressions in the writing lesson, but he looked by no means hopelessly dejected.

There are three hundred and fifty children in attendance on this school,

which is conducted by five teachers. It is one of the Birkbeck Schools, several of which are now established in and about London for the children of parents who can pay sixpence a week for schooling. The children here, we were informed, are classed in the first instance according to their ages in three divisions, the first taking in those under eight years old; the second, those between eight and eleven; the third, children older than eleven. These form, in fact, three ages of youth. It is found most convenient to teach children classed upon this principle, and to keep the elder and the younger boys from mutual action on each other, because it would be impossible to provide for such a school so many teachers as could exercise every minute supervision. In each of these three divisions, the children are subdivided for the purpose of instruction into two classes—the quick and the slow—which receive lessons suited to their respective capacities. It is obvious that, without punishment, five teachers could not preserve discipline among three hundred and fifty boys; and therefore, though it is but seldom used, a cane is kept on the establishment.

The children having clapped and sung together, sang their way out of the great room, in file, while others began streaming in. We were invited to an Object Lesson, and marched off, (not venturing to sing our way into a class room,) where we took our seat among the pupils, whose age varied between eight years and eleven. The teacher was before us. We were all attention. "Hands down." We did it. "Hands on knees." Beautifully simultaneous. Very good. The lesson began.

"I have something in my pocket," said our teacher, "which I am always glad to have there." We were old enough and worldly enough to know what he meant; but boys aspire to fill their pockets with so many things that, according to their minds, the something in the teacher's pocket might be string, apple, knife, brass button, top, hard-bake, stick of firewood for boat, crumbs, squirt, gunpowder, marbles, slate pencil, pea-shooter, brad-awl, or perhaps small cannon. They attempted no rash guess therefore at that stage of the problem. "Boys, also," our teacher continued, "like to have it though when it gets into a boy's pocket, I believe that it is often said to burn a hole there." Instantly twenty outstretched hands indicated demanding utterance in twenty heads. "If you please, sir, I know what it is." "What is it?" "A piece of coal."

You draw your reasoning, my boy, from a part only of the information given to you, founding your view of things on the last words that sounded in your ears. We laughed at you, cheerfully; but when we see the same thing done in the world daily by your elders, we do not always find it laughing matter.

"This little thing in my pocket," the teacher continued, "has not much power by itself, but when many of the same kind come together, they can do great deeds. A number of them have assembled lately to build handsome monuments to a great man, whose name you all ought to know, who made the penny loaf bigger than it used to be—do you know what great man that was?" Hands were out, answers were ready, but they ran pretty exclusively in favour of Prince Albert and the Duke of Wellington. "I am sure," says the teacher, "you must have heard who made all the loaves larger without altering their price, think again—who was it?" A confident voice hazarded, the suggestion that it was "Guy Fawkes," and half-a-dozen voices cried "Guy Fawkes." There are always some to follow the absurdest lead if it be taken confidently, in the great as in the little world.

"Guy Fawkes! nonsense, do you mean him to be carried about in your heads all through November and December." More inquiry at length elicited, after a little uncertain hovering about Louis Napoleon, the decisive opinion that the man who made bread cheap was Sir Robert Peel. "If you please, sir," said an argumentative little fellow, "*he* did not make the penny loaf bigger." "Why not?"—"He did not make the loaf: he made the baker make it." The difficulty thus started having been properly gone

into, and further statement of the riddle having been given, it was at length fairly guessed, that the teacher's object upon which he meant to talk with us that day was a Penny.

We ascertained that it was round, that it was hard, that it was brown, that it was heavy—by which we meant, as some of us explained, that it was heavier than the same quantity of water—that it was stamped on both sides, and so forth; also that it was made of copper. Pence being next regarded purely in the light of coppers, the name of the metal, 'Copper,'' was written at the top of a black board, and a line was drawn, along which we were to place a regiment of qualities. We began easily by asserting copper to be hard; and showed our penetration by discovering that, since a penny would not do for framing as a spy-glass, it must be opaque. Spell opaque? O dear, yes! twenty hands were out; but we were not all so wise as we imagined. No matter; there are folks of bigger size elsewhere who undertake what they are not able to do. O-p-a-k-e ought to be right; but, like not a few things of which we could argue that they must be right, it happened to be wrong, and so what was the use of talking. We heard a little boy in the corner whispering the truth, afraid as yet to utter it too boldly. It was not the only truth that has appeared first in a whisper. Yet, as truth is great and shall prevail, it was but fit that we all finally determined upon o-p-a-q-u-e; and so we did; and we all uttered those letters from all corners of the room with the more perfect confidence as they grew, by each repetition, more familiar to our minds.

A young student in a pinafore, eight years old and short for his age, square and solid, who had been sitting on the front row nearly opposite the teacher, was upon his legs, he had advanced one or two steps on the floor holding out his hand; he had thoughts of another quality, and waited to catch the Speaker's eye. But our eyes wandered among the outstretched hands, and other lips cried, "It is Malleable;" so Malleable was written on the board. It was not the word that still lurked in the mind of Master Square, who in a solid mood kept his position in advance, ready to put forth his suggestion at the earliest opportunity. What Malleable meant, was the question over which we were now called upon to hammer, but we soon beat the answer out among ourselves; and we spelt the word, and Malleability into the bargain. Master Square uplifted his hand the moment we had finished; but then rose other hands again, and the young philosopher, biding his time in sturdy silence, listened through the discussion raised as to whether or not copper might be called odorous. This debate over, Square was again ready—but an eager little fellow cried that copper is tenacious, upon which there was a new quality submitted to our notice, which we must discuss, explain, and of which the name had to be spelt. But Master Square's idea had not yet been forestalled, and he, like copper, ranked tenacity among his qualities. At length he caught Mr. Chairman's eye, and said with a small voice, "Please, sir, I know a quality." "And what is that?" the teacher asked. Little Square replied, as he resumed his seat, "It's INORGANIC."

Here was a bombshell of a word thrown among us by this little fellow, but we did not flinch. Inorganic of course meant "got no organs," and we all know what an organ was, and what a function was, and what were the grand marks of distinction between living and dead matter, and between animal and vegetable life. So we went on, with a little information about mining, and display of copper ore: a talk about pyrites, and such matters. Three quarters of an hour had slipped away. The lesson ended, and there was another re-arrangement of the classes.

There were copy-books to look at in the central lecture-room, to which we then returned; in some of which "Friends, Romans, Countrymen," and other trifles from the poets seemed to have been copied from dictation. Around large maps, were little classes, each with a young monitor in the middle, demonstrating geography, and questioning with tongue and finger. We joined one group but the small teacher faltered, and was uneasy in the presence of so tall a pupil; we passed to another group, and found another monitor who clearly liked to be observed, and put on the important tone of an instructor—not at all roughly, for he had no rough example in his eye—but with an amusing mimicry of ways and tones used by his elders.

While we had been watching the fingers of this young gentleman, as they pointed out on a map some of the ways of the world, the classes had been formed again, and we were presently invited to attend another lesson. We had, this time, another teacher, and joined pupils more advanced in years; the youngest were old fellows of eleven.

"If you buy a loaf, what do you give for it?" "Money." "What is money?"—From this point we were carried through a series of questions on the social relations that exist in civilised communities. The boys readily defined and explained such terms as wealth, capital, wages, labour; showed by a train of reasoning their perfect comprehension of the principle that governs our common divisions of labour and the relative rewards of toil. They went over old ground, but it was quite evident that they had not got their answers stereotyped, for half-a-dozen answers came to every question; all of them showing that the right idea was in the speaker's mind, though the boys differed in their methods of expression. With the exception of one boy, evidently oppressed by the languor of ill-health, there was not an inattentive pupil in this class. All went heartily at the business in hand, and there was no mistaking the real interest they felt in the discussion through which they were led. A little fellow with light flaxen hair, one of the youngest in the class, was quite a luminary upon all points that were mooted. He made for himself a cushion of his knuckles, and he sat so on the backs of his hands, with his small legs reaching only half way to the ground, his quick eyes bent on the teacher, and his face gladdened with a smile of intelligent pleasure in the train of reasoning that he had evidently mastered. Where others hesitated, he answered boldly and correctly; where others knew their ground, he answered with

them in his own way, but in an under voice, for the mere pleasure of working out the subject. He sat, and swung his legs, and smiled, and spake with the most complete independence. There was not a question that he did not answer, and there was not one of his answers that was not clearly and correctly given. It was a touch of the very pleasantest comedy, when this imperturbable young philosopher got the class over a difficult case by suggesting the line of conduct which a capitalist would probably pursue in given circumstances. A young man with his business head—he is eleven years old—and his knowledge of the laws that regulate prices and other matters in the country, ought to be in Parliament. There are men there (and perhaps in the Cabinet), very much behind him in point of knowledge and acuteness on such topics. If he were put upon the table of the House so that honourable members could see him—for his legs are very short—we are quite sure that his speeches would be shorter than his legs; but we are quite sure also that there are in the said House, fifty or sixty gentlemen who might be wiser for accepting the instruction he would give them.

What must be the practical effect of teaching the facts that concern social welfare to such children, let a scrap or two out of their present lesson testify. "What are wages?" Answers vary in form: "The reward of labour," "Capital employed to purchase labour," and so forth. "When you become men, and work, and receive wages, will you all receive the same amount of money for your labour?"—"No, very different."—"Why different?"—"The price paid for labour will depend among other things upon the value of it, and that differs in different people."—"How?"—"Some are more skilful than others."—"Why so?"—"Because they have spent more time and pains, and perhaps money, to become able to do something; and they must be paid more for the more that they have spent."—"Then the rate of wages that a man can earn in any business will depend upon his skill?"—"Yes, and on other things; men must be industrious. If two men are equally skilful, and one is more industrious than another, the one that is more industrious will give more valuable labour, and the price obtained by labour depends on the value of it."—"The rate of wages depends then on the skill and industry of the labourer. On anything else?"—"Yes, he must be sober. He may be very skilful and work hard, but he may get drunk and be unable to turn his skill and industry to full account. If he does that, he lessens his own value."—"The best wages then go to the man who is skilful, industrious and sober; are any other qualities concerned in the contract between employer and employed?" A young sanitary reformer shouted that "He must be clean;" but it was then argued that there are trades in which no workman can be clean, and the necessity of cleanliness was therefore struck out of the list. "He must be honest," said the little statesman. "If he is skilful, industrious, and sober, without being trustworthy, his value to the employer is destroyed." Honesty was, therefore, added to the list. "He may be skilful, industrious, sober, and honest, yet, if he be nothing more," said the teacher, "there is a workman who may beat him yet."—"Yes," half-a-dozen cried, "he must be punctual. If he is not punctual he is of less value than a man who is skilful, industrious, sober, honest, and punctual as well." Having laid down these principles, the boys proceeded to reason that the man with two good qualities was better off in prospects than the man with one; and so on, up to the man with all five recommendations, whose prospect of wages would then be great, in proportion to the intensity of each.

The relation between capital and population, competition and the rise and fall of wages, were discussed in the same familiar way. Throughout the lesson, it was evident that the boys were becoming grounded in the truths that regulate the life before them, and that they knew it. They were learning how they must work, and why they must work.

They were taught at what points human sympathy should step in, and does very commonly step in, to smooth the business intercourse existing between man and man; how, when a man droops in sickness, or a labourer becomes infirm, stronger hands commonly are prompt to do a neighbour's work: forebearing to deprive him of the hire on which his bread depends. They learnt in what cases forbearance should be expected, but they learnt also that even in such cases it is sometimes absent; that they must be prepared to do their duty of forbearance towards others, as the best foundation for a claim upon forbearance when they need it for themselves. Fluctuations of wages that depend on natural causes they were taught to understand and to accept as necessary facts, when they might hereafter occur within their own experience. And thus in fact these boys were learning what work means, were trained to help themselves, and rescued from the unhappy crowd that yet for many years to come will act to its own hurt under the guidance of pot-house orators and pot-house prints. The little flaxen-headed statesman who dropped from his form when the lesson was over, and fell into the file for marching out, standing in his shoes one or two heads shorter than the boy before him, will, with Heaven's leave, grow up to be a workman skilful, industrious, sober, honest, and punctual. We pictured him to ourselves as he will be hereafter, with a square bald head, sitting beside the neatest of wives, and arguing with his eldest son the question, how he shall dispose of certain capital into which a portion of his wages shall have been by that time converted. It is too much to hope that he will ever be Prime Minister.

It had struck one o'clock, and when we came again into the central lecture-room, we found the children there assembled for the enjoyment of thirty minutes' rest to their minds, and preparing to get through a little labour with their teeth. Pocket-dinners were produced and eaten. How dear is the savour of a stew on Saturday; how like the gale of Eden is the breath of osmazome from the hot joint of Sunday, to the child who has been digesting the cold lumpiness of pocket-dinners for every one of the first five days of the week. We took leave of the young faces, and at the door of the London Mechanics' Institution we found puddles under foot, and a smoke-coloured rain descending.

No weather could damp our curiosity to hear a little more of this kind of instruction. Snatches of it that we had heard, such as the following, amused and interested us, and at the same time still piqued our curiosity.

Teacher to Pupil—How many appetites a day have you? Pupil answers that he has four appetites; that he likes breakfast, dinner, tea, and supper. How many does that make in a year? the teacher next inquires. Three hundred and sixty-five times four, which being worked out on a slab, is found to make a total for each person of one thousand four hundred and sixty appetites a year. The teacher then wishes to know how many harvests there are in the year, and is of course told that there is "only one." Only one harvest for us all, when each of us has fourteen hundred and sixty appetites. How can we all be fed? The child begins to think, and answers that the corn is not all eaten at once, that it is saved, and so the lesson travels into the wide fields of social economy.

Not very long after our visit to the Birkbeck School in Southampton Buildings, we paid an afternoon visit to another school established on a plan somewhat similar, to Holborn. An evening lesson was to be given by a gentleman who has for some time devoted all the leisure of an active life to education of the kind we have described. It was the gentleman by whom indeed, the Birkbeck schools were founded, and by whose suggestions social science was included in the list of subjects taught. We joined, on this latter occasion, a mixed class of boys and girls, enjoying the mental discipline provided by an enthusiastic and accomplished teacher. The children had all written on their slates, the subject of the lesson that "not the money wages, but the amount of commodities that money wages could procure, ought to engage the attention of the person by whom wages are received." After defining, in reply to questions, general terms, and thoroughly making up their minds that a shilling when it would buy four loaves and other food in like proportion, was really higher wages to the workman than eighteenpence would be if eighteenpence would only buy three loaves, a part of the lesson ran somewhat in the following way:—

If the value of gold should be lowered for the importation from Australia—"Then," said a brisk girl in a green netted polka jacket, "there could not be so much food bought with a sovereign. Real wages would be lowered." A stout and tall boy, with a heavy well-formed head, and with a wide interval between the top of his half boots and the bottom of his trousers, was of opinion that in such a case "the workman would want more wages." "Could they be had by wanting?" "Well, they would be wanted. But the change must be gradual. The proportion between capital and wages never alters suddenly." "But when the workmen wanted wages, would it be enough to want? Who wants wages most?" "The man who can't get them," cried a small voice. "A drunken man, does he want wages as much as a good workman?" A shrewd little girl suggested that "he wanted more." "Then wanting wages does not constitute a right?" "Yes, but—" said the stout boy true to his point which was no stupid one—"if the value of gold falls, the workman has a right to higher money wages." "But if the proportion between capital and labour should not allow a rise; if there should be a hundred labourers and only a hundred pounds to pay among them, could more be paid than a pound to each; or would the average wages be higher if four pounds a piece were paid to five and twenty?" "No, sir," replied green polka, "the average would be the same." "Then," suggested the stout boy, arguing in a fair train, "the amount of labour should be lessened. Some of the workmen ought to emigrate, and make more room." "Room do you want, is that all? Let us see." A pale-faced little fellow looking with big eyes into the argument before him who had already taken a large part in the lesson, with a nervous energy of interest, and nervous irritability of manner, when he found that he was tumbling upon false conclusions, here, said,

"You must apply skill and industry in labour to increase wealth in a country and produce more capital." "Well," said the teacher, "not long ago three-fifths of the people of this country could not sign their names. Suppose the remaining two-fifths had prudently resolved to better themselves and the country by emigration. Suppose they had gone away. There would have been more room, wouldn't there?" "Yes," said green polka, "but we should have been a great deal poorer." "Why so, with so much more room?" "Because those who remained at home would be the ignorant and idle." "They would get drunk," cried one voice—"until they had no money to get drunk with," added another. "Then," said the nervous

boy, holding also to his point, "they would go and work for wages, but they would work badly—" "Then it is not altogether room that we want if we would prosper? There's room in the great desert, but you wouldn't like to go and live there, eh?"—"No," said the nervous boy, "there must be knowledge, skill, and industry, and prudence to increase wealth." "There must be skill, and industry, and prudence; and how are all those qualities acquired? In a minute?"—"No, sir." "How then?"—"By training, by education." "And when must education begin?"—"From the first." "You are being educated?"—"Yes." "And when everybody is educated into knowledge, industry, and prudence, and bred up to work wisely—what shall we all do!"—"Increase the wealth of the country, and so increase also the amount that is to be divided among workmen." "That," said the pale boy, with large eyes, "is civilisation." "Do you think we can be too civilised?"—"No," replied a chorus. "If there were a ship's crew at sea with a short allowance of rations, could they do anything to make every man's dinner larger."—"No, sir." "But they would not like it, but they would want more."—"Yes, but they would have to make the best of it and be good tempered." "If a number of them would not be good tempered, but cried out for larger rations, what then?"—"Others would think them very ignorant."

"And what would the others do in such a case—"Try to teach them better," said green polka, quickly. "If wages fell on shore because there was not so much capital as usual to divide among the labourers, and if the labourers understood that, what would they do?"—"Put up with it," said green polka.—"And work well," added the pale face, "in order to make better times." "If there were telve workmen, ten doing their best for themselves and their country, and two getting drunk, talking nonsense, and doing nothing, what ought the ten good men to do in such a case?" The stout youth appeared ready to suggest "Punch their heads," but green polka forestalled his speech with the idea that they would "help to teach them better"—"Then you think teaching necessary?"—"Yes, but it is better young."—"And from whom can the young learn most?"—"From their parents."—"Can any of you answer this hard question? If we were all educated, all civilised and working hard, pulling together to increase the wealth of us all—what effect would that have, or would it have any effect, do you think, in increasing or lessening the number of mouths we have to feed?" There was a serious pondering over this question, which was evidently new to all the children; but at last the youth with the half-boots propounded his opinion that there would not be quite so many of us: because "if men were intelligent and prudent they would not often marry till they knew beforehand how they were to feed and educate their children."

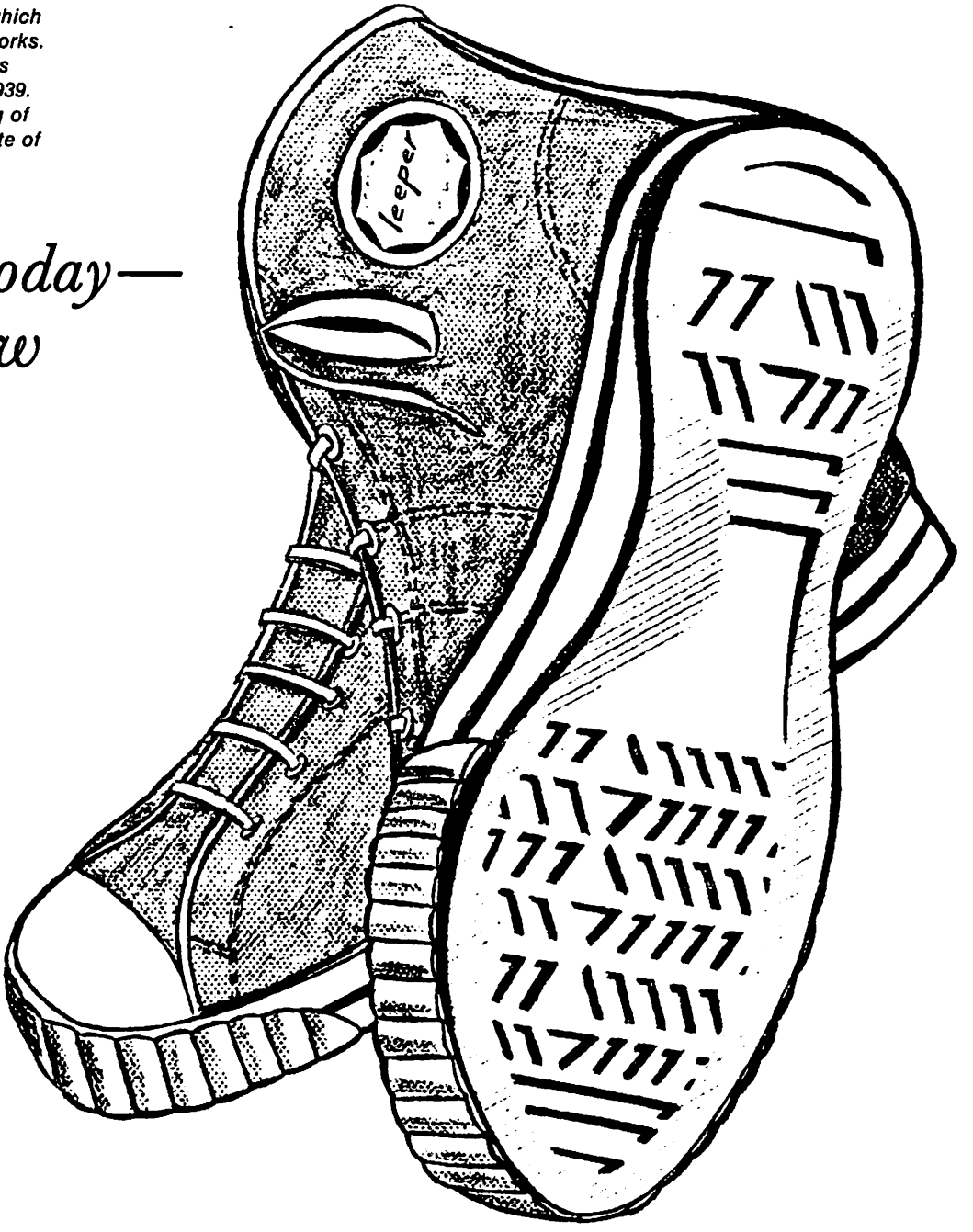
We need not illustrate these lessons in greater detail. It is of course impossible in a few paragraphs to give anything like an exact transcript of the lights and shades of expression and opinion, or of the precise words elicited from many children in any part of a diffuse lesson carried on by constant dialogue. In its diffuseness, however, it is least dull. The quaint suggestions of fresh minds at every turn enliven the whole subject, the ponderings expressed on childish faces, the triumphs of discovery, the pleasant laughter at the odd conceits occasionally struck out, and the bold jokes hazarded at times by some young wild-goose of the party—all this mingled with a fair sense of the good work that is being done, makes any lesson of the kind, if it be conducted by an able teacher, a very agreeable entertainment.

The imaginative faculty in all these children, and also (last but not least) their religious principles, we assume to be cultivated elsewhere. Such cultivation, we are well convinced, is no less important to their own happiness and that of society than their knowledge of things and reasons; and it should steadily be borne in mind that no amount of political economy, and no working of figures, will or can ever do without them. Still, that in its influence upon the well-being of the children and upon the future of the country to which they belong, this is an important and useful labour, we are quire sure we need not insist. Very distinct illustrations of that fact will occur at once to all of us.

It is unlikely that many of those who acclaim W. H. Auden as perhaps the foremost English poet of his time, and one of the leading essayists, are aware of the interest he took in education, or of the fact that in 1939 he and T. C. Worsley wrote a book on that topic. One of Auden's motives may have been to refute D. H. Lawrence's educational views, which Auden considered reactionary. (For a portion of Lawrence's essay, see Thinking, *Vol. II, No. 1, pp. 43-49.) According to Auden's literary executor, Edward Mendelson, "the first half of the section ('Theory') is probably mostly by W. H. Auden and the second part ('Suggestion') probably mostly by Worsley." We are very grateful to Mr. Mendelson for allowing us to reprint this passage from an essay which is still among Auden's uncollected works.* Education Today—and Tomorrow *was published by The Hogarth Press in 1939. The selection that follows, consisting of pages 31-51, is copyright by the Estate of W. H. Auden.*

Education Today—and Tomorrow

by W. H. Auden and T. C. Worsley



Theory

All education is a preparation for life. It must teach people how to do the things which will keep them alive, agriculture, hunting, fighting and what not, and it must teach them how to live together, the laws, customs and beliefs of the community.

In a primitive community with an undifferentiated economy, there is no quarrel between the vocational and the social aspect, for, apart from the division of labour between the sexes, all have to do the same things and lead the same kind of life. Religious instruction is practical, and practical instruction religious.

Educational theory begins when society has become differentiated, when different classes are living so differently, and doing such different things that the question arises: "What shall we teach and to whom?"

The Middle Ages

Our present education has developed out of the theory and practice of the Middle Ages. Mediæval social theory divided society into three classes:

1. Those who pray.
2. Those who guard.
3. Those who work.

Those Who Pray

Their social function was to mediate between God and man; their practical occupation a life of contemplation. That is to say, their life was a mental one, a training of the mind rather than the body, the more so because the flesh was held to be evil. Originally they were vowed to poverty, and in many monastic communities, manual labour was an important part of their life, but their intellectual training was an abstract and philosophical one. Believing that the material world was as straw beside the heavenly mysteries, and that the truth had been revealed once and for all, and that their task was one of interpretation only, they did not pursue a scientific method of inquiry.

In addition, their professional language was Latin. As they were the only literate part of society, they became responsible for educational, legal and administrative duties. It is from them that the academic tradition with its bias towards abstract knowledge divorced from action, its preference for interpretation rather than creation, its formalism, and its emphasis on Latin, is derived.

Those Who Guard

Their function was to guard property; their occupation the life of the courtier and the soldier; and their training, a training of the body and the social manners of a governing class. To them the military virtues of physical strength, courage, loyalty and social discipline were important, and neither intelligence nor technical skill of much value. It is on them that the public school social code is based.

Those Who Work

Their function was to provide society with goods, their occupation manual labour, and their training purely vocational. The peasant child began to work in the fields as soon as he could, and as economic life became increasingly complicated, an organized apprentice system grew up in the skilled trades. For them education was empirical and specialized.

This view of society involves three assumptions:

1. That the structure of society is static.
2. That it is just.
3. That the special aptitudes suited to each class are inherited. (Except of course in the Church, where the laying on of hands took the place of birth-right.)

Christianity was committed to the belief that all human souls were of equal value. To square this with the manifest inequality of social reward, the theologians were forced to explain it by the Fall of Man. Society, then, was corrupt, but it was just. Further, if children are born evil, then they will always tend not to want the things they ought to want, such as learning or courage or manual skill, and must be forced to want them. The traditional disciplinary technique was due partly to ignorance, but was aggravated by an *a priori* doctrine of what the child must be like.

The Renaissance and the Reformation

Both had important influences upon education. The study of Greece brought knowledge of an intellectually educated ruling class and a secular culture. It was not incompatible with being a gentleman to be also a scholar. This encouraged speculation at the expense of authority, but it only intensified the gulf between thought and action, by making learning an aristocratic privilege. The pursuit of disinterested knowledge like pure mathematics and the practice of disinterested action like sport was socially respectable. Applied science or manual labour were not.

The Reformation coincides with the rise to political and economic power of the middle classes, and as a new class they had a new conception of society. Puritanism accepted the first two tenets of medieval social theory but denied the third, i.e. it held that:

1. The structure of society is static.
2. It is just.
3. Special aptitudes are not inherited.

It accepted the class stratification, but asserted that the class in which the individual found himself depended upon his own efforts. The Middle Ages had believed, in theory at least, that the beggar was as good as the rich man. The Puritan denied this. The beggar was a beggar because he was wicked. All classes must pray and all classes must work. It is from them, both for themselves, and as employers, that the demand for a more vocational and scientific education and the attack on the Humanities has come.

Rousseau and Romantic Anarchism

The increasing complexity of social economic life and their growing moral and physical ugliness stimulated a reaction which began with Rousseau and is ending with Freud. The fundamental beliefs on which it is based are:

1. The structure of society is static.
2. It is unjust.
3. The individual is born good and is made evil by society. "Man is born free and is everywhere in chains."

The effects of these beliefs on the theory and practice of education have

been immense. If the individual is born good, then the child is better than the adult, and it is the adult who must learn from the child.

However questionable in some respects their theories may have been, they had the practical effect of making people study children to see what they were really like, and it is to the followers of Rousseau that we owe most of the advance that has been made in teaching and disciplinary technique.

Comments

1. The single point upon which all these theories agree, and upon which they are all wrong, is that the structure of society is static and unchangeable.

2. The Middle Ages were right in supposing that the poor are not necessarily poor because they are wicked, nor the rich necessarily rich because they are virtuous. The Puritans were wrong.

3. The Puritans were right in supposing that ability or the lack of it are not necessarily inherited. The Middle Ages were wrong.

4. Rousseau was right in supposing that society is not necessarily just. The Middle Ages and the Puritans were wrong.

5. The Middle Ages and the Puritans were right in supposing that Society is a necessary fact. Rousseau was wrong.

The Victorian Era

With the middle classes established in the saddle after the industrial revolution, came the consolidation of their private educational system, the reform of the old public schools, the creation of a great many new ones, and a systematization of the principles on which they were to be run. The public schools before Arnold began to reform them had been tough, barbarian places which produced the kind of brave and unscrupulous adventurers who get an Empire. Arnold's job was to turn them into incubators for the type of narrow-minded, active, unquestioning administrators who would develop and keep it, and the same type was needed for the reformed army and the new Civil Services, all the key positions of a new dominant class.

The contribution of Arnold and his followers was the invention of the prefect system, the emphasis on "character" rather than intelligence, and the discovery of organized games as the best means of developing it. By the prefect system boys were given a training in the theory and practice of authoritarian discipline; while their character-training taught them to regard themselves as natural leaders, owing a rigid loyalty to their group; and as they lived in boarding schools where only their own class was admitted from the ages of 8-18, it was hardly surprising that they identified their group completely with the nation. These features remain to-day the foundations of the public school system (vide *Games*).

A national public education begins at the end of the nineteenth century, when industrial processes demand technically educated masses and recruits for the lower grade executive posts. If the evangelicals of the nineteenth century wanted the poor to be taught to read so that they could read the Bible, the more far-sighted of the bourgeoisie wanted it so that they should understand blueprints and modern book-keeping. That, instead of either, they should come to understand Karl Marx, was no part of anyone's design, though it was a danger which the diehards foresaw.

Transition to Democracy

The establishment of universal compulsory education created a new problem which the liberal conscience attempted to solve by the "ladder" theory. Government should be by the best man irrespective of class, and the problem was to make access to the highest positions as easy and generous as possible. This theory is a barely concealed "leadership theory," the logical end of which is seen in the modern Nazi training colleges. But it has never been brought to anything like its logical conclusions in England.

The exclusiveness of the public schools was largely retained, and justified on the grounds that their products were the leaders who *served* the nation; while at the other end an attempt was made to limit their exclusiveness by opening them to a small creamed selection of working-class boys. This movement has never touched the more important schools, and the less important, whose finances have forced them to enter it, have never had to admit more than 10 per cent of their total numbers.

This half-heartedness is defended by the assertion that the public schools have something very precious (their tradition) which might be swamped by too great an influx of the lower classes. This gives the game away. The middle classes *are* the best, but, under this liberal theory, they may recruit into their ranks a small selection from the lower classes who are then submitted to a thorough de-classing process. The class structure remains unaltered, but a certain number of the lower classes are taken out of their class and trained as leaders. But it still remains that to be leader you must be middle class.

Liberal education also implies the academic bias; liberal, in this sense, meaning fit for an Athenian free man as opposed to a slave. And the Athenian tradition that a real free man despises trade as well as manual labour still lingers, rather mustily, in our educational approach.

The practical success of Rousseau's methods in education only shows that if you treat children with a modicum of kindliness and common sense, in other words, if you make the society in which they live a reasonably decent one, they will thrive on it. A good society makes people good, a bad society makes them bad. Therefore if you can discover the

factors which make a society what it is, you can educate people to virtue. The failure of education to have any appreciable effect upon the behaviour of adults or nations shows that most people adapt themselves quickly to whatever society or section of society they happen to fall into. The charming young public school athlete becomes the Great Portland Street tyke.

This is not to say that school society ought to be no better than society outside, but to say that it cannot be; different schools imitate different sections. The State school imitates the mass-production factory, the public school the army and the Colonial Civil Services, while the progressive school community resembles that of the *rentier* who is free to devote himself to higher things, and is under no obligation to develop his courage or his cunning.

Education can never be more effective than the structure of society as a whole will let it, and the teacher who imagines that you can effectively change education without first changing society will end either by throwing the whole contraption overboard in despair like D. H. Lawrence, or by deceiving himself with a lot of gas about Service like Dr. Norwood.

D. L. Lawrence, Anti-Idealism, and Fascism

All English education plays lip-service to the Liberal ideal, though the public schools have pursued it rather half-heartedly. The most serious attack on Liberal education has been made by D. H. Lawrence, and the fact that the Fascist countries appear on the surface to be putting his theories into practice makes their study extremely important to socialists. Very briefly summarized they amount to this:

1. Man fell when he became self-conscious.
2. Mental life and physical life are at odds; each secretly despises the other.
3. Idealism, the running of the instinctive life by the self-conscious mind, corrupts life.
4. Europeans have lived so long under the rule of idealism that they have become deranged, and think they want what they ought to want. They are, most of them, self-conscious neurasthenic ninnies, afraid of life.
5. Every individual is unique, with his unique needs. You cannot live by a set of Sunday-school rules.
6. Very few people either really want or are suited to a life of thought. Most can only learn a few tricks.
7. The aim of education should be to help people to realize their deepest instinctive needs.

Education should therefore:

1. Turn its back on the whole academic tradition. The majority of pupils will need no more than the three Rs. The basis of training should be the primary manual trades, farming, building, tinkering, cooking, etc., not book-learning nor ornamental arts and crafts.
2. Train the body and spirit by the tougher sports like boxing and swimming which develop courage and personal pride. Gymnastics begin at the wrong end by setting out to train the body through the mind.
3. Select its candidates for mind-training very carefully.

Many of Lawrence's observations are true, and perhaps several of his practical suggestions are sound, but his refusal to admit that on the whole people are like what they are because society is like what it is instead of the reverse makes his conclusions dangerous. As a matter of observation it is true that book-learning has a bad effect on many people, and that manual work is viewed with horror. But it is not true to say:

1. That you know that mental activity *must always* be only suited to a few.
2. That you know who they are.

It is a very attractive doctrine for an authoritarian state, because once you begin by saying that some people are born to think and therefore to rule, while the mass are born not to think but to carry out the way of life which the thinkers decide is best for them, it is a short step to saying that those who are actually ruling are born to think and those who oppose them must not be allowed to think. It is Plato's old problem of how to secure rule by the Good Men. No one can decide who they are, and no one has ever succeeded in convincing those who are in power that they are bad or that they are incompetent to judge who is.

Headmasters of old schools and new schools alike are always proclaiming that their aim is to produce leaders. This only shows that they are conceited. Every teacher knows in his heart of hearts that he has not the slightest idea of what effect he is having, that he is working largely in the dark, that on most of his pupils he has no effect at all, and probably a bad effect on half the rest.

It also shows that they are reactionary. The leaders of the second generation are the rebels of the first. A leader is the very last person they would recognize or like to see in their schools; what they want is a pleasant-mannered yes-man with executive ability.

We come back again to the old fallacy that there can be a state of society which is final and absolutely just. The moment we forget that

1. All forms of society are imperfect,
2. Some are better than others,

that is to say, if we become romantically utopian or other-worldly, if we deny the movement of history, we surrender to the first tyrant who can seize power.

Loyalty and intelligence are mutually hostile. The intelligence is always disloyal. There must always be a conflict between the loyalty necessary for society to be, and the intelligence necessary for society to become. The question of whether there are some people who are followers by nature, and others who are leaders, can only be discussed when education up to the age of maturity is open to all.

Meanwhile the important part of Lawrence's attack is his attack on the school curriculum. Every educationalist agrees that education should be general and not vocational, yet, in fact, everyone receives a vocational education in academic teaching. It is not a question of whether some people do not need an academic training but of whether all people do not need a practical manual one in some real trade, and need to realize that the mind is only a part of the whole man.

Suggestion

Since education can never be much better than the social system within

which it functions, the improvement of the latter must take precedence over everything else. Until every child has the same educational opportunities, until equal social value is put upon all forms of employment, until class distinctions are obliterated, all suggestions for educational reform, except on quite minor points, must seem highbrow and unreal. What follows presupposes radical social changes, and is only offered tentatively as matter for discussion.

I. Training Colleges and Teachers

Teachers are unique in receiving a vocational training from the age of 5. No one would expect a fifteen-year course in typewriting and shorthand to produce the perfect secretary, yet that, in effect, is the way in which we train teachers.

It would be hard, for instance, to think of a worse course than segregating teachers by themselves as happens in those training colleges which are not attached to a university. The teacher should know more about life than other people; he knows less. Sometimes he realizes this; his pupils always do.

The training colleges offer a little textbook psychology, some instruction in the theory and technique of teaching, and uplift about the citizens of to-morrow. The psychology a teacher needs is that of a sensitive, observant, intelligent man or woman of the world, or else that of a fat, stupid, kindly saint; not potted M'Dougall. And this cannot be taught. Given the right soil, it grows by friendship with all kinds of people, by love affairs, by an active life. Similarly, all the teaching technique you can teach in a lecture hall cannot amount to more than few tricks. Technique and personality are inseparable; what one learns, one learns by practice and by personal apprenticeship to those who are good at their profession. We suggest therefore:

1. That intending teachers should have several interviews with some really experienced person to find out for themselves what sort of a person they are, and if they really want or are suited to become teachers. How one is to find the interviewer is a question. One hesitates to suggest the psychologists, as there are so few that one trusts. But the truly wise men must be found. In the event of intending teachers deciding against continuing, they should be under no obligation to return State grants, and if they are still due to receive them for further training, they should get them.

2. That the valuable part of the training course is the practical part; this should be much longer than the six months or six weeks that students get at present, and they should be sent to work under the personal guidance of adult and experienced teachers, the choice of teacher to vary with the personality of the pupil and the type of school in which he or she intends to teach.

3. That in so far as theoretical instruction is needed, the staff of training colleges should be frequently changed, and consist of school teachers temporarily seconded to the job. The training-college post should never be a dead end.

4. That under no circumstances should the teacher in training be made to live in conditions where the company is confined to other pupil teachers.

5. That before a teacher starts on his career, not less than a year should be spent in some totally different kind of life. What this would be would vary of course very much from area to area and teacher to teacher. For some it might be employment in industry, for others a social service job, for others foreign travel, etc.

6. That provision should be made for entering the teaching profession from other occupations, experience in the latter to count fully in assessing increment allowances. That, in general, as much use as possible should be made of the part-time teacher.

7. That in not less than every five years, every teacher should have a sabbatical term, and in not less than every ten a sabbatical year, with pay.

8. That teaching hours should be such as to encourage teachers to do research or any other work of their own, no matter how apparently remote from their job.

The Pre-Primary School

1. That it is probable that most children begin the three Rs too early. A small child's wish to read is often a sign that it is unhappy or bored.

2. That up to the age of 7, and perhaps later, little is wanted but good facilities for play, the company of other children of both sexes, fresh air, and as little interference as possible, except for careful medical attention. It is truer of this age than of any other that if you look after the body the mind will look after itself.

7-11

1. That the proper school for this age is certainly a day school, and probably co-educational.

2. That the basic subjects are English Language (not Literature), Arithmetic, and Nature Study, which in the town means study of people, trains, buses, etc.

3. That dramatics, singing, and painting are also extremely important subjects for this age-group.

4. That foreign languages, history, geography, civics, etc., are probably unsuitable as having no relation with the child's experience. There are better outlets for imagination.

5. That children of this age are capable of doing simple unskilled manual jobs, and where the school needs them, they should be encouraged to carry them out.

11-15

1. That it is an interesting comment upon Fascism that many of the theories and practice which it prescribes for adults may be well adapted to the needs of adolescents. The emphasis on physical adventures and physical toughness, the segregation of the sexes, the distrust of intellectualism, the love of ritual, the gang and leader organization, all apply to many boys and girls from 11 to 16.

2. That no democracy can survive unless a very large percentage of its citizens take an interest in what are commonly called things of the mind, read widely, think dispassionately and so on. At present it is an unfortunate fact that a large percentage, even of those who receive higher education, do not take this interest, and there is some evidence to show that it is during adolescence that such an interest is developed or lost. There is no justification for assuming that this is inevitable until much deeper research has been undertaken on the most suitable curricula for adolescents. Accepted tradition assumes that for those who can afford to prolong their education beyond 14 or 15 such an education should be academic. While, on the contrary, it seems very likely, even for many who will afterwards adopt an academic career, that at this particular age the basis of education should be physical, and technical, and intellectual work a private hobby rather than an official lesson. In the present state of our psychological knowledge this can remain no more than a theory.

3. That all that can be done at present is to build up a really adequate technical-school system parallel to the secondary one, with proper facilities for transfer of misfits in one or the other up to the age of 14.

4. That in the former the training should be based for boys on learning a manual trade, and for girls on domestic science, except for those with particular gifts.

5. That even in the secondary schools there should be a certain amount of group constructional work, building, digging, etc., provided that the things constructed have a real social use.

6. That both sexes should be taught biology from a human angle.

7. That if there is a case for the boarding school, it is at this age.

8. That, in general, more damage is done by being compelled to learn things to which the particular individual is hostile or unsuited, at this age, than at any other, and that therefore the guiding principle should be to allow people to put their *main* energies at this time into what most interests them, while ensuring that they do not neglect entirely either body or mind. The adolescent, in fact, should specialize more, and the 15-18 age group should have a more general education than at present.

15-18

1. That as far as freedom and general living conditions go, schools should be run on university lines, i.e. pupils would be expected to work much on their own, and to be treated as reasonable human beings.

2. That there should be different kinds of education for different kinds of ability, but as far as possible within the same school buildings.

3. That while those preparing for a technical career would continue practical work, they are now fitted for full theoretical instruction.

4. That a course in social and economic history and geography should be compulsory for all students, technical or academic.

5. That an examination, corresponding to the present school certificate, but with a much wider range of subject choice should be taken by all (except scholarship candidates) at about 18.

Universities

1. That the tutorial system should be extended as far as possible, and the number of lectures much curtailed.

2. That while the college system should be encouraged, the life of the university should not be divorced from the life of the town. It should take its full share in municipal administration. There should be university seats on the Town Council.

3. That the students should be represented on some sort of consultative committee with the governing body.

Discipline

1. That the problem of discipline is so bound up with material facts such as size of classes, buildings, grounds, etc., and psychological questions such as the proper type of curriculum, that its discussion in the abstract is largely unreal.

2. That while a democracy is bound to accept the principle that discipline by consent is preferable to discipline by coercion, it must be remembered that a degree of coercion enters into all human relationships, and that moral coercion can be more damaging than physical coercion.

3. That it is possible that the child passes through various phases, corresponding to various types of social organization, e.g. that in the pre-primary and primary stage he is a romantic anarchist, in adolescence an authoritarian (and therefore a rebel also), and after 16 potentially a rational democrat.

4. That if this is true, the proper kind of adult authority in the first stage would be paternal, supplying material needs and protecting from physical damage, in fact, rather like the "good" employer. That education should be through voluntary play, but that on the other hand the child should not be expected to bother about questions of self-government. That in adolescence discipline should be stricter, external and from above downwards, and finally after 15 by rational argument and democratic self-government.

Games

1. Children and most adults naturally enjoy using their bodies freely and progressively more skilfully. When they do not it may be because of revulsion at or rebellion against the bogus moral values attached, physical defects, or premature mental development due to loneliness, emotional troubles, compensation, or mistaken parental insistence. Precocious mental activity upsets the psycho-physical balance.

2. Most boys like tough and dangerous sports and games and ought to have the opportunity to indulge in them.

3. Games offer opportunities for the development of valuable qualities, endurance, courage, etc. (It is doubtful if they *teach* them. Thus Rugby football confirms a timid boy's cowardice more often than it teaches him courage.)

4. They provide emotional outlets. A ritualistic game like cricket is exhibitionistic, and adolescents are always self-regarding. Tough games like Rugger release hate and love. This is valuable.

5. In a game the players experience emotions of fear, excitement, and triumph. These experiences create a deep and lasting bond between those who have shared them. For this reason such things as village cricket so praised by the England-lovers mitigate class-feeling. They do not, of course, remove it. It is only in a classless society that the full value of games can be realized.

The importance of games and sports is obscured in many "progressive" educational theories, because the whole subject has been so mishandled by the public schools.

The public school tradition propagates two fallacies:

1. That "it is the team-spirit which *alone* builds character" (Dr. Norwood).

2. That no game in which the individual stands out has educational value.

The Team-spirit

A little observation of public schoolboys, both at school and afterwards, soon shows that those who excel at games are not conspiculously virtuous. If that theory were true, England would not only be a much better country than it is, but it would be led by a band of blues. On the contrary, public schoolboys form the section of the community who are most prone to demand competition rather than co-operation internationally and nationally, the potential militarists and strike-breakers.

But this is not the fault of games, as the opponents of them sometimes suggest.

The team-spirit, like the school-spirit, the house-spirit, the old-boy-spirit, is a form of harnessing loyalty to a group.

A public school is situated in one locality and most of the boys are drawn from other localities. The school has no natural place in the district; it only provides a certain amount of small trade, and it is notorious that there is often a

feud between the public school and the inhabitants of the town or countryside where it is placed.

A natural community spirit would graft the school on to the community life of the locality. This is impossible because the school draws its members entirely from one class.

Since a community spirit is desirable, the school proceeds to manufacture an artificial one of its own.

Its apologists claim that the spirit once learnt will be gradually extended. They imagine an ascending staircase of loyalties leading from the smallest group, the team, through the house, the school, the nation, up to the lonely figure of Christ at the top. The fact that this progression seldom occurs in practice never seems to disturb them; it is a beautiful dream.

What really happens is that the various "spirits" manufactured in the first place to compensate for a lack of real community spirit, reinforce the one unifying social factor, the isolated one-class nature of the schools.

All this is more important than the actual number of children in public schools would indicate, because

1. The public schools product occupies at least 60 per cent of strategic positions (e.g. officers in the armed forces).

2. Many State schools are deceived into imitating this aspect of the public schools and universities, while these institutions remain as they are, results in a creamed selection of working-class children being submitted to a powerful reclassing process.

A community sense would be invaluable, if the nation were a harmonious community. The public school practice serves only to intensify the class differences.

Dr. Norwood says: "Lawn tennis, fives, rackets, golf, are also good in their place, good games, but mainly hygienic in their value." That is, a team game is morally better than any "individualistic" one. But one may observe that:

1. Individualism is a far greater element of team games than is usually admitted. Any game involving more than one player demands co-operation, and conversely in any game the good player will shine. The only difference in this respect between tennis-doubles and Rugby football is that in the latter there are nearly eight times the number of players. Would the team-spirit protagonists prefer games with 200 a side?

2. What is true of the adolescent is not necessarily true of an adult or a young child. Team games correspond to a real need in the adolescent. He naturally likes games where one gang fights another. But what is true for boys between 11 plus and 16 has been universalized into a truth for people of all ages, and exalted into a morality; with the result that many people come to dislike all games because they were made to play team games too soon; and those who are good at team games, by continuing to play them when adult, suffer from arrested development.

A Short Term Programme

But at present most of this must remain in the air. In the event of a Socialist Government being returned to power without a radical change in the class system and the private ownership of capital, we suggest the following points should be an essential part of its educational programme. In addition, of course, to the obvious demands for better buildings, more playing fields, more teachers and smaller classes:

1. A serious tackling of the teacher-training problem.

2. Compulsory inspection of all private schools with power to close. It is sometimes argued that this would endanger certain schools where valuable experiment is being done, which a reactionary or short-sighted government would be more likely to close than the really reactionary and inefficient ones. There is always a risk of this, but it is negligible compared with the urgent problem of the inefficient private school which is far more common than the good one, as the class of parent which can just afford a cheap private school is a larger class than the richer parent who can pay for the best.

3. The raising of the school-leaving age to 16, with full provision of maintenance allowances.

4. That, if making State elementary education compulsory for all would, in the present state of England, raise such a dust that no government could survive, this must be an objective which is never lost sight of, as it probably has more to do with class feeling on its psychological side in this country than any other factor. We shall never have a country even remotely resembling a democracy till we do, however excellent some of the preparatory schools may be.

5. The raising of the leaving age not to mean a secondary education for all of the academic kind now offered by the secondary school. In particular, there should be a full development of the junior technical school.

6. Separation of the school certificate examination from university entrance examinations. The former to have a range which would cover technical as well as secondary curricula. Further, instead of the present practice of a pass or a fail, the certificate should take the form of a document stating how the candidate has done in each subject and including a teacher's testimonial.

7. All employers in all trades to be compelled to provide facilities for their employees to attend day continuation classes up to the age of 18.

8. State grants for higher education to be awarded on general or special ability and to carry with it no obligation to enter the teaching profession.

9. Equal financial status for all types of teachers, male or female, elementary or secondary, with provision for family allowances.

10. Provision for transfer of teachers from one kind of school to another. Every teacher should have some experience of both elementary and secondary teaching.

11. Full provision of nursery schools and child guidance clinics.

N.B.—It is often suggested that a Socialist Government should compel the public schools to take a percentage of free-place children. This under-estimates the power of the public school tradition. It would not result in the democratization of the public schools, but in the conversion of favoured working-class children into sound public school men. None are so reactionary as those who are afraid of falling.

A Place of Learning

By Michael Oakeshott

Michael Oakeshott is a British philosopher who has served as Professor of Politics at the London School of Economics and Political Science, and whose books include Experience and its Modes *and* Rationalism in Politics. *His interest in the philosophy of education is perhaps best exemplified by his essay, "Learning and Teaching" (reprinted in R. S. Peters,* The Concept of Education.*) The selection reprinted here is from a lecture given by Prof. Oakeshott at The Colorado College. It was subsequently printed in* The Colorado College Studies, *January, 1975, No. 12, pp. 12-29, under the title "A Place of Learning." We wish to thank Prof. Oakeshott and Prof. Timothy Fuller, Editor of* The Colorado College Studies, *for consenting to its reappearance in the pages of* Thinking.

For a human being then, learning is a life-long engagement; the world he inhabits is a place of learning. But, further, human beings, in so far as they have understood their condition, have always recognized special places, occasions and circumstances deliberately designed for and devoted to learning, the most notable of which are the human family, school and university. The human family (whatever form it may take) is a practice devised, not for the procreation of children, nor merely for their protection, but for the early education of newcomers to the human scene: it recognizes that learning begins slowly and takes time. School and university are unmistakable; they are successive stages in this deliberate engagement to learn, and it is with these we are concerned.

Now, the distinctive feature of such a special place of learning is, first, that those who occupy it are recognized and recognize themselves preeminently as learners; although they may be much else besides. Secondly in it learning is a declared engagement to learn something in particular. Those who occupy it are not merely 'growing up', and they are not there merely to 'improve their minds' or to 'learn to think'; such unspecified activities are as impossible as an orchestra which plays no music in particular. Further, what is to be learned in such a place does not present itself by chance or arise circumstantially out of whatever may happen to be going on; it is recognized as a specified task to be undertaken and pursued with attention, patience and determination, the learner being aware of what he is doing. And thirdly, learning here is not a limited undertaking in which what is learned is learned merely up to the point where it can be put to some extrinsic use; learning itself is the engagement and it has its own standards of achievement and excellence. Consequently, what is special about such a place or circumstances as its seclusion, its detachment from what Hegel called the *hic et nunc,* the here and now, of current living. Each of us is born in a corner of the earth and at a particular moment in historic time, lapped round with locality. But school and university are places apart where a declared learner is emancipated from the limitations of his local circumstances and from the wants he may happen to have acquired and is moved by intimations of what he has never yet dreamed. He finds himself invited to pursue satisfactions he has never yet imagined or wished for. They are, then, sheltered places where excellences may be heard because the din of local partialities is no more than a distant rumble. They are places where a learner is initiated into what there is to be learned.

But what is there for a human being to learn? A large part of human conduct is, and always has been, concerned with exploiting the resources of the earth for the satisfaction of human wants, and much of human learning is concerned, directly or indirectly, with this endlessly proliferating intelligent engagement. And it is genuine learning. An otter may be equipped with what for want of a better word we call an instinct which enables it to catch fish, a beaver in response to some biological urge may build a dam and an eagle may swoop down and carry off a lamb; but a fisherman must learn to catch fish and he learns to do so well or ill and with a variety of techniques, the engineers who designed and built the Boulder Dam were equipped with something more than a biological urge, and to breed sheep for meat or wool is an art that has to be learned. In respect of being concerned to exploit the resources of the earth a current human being is, then, an inheritor of a vast variety of instrumental skills and practices which have to be learned if they are to yield the satisfactions they are designed to yield. Moreover, the inventor and the user of these skills and practices is not Man or Society; each is the discovery or invention of assignable men, a Prometheus, a Vulcan, a Bessemer or an Edison. It is not Man or some abstraction called 'medical science' which cures the sick; it is an individual doctor who has himself learned his art from some assignable teachers. There is no such thing as 'social learning' or 'collective understanding'. The arts and practices we share with one another are nowhere to be found save in the understandings of living, individual adepts who have learned them.

And further, the satisfaction of human wants is pursued in transactions between human beings in which they compete or cooperate with one another. To seek the satisfaction of a want is to enter into relationships with other human beings. This human association is not the interaction of the components of a process, nor is it an unspecified gregariousness or sociability; it is made up of a variety of different kinds of relationships, each a specific practice whose conditions must be learned and understood if its advantages are to be enjoyed. And incomparably the most useful of these relationships is that which subsists between those who speak a common language in which to communicate their wants and to conduct the bargains in which they may be satisfied. Such a language, like all other conditions of human association, has to be learned.

To be human, to have wants and to try to satisfy them, is, then, to have the use of particular skills, instrumental practices and relationships. There is no action which is not a subscription to some art, and utterance is impossible without a language. These skills, practices and relationships have to be learned. And since this learning, so far as it goes, is genuine and may be extensive it is no surprise that there should be special places devoted to it, each concerned to initiate learners into some particular instrumental art or practice and often equipped with the opportunity of 'learning on the job', as it is called: Medical schools, Law schools, language schools, schools of journalism or photography, schools where one may learn to cook, to drive an automobile or run a bassoon factory, and even polytechnics where a variety of such instrumental skills may be learned.

There is much more that might be said about this activity of exploiting the resources of the earth, of the arts and relationships used in the satisfaction of

human wants and the learning these entail. It is certainly genuine learning, although the special places devoted to it are appropriately limited in their aims and in their seclusion from considerations of utility. To learn an instrumental art is not merely being trained to perform a trick; it entails understanding what you are doing. And learning a practice is not merely acquiring a mechanical contrivance and knowing how to work it. A human art is never fixed and finished; it has to be used and it is continuously modified in use. Even using a language to communicate wants is itself an inventive engagement. But I do not propose to explore further this engagement in learning; there is something more important for us to consider. We catch a glimpse of it when we recognize that choosing wants to satisfy is also something that has to be learned and that the conditions to be subscribed to in making such choices are not the terms of the instrumental arts and practices in which chosen wants may be conveniently satisfied. It is never enough to say of a human want: 'I know how to satisfy it and I have the power to do so'. There is always something else to consider. But what thus comes into view is not merely an extension of the field of instrumental learning but an altogether different engagement of critical self-understanding in which we relate ourselves, not to our inheritance of instrumental arts, but to the continuous intellectual adventure in which human beings have sought to identify and to understand themselves.

Now, to recognize oneself in terms of one's wants, to recognize the world as material to be shaped and used in satisfying wants, to recognize other as competitors or cooperators in this enterprise and to recognize our inheritance of arts and practices, including a common language, as valuable instruments for satisfying wants—all this is, unquestionably, *a* self-understanding. It gives *an* answer to the question. Who am I? And indeed there are some who would persuade us that this is all we know or can know about ourselves and that all other thoughts human beings have had about themselves and the world are idle fancies and all other relationships are shadowy reflections of this relationship. But they refute themselves. In purporting to make a true statement about human beings and their relationships they identify themselves as something other than mere seekers after contingent satisfactions; they assume a relationship between themselves and those whom they address which is not that of exploiters of the resources of the earth but that of persons capable of considering the truth or falsehood of a theorem.[1]

But be that how it may, it is unquestionable that human beings, without denying their identities as exploiters of the resources of the earth, have always thought of themselves as something other than this and that they have been tireless in their explorations of these other identities. They have engaged in manifold activities other than this—adventures of intellectual enquiry, or moral discrimination and of emotional and imaginitive insight; they have explored a vast variety of relationships other than this—moral, intellectual, emotional, civil; and they have perceived, dimly or clearly, that this identity as exploiters of the resources of the earth is not only evanescent and insubstantial when set beside these others but is itself conditional upon them. They have recognized that these understandings of themselves, and these valuations of occurrences (like everything else human) are themselves human inventions and can be enjoyed only in learning. Even in the most difficult circumstances, overwhelmed by the exigencies of the moment (life in the covered wagon, for example), they have carried these identities with them and imparted them to their children if only in songs and stories. Whenever opportunity has occurred they have set aside special places and occasions devoted to this learning, and until recently schools and universities were just such places of learning, sheltered enough from the demands of utility to be undistracted in their concern with these adventures and expressions of human self-understanding.

This, then, is what we are concerned with: adventures in human self-understanding. Not the bare protestation that a human being is a self-conscious, reflective intelligence and that he does not live by bread alone, but the actual enquiries, utterances and actions in which human beings have expressed their understanding of the human condition. This is the stuff of what has come to be called a 'liberal' education—'liberal' because it is liberated from the distracting business of satisfying contingent wants.

But why should be we concerned with it? If it purported to provide reliable information about 'human nature' our concern would be intelligible. But it does not. There is no such thing as 'human nature'; there are only men, women, and children responding gaily or reluctantly, reflectively or not so reflectively, to the ordeal of consciousness, who exist only in terms of their self-understandings. Nor is being human itself a special instrumental skill like that of an electrical engineer. And if our concern is with human self-understanding, why all this paraphanalia of learning? Is this not something we each do for ourselves? Yes, humanly each of us is self-made; but not out of nothing, and not by the light of nature. The world is full of

home-made human beings, but they are rickety constructions of impulses ready to fall apart in what is called an 'identity crisis'. Being human is an historic adventure which has been going on since the earth rose out of the sea, and we are concerned with this paraphernalia of learning because it is the only way we have of participating in this adventure. The ancient Greek exhortation, know thyself, meant learn to know thyself. But it was not an exhortation to buy a book on psychology and study it; it meant, contemplate and learn from what men, from time to time, have made of this engagement of learning to be a man.

Human self-understanding, is, then, inseparable from learning to participate in what is called a 'culture'. It is useful to have a word which stands for the whole of what an associated set of human beings have created for themselves beyond the evanescent satisfaction of their wants, but we must not be misled by it. A culture is not a doctrine or a set of consistent teachings or conclusions about a human life. It is not something we can set before ourselves as the subject of learning, any more than we can set self-understanding before ourselves as something to be learned; it is that which is learned in everything we may learn. A culture, particularly one such as ours, is a continuity of feelings, perceptions, ideas, engagements, attitudes etc. pulling in different directions, often critical of one another and contingently related to one another so as to compose, not a doctrine, but what I shall call a conversational encounter. Ours, for example, accommodates not only the lyre of Apollo but also the pipes of Pan, the call of the wild; not only the poet but also the physicist; not only the majestic metropolis of Augustinian theology but also the 'greenwood' of Franciscan Christianity. A culture comprises unfinished intellectual and emotional journeyings, expeditions now abandoned but known to us in the tattered maps left behind by the explorers; it is composed of lighthearted adventures, of relationships invented and explored in exploit or in drama, of myths and stories and poems expressing fragments of human self-understanding, of gods worshipped, of responses to the mutability of the world and of encounters with death. And it reaches us, as it reached generations before ours, neither as long-ago terminated speciments of human adventure, nor as an accumulation of human achievements we are called upon to accept, but as a manifold of invitations to look, to listen and to reflect. Learning here is not merely acquiring information (*that* produces only what Nietzsche called a 'culture philistine'), nor is it merely 'improving one's mind'; it is learning to recognize some specific invitations to encounter particular adventures in human self-understanding.

A man's culture is an historic contingency, but since it is all he has he would be foolish to ignore it because it is not composed of eternal verities. And it is itself a continent flow of intellectual and emotional adventures, a mixture of old and new where the new is often a backward swerve to pick up what has been temporarily forgotten; a mixture of the emergent and the recessive; of the substantial and the somewhat flimsy, of the commonplace, the refined and the magnificent. And since learning here is not merely becoming aware of a so-

called cultural inheritance but encountering and seeking to understand some of its specific invitations, a special place devoted to such learning is constituted only in terms of what it is believed there is to learn. And, of course, this belief is itself a response to what may be called the 'educational' invitations of the culture. To talk of being 'culturally conditioned' is rubbish; a man *is* his culture, and what he is he has had to learn to become.

The wandering scholars who, in the twelfth century, took the road to Paris, to Bologna, to Chartres or to Toulouse were, often unknown to themselves, seeking within the notions of the time, a 'liberal' education; they are our forebears in this adventure. You and I were born in the twelfth century and although we have traveled far we still bear the marks of our birth-time. But when two centuries later the expression 'liberal studies' acquired a specific meaning it stood for an encounter with a somewhat remote culture which was slowly being retrieved from neglect—the Greek and Latin culture of antiquity. Some of the achievements of this ancient civilisation had never been lost: the Latin language as a medium of communication, some useful information (mostly legal and medical) and some notable pieces of writing. But the educational adventure of the fourteenth century sprang from an ever more extended recovery of this almost lost culture which revealed itself not only to have been one of great intellectual splendour, variety and reflective energy but also to be one in which a man of the fourteenth century could identify himself and which offered him a wealth of hitherto unheard of invitations to explore and to understand himself: languages recognized as investments in thought; epic, dramatic, lyric and historical literatures which gave a new dimension to human relationships, emotions, aspirations and conduct; enquiries (including those of the early theologians of Christianity) which suggested new directions for human reflection. Thus, 'learning' was identified with coming to understand the intimations of a human life displayed in an historic culture of remarkable splendour and lucidy and with the invitation to recognize oneself in terms of this culture. This was an education which promised and afforded liberation from the here and now of current engagements, from the muddle, the crudity, the sentimentality, the intellectual poverty and the emotional morass of ordinary life. And so it continues to this day. This education has had often to be rescued from the formalism into which it degenerated. Its centre of gravity moved from the culture of antiquity but without any firm settlement elsewhere. We have seen, sometimes regretfully, bits of this education fall away, having lost their compelling interest. It has been extended to include new and substantial vernacular languages and literatures. It has accommodated, somewhat reluctantly, the novel and still inadequately self-understood enquiry which has absorbed so much of the intellectual energy of modern times, namely the natural sciences. And it has had to resist the seductive advances of enemies dressed up as friends. And what now of its present condition?

The engagement has survived. We do not yet live in the ashes of a great adventure which has burnt itself out. Its self-understanding is not at present very conspicuous, its self-confidence is fluctuating and often misplaced, its credit is stretched and it has borrowed when it would have been better to economise, but it has not been lacking in serious self-examination. The torch is still alight and there are still some hands to grasp it. But I shall not dwell upon its present vitality, such as it is; our concern is with its infirmities and with those which may be counted as self-betrayals — not to censure them but to try to understand them.

Its most naive self-betrayal is merely to have listened to the seductive voice of the world urging it, in the name of 'relevance' to take up with extraneous concerns and even to alter course. When, like Ulysses, we should have stopped our ears with wax and bound ourselves to the mast of our own identity, we have been beguiled, not only by words but by inducements. To open a School of Business, to undertake the training of journalists or corporation lawyers seem harmless enough concessions to modernity; they may be defended by the specious argument that they certainly entail learning, they give a place of liberal learning an attractive image of 'relevance' and the corruption involved may be written off as negligible. Events, however, hardly confirm this optimism. Having no proper part in liberal learning, these appealing divergencies are difficult to contain; they undermine rather than assail the engagement. Their virtue is to be evanescent and contemporary; if they are not up-to-date they are worthless. And this unqualified modernity rubs off on the proper concern with languages, with literatures and with histories which are thus edged into the study of only what is current in a culture. History is contracted into what is called contemporary history, languages come to be recognized as means of contemporary communication, and in literature the book which 'verbalizes what everyone is thinking now' comes to be preferred, on that account, to anything else.

But the real assault upon liberal learning comes from another direction; not in the risky undertaking to equip learners for some, often prematurely chosen, profession, but in the belief that 'relevance' demands that every learner should be recognized as nothing but a role-performer in a so-called 'social system' and the consequent surrender of learning (which is the concern of individual persons) to 'socialization': the doctrine that because the current here and now is very much more uniform than it used to be, education should recognize and promote this uniformity. This is not a recent self-betrayal; it is the theme of those wonderful lectures of Nietzsche on the *Future of our Educational Institutions* delivered in Basel a century ago in which he foresaw the collapse which now threatens us. And although this may seem to be very much a matter of doctrine, of merely how education is thought about and spoken of, and to have very little to do with what may actually go on in a place of learning, it is the most insidious of all corruptions. It not only strikes at the heart of liberal learning, it portends the abolition of man.

But if these are the cruder subversions of liberal learning there are others, more subtle but hardly less damaging. It has

come to be thought of as a 'general' education; that is, as learning not only liberated from the here and now of current engagements but liberated also from an immediate concern with anything specific to be learned. Learning here is said to be 'learning to think for oneself' or to be the cultivation of 'intelligence' or of certain intellectual and moral aptitudes — the ability to 'think logically' or 'deliberatively', the ability not to be deceived by irrelevance in argument, to be courageous, patient, careful, accurate or determined; the ability to read attentively and to speak lucidly, and so on. And, of course, all these and more are aptitudes and virtues that a learner may hope to acquire or to improve. But neither they, nor self-understanding itself, can be made the subject of learning. A culture is not a set of abstract aptitudes; it is composed of substantive expressions of thought, emotion, belief, opinion, approval and disapproval, of moral and intellectual discriminations, of enquiries and investigations, and learning is coming to understand and respond to these substantive expressions of thought as invitations to think and to believe. Or, this word 'general' is used to identify and to recommend an education concerned, indeed, with the substance of a culture, but so anxious that everything shall receive mention that it can afford no more than a fleeting glimpse of anything in particular. Here learning amounts to little more than recognition; it never achieves the level of an encounter. It is the vague and fragmentary equipment of the 'culture philistine.'

Nevertheless, a place of liberal learning is rarely without a shape which purports to specify what there is to be learned. And its present shape in most such places bears witness both to the ancient lineage of the engagement and to the changes our culture has undergone in recent centuries. The natural sciences, mathematics, the humanities and the social sciences — these are the lineaments of this education as it comes to us now. Let us briefly consider these constituents.

Liberal learning is learning to respond to the invitations of the great intellectual adventures in which human

beings have come to display their various understandings of the world and of themselves. And before the natural sciences could be recognized in this character they had not only to offer something specific capable of being learned but also to present themselves as a distinctive enquiry or mode of human understanding. That is to say, they had to appear as very much more than somewhat mysterious information about the natural world which no educated man should be without, and something very much less than an unconditional or definitive understanding of the world. In respect of the first they have amply succeeded: every natural science now presents itself to the learner as a related set of theorems which invites critical understanding. In respect of the second they have been hindered, not by any inherent self-deception, but by two unfortunate circumstances. The first of these is the relic of a disposition to value themselves in terms of the use which may be made of the conclusions of their enquiries. This, in a place of liberal learning, has sometimes led to a proliferation of what may be called semi-sciences — organizations of information in terms of the use which may be made of it. But this is not a very important hindrance. The more serious encumbrance comes in some absurd claims made by others on their behalf: the claim that they themselves compose a distinctive culture (the silly doctrine of the 'two cultures'); the claim that they represent 'the truth' (so far as it has been ascertained) about the world; and the claim that they constitute the model of all valid human understanding — a claim which has had disastrous consequences elsewhere. But in spite of these hindrances, the natural sciences have unquestionably earned a proper place for themselves in the design of liberal learning and know how to occupy it. No doubt, for example, a biological identity is not itself a human identity, but one of the significant self-understandings which human beings have come upon and explored is that of persons concerned with a specifically 'scientific' understanding of themselves and the world.

Of the humanities I need say little. They are directly concerned with expressions of human self-understanding and their place in liberal learning is assured and central: Languages recognized, not as the means of contemporary communication but as investments in thought and records of perceptions and analogical understandings; literatures recognized as the contemplative exploration of beliefs, emotions, human characters and relationships in imagined situations, liberated from the confused, cliche-ridden, generalized conditions of commonplace life and constituting a world of ideal human expressions inviting neither approval nor disapproval but the exact attention and understanding of those who read; histories recognized, not as accounts of the past focused upon our contemporary selves purporting to tell us how we have become what we are and containing messages of warning or encouragement, but as stories in which human actions and utterances are rescued from mystery and made intelligible in terms of their contingent relations; and philosophy, the reflective undertaking in which every purported achievement of human understanding becomes the subject of an enquiry into its conditions. And if any of this has got driven off its course it is by the winds which forever blow around the engagement of liberal learning, menacing its seclusion from the here and now or driving it upon the rocks of abstract aptitudes or socialization.

But what of the latest born component of liberal learning: the social sciences? They are a mixed lot. Among them we may expect to find sociology, anthropology, psychology, economics, perhaps jurisprudence and something called 'politics'. They purport to be directly concerned with human conduct. These are what used to be called the 'human sciences' — *geisteswissenschaften,* in order to make clear that their concern is with human beings as self-conscious, intelligent persons who are what they understand themselves to be and not with human beings in the loose and indistinct sense of highly evolved organisms or processes of chemical change, the concern of natural sciences. And insofar as these human sciences are what they purport to be (which is not so in every case) it would seem that they belong properly to the 'humanities'. But distinguished they now are; and if the project of distinguishing them from the 'humanities' was an unfortunate mistake, the terms of the distinction are nothing less than a disaster. These terms are specified in the words 'social' and 'science'.

'Social', of course, is a cant word. It is used here to denote an enquiry about human conduct concerned, not with substantive actions and utterances but with the relationships, the associations and the practices in which human beings are joined. This focus of attention is not, in itself, corrupting. It is that upon which most histories of law are centred; and it is the focus, for example, of Maitland's *Constitutional History of England* which, he tells us, is designed to be an account, not of human struggles, but of the results of human struggles in constitutional change. But it is chosen here, and is labeled 'social', in order to allege (or to suggest) that human beings and their performances are what they are in terms of these relationships, associations and practices; and to suggest, further, that these relationships and practices are not human devices, autonomous manners of being associated, each with its own specified conditions of relationship but are the components of an unspecified, unconditional interdependence or 'social' relationship, sometimes called a 'society' or 'Society'. In short, the contention is that this unspecified 'social' relationship is the condition, perhaps the determinant, of all human conduct and that to which human actions and utterances must be referred in order to be understood. But this substitution of the word 'social' for the word 'human' is a surrender to confusion: human conduct is never merely a subscription to a practice or to a relationship, and there is no such thing as an unconditional 'social' relationship. And this confusion is partnered by a commonplace corruption of our language in which the word 'social' has become the centre of endless equivocation. Selden in the seventeenth century said of the cant expression *scrutamini scripturas,* 'these two words have undone the world': a single word has sufficed to undo our cruder twentieth century.

It might, however, be supposed that in connecting the word 'science' with the word 'social' something has been done to restore exactness. But the outcome of this conjunction has been to add a ruinous categorical confusion to what need not have been more than a permissible partiality in considering human conduct. For the word 'science' here is intended to denote a natural science of human conduct; that is, to mean the investigation of human actions and utterances and the practices and relationships to which they may subscribe as if they were non-intelligent components of a 'process' or the functional constituents of a 'system' which do not have to learn their parts in order to play them. The design here is to remove human action and utterance from the category of intelligent goings-on (that is, chosen responses of self-conscious agents to their understood situations which have reasons but not causes and may be understood only in terms of dispositions, beliefs, meanings, intentions, and motives), and to place them in the category of examples of the operation of regularities which do not have to be learned in order to be observed; and to remove human practices, relationships, associations etc. from the category of procedures whose conditions have to be learned and understood in order to be subscribed to and can be subscribed to only in self-chosen actions and utterances, and to put them into the category of 'processes'. Rules are misidentified as regularities, intelligent winks as physiological blinks, conduct as 'behaviour' and contingent relationships as causal or systematic connections.

This project of collecting together a number of respectable enquiries under the head of 'the social sciences' and the attempt to impose this equivocal character upon them has not met with universal acceptance but it has gone far enough to have deeply damaged liberal learning; no other failure of self-understanding in the humanities has generated such confusion. And it is all the more damaging because in putting on the mask of 'science' some of these departments of learning have succumbed to the temptation to understand and to value themselves in terms of the use which may be made of the conclusions of their enquiries. The recognition as the appropriate equipment for new technological enterprises and for the new and proliferating profession of 'social worker' has corrupted liberal learning. But this does not mean that, individually, and when properly recognized as *Geisteswissenschaften,* they have no proper place in liberal learning; it means only that they have been misidentified. Jurisprudence, until it was confused with a vapid concern for so-called social and psychological needs and become part of the equipment of 'social engineers', was a profound philosophical enquiry, one of the most ancient and respected components of liberal learning. Sociology and anthropology are respectable and somewhat attenuated engagements in historical understanding; they are concerned with human practices, procedures, associations etc. and their contingent relations, and with human actions and utterances in terms of their subscriptions to the conditions of practices. And psychology has long ago declared itself a 'natural', not a 'human' science. It is not concerned with substantive human thoughts, beliefs, emotions, recollections, actions and utterances but with socalled 'mental processes' which are vulnerable to reduction to genetic and chemical processes.

Putting on one side engagements in learning which have no proper place in a liberal education, there are, then, departments of liberal learning in which self-consciousness has not yet been transformed into the self-understanding upon which authentic enquiry and utterance depends. But the more serious consideration for anyone who undertakes to review the present condition of liberal learning is the terms of the self-understanding of the engagement itself.

As it emerged in Western Europe liberal learning was understood to be a concern to explore the invitations of the culture of antiquity, to hold before learners the mirror of this culture so that, seeing themselves reflected in it, they might extend the range and the depth of their understanding of themselves. This idiom of the self-understanding of liberal learning was never very satisfactory; it was substantial, not formal, and it has long since passed away. It has been succeeded by other, similarly substantial, self-identifications. For example, when I was young it was thought (or at least suggested) that the whole of liberal learning might properly be understood in terms of a somewhat extended study of Geography: liberal learning was urged to find the focus of its attention in 'geographical man'. And we have since become familiar with a claim of this sort made on behalf of Sociology; if every department of liberal learning is not itself to be turned into sociology (philosophy into the sociology of knowledge, jurisprudence into the sociology of law etc.) then, at least, none is as it should be unless sociology were added to it. These, of course, are fanciful notions, but they are not unconvincing merely on account of their contingent implausibility. They are unacceptable because the identification of liberal learning they suggest is of the wrong kind. The self-understanding of liberal learning must, I think, be sought in the recognition that its component enquiries, in spite of their substantial differences, have a common formal character and that they are related to one another in a manner agreeable with that formal character.

I have already suggested that the components of a liberal education are united and distinguished from what does not properly belong to it in terms of their 'liberality'; that is, in terms of their concern with what Valéry *calls le prix de la vie humaine*[2], and their emancipation from the here and now of current engagements. But beyond this general consideration, these components may be resolved into and understood as so many different *languages:* the language of the natural sciences, for example, the language of history, the language of philosophy, or the language of poetic imagination.

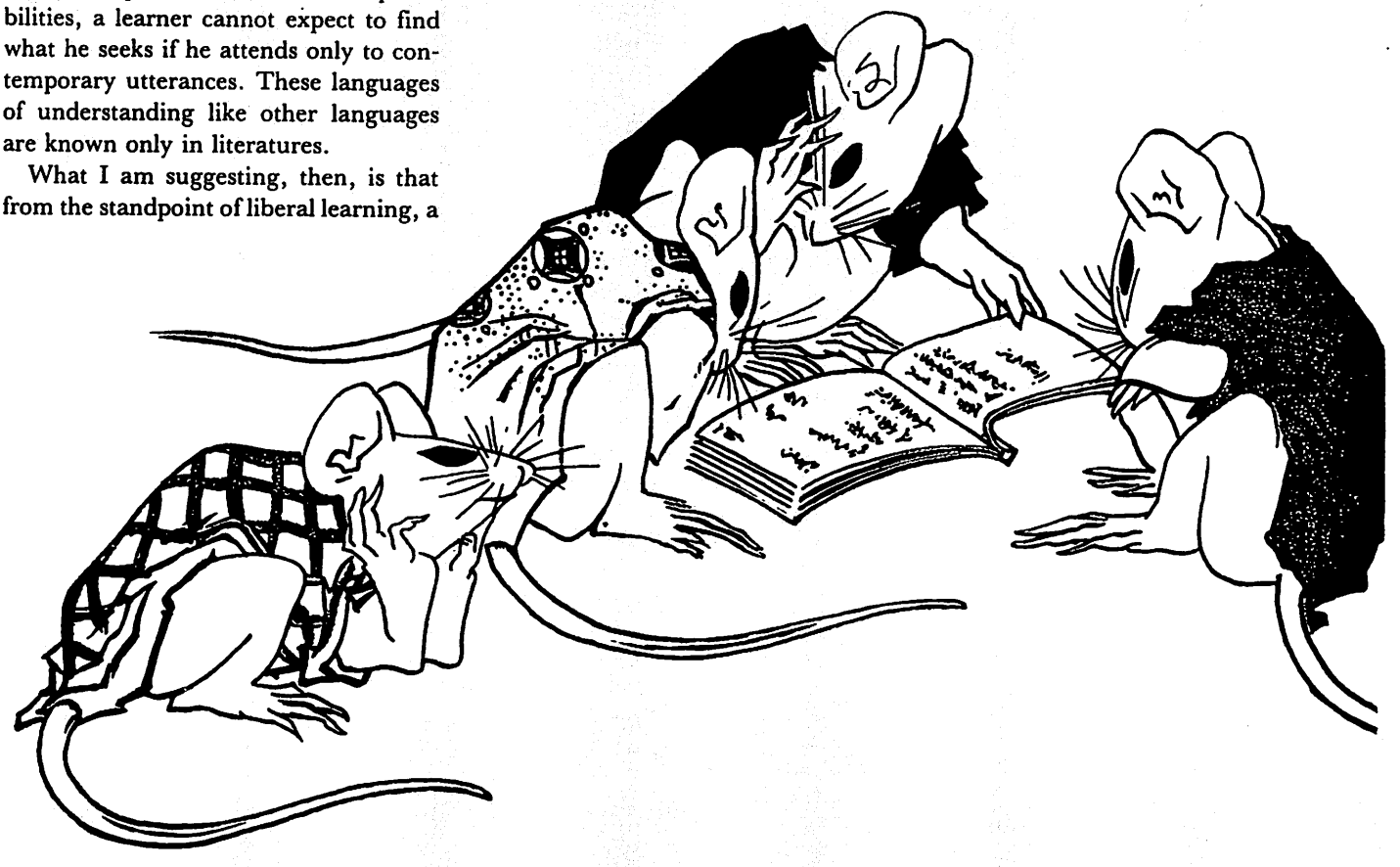
Languages in a more commonplace sense are organizations of grammatical and syntactical considerations or rules to be taken account of and subscribed to in making utterances. These considerations do not determine the utterances made or even exactly how they shall be subscribed to; that is left to the speaker who not only has something of his own

to say but may also have a style of his own. And, of course, no such language is ever settled beyond the reach of modification; to speak it is a linguistically inventive engagement. But here, the conditions imposed upon utterances by these languages of understanding constitute, not merely linguistic idioms, but particular conditional modes of understanding. Learning here is learning to recognize and discriminate between these languages of understanding, is becoming familiar with the condition each imposes upon utterance, and is learning to make utterances whose virtue is not that they express original ideas (that can only be a rare achievement) but that they display genuine understanding of the language spoken. It is on this account that a learner may be recognized to understand a language such as that of philosophical or historical understanding and yet not be a philosopher or an historian; and also that a teacher may be recognized to have something into which he may initiate a learner which is not itself a doctrine. But since none of these languages of understanding was invented yesterday and each is the continuous exploration of its own possibilities, a learner cannot expect to find what he seeks if he attends only to contemporary utterances. These languages of understanding like other languages are known only in literatures.

What I am suggesting, then, is that from the standpoint of liberal learning, a culture is not a miscellany of beliefs, perceptions, ideas, sentiments, engagements etc. but may be recognized as a variety of distinct languages of understanding, and its inducements are invitations to become acquainted with these languages, to learn to discriminate between them, and to recognize them not merely as diverse modes of understanding the world but as the most substantial expressions we have of human self-understanding.

But the identity of a culture and of liberal learning remains obscure until we have some conception of the relationship of its components. Now, each of these languages constitutes the terms of a distinct, conditional understanding of the world and a similarly distinct idiom of human self-understanding. Their virtue is to be different from one another and this difference is intrinsic. Each is secure in its autonomy so long as it knows and remains faithful to itself. Any of them may fail, but such failure is always self-defeat arising from imperfect understanding of itself or from the non-observance of its own conditions. They may not all be equally interesting and they may compete for our attention, but they are not inherently contentious and they are incapable of refuting one another. Hence, their relationship cannot be that of parties in a debate; they do not together compose an argument. Further, they are not different degrees of divergence from some suppositious unconditional understanding of the world: their relationship is not hierarchical. Nor is it either a cooperative or a transactional relationship. They are not partners in a common undertaking each with a role to perform, nor are they suppliers of one another's wants. What then is left?

Perhaps we may think of these components of a culture as voices, each the expression of a distinct and conditional understanding of the world and a distinct idiom of human self-understanding, and of the culture itself as these voices joined, as such voices could only be joined, in a conversation — an endless unrehearsed intellectual adventure in which, in imagination, we enter into a variety of modes of understanding the world and ourselves and are not discon-



certed by the differences or dismayed by the inconclusiveness of it all. And perhaps we may recognize liberal learning as, above all else, an education in imagination, an initiation into the art of this conversation in which we learn to recognize the voices; to distinguish their different modes of utterance, to acquire the intellectual and moral habits appropriate to this conversational relationship and thus to make our *début dans la vie humaine.*

Liberal learning is a difficult engagement. It depends upon an understanding of itself which is always imperfect; even those who presided over its emergence hardly knew what they were doing. And it depends upon a self-confidence which is easily shaken and not least by continual self-examination. It is a somewhat unexpected invitation to disentangle oneself from the here and now of current happenings and engagements, to detach oneself from the urgencies of the local and the contemporary, to explore and enjoy a release from having to consider things in terms of their contingent features, beliefs in terms of their applications to contingent situations and persons in terms of their contingent usefulness; an invitation to be concerned not with the employment of what is familiar but with understanding what is not yet understood. And a university as a place of liberal learning can prosper only if those who come are disposed to recognize and acknowledge its particular invitation to learn. Its present predicament lies in the circumstance that there is now so much to obstruct this disposition.

There was a time, not so long ago, when liberal learning was, not better understood, but more generally recognized than it now is and when the obtrusive circumstances of the early upbringing of many (and not merely of the better off) were such that they did not positively stand in the way of the recognition of its invitation. They were, indeed, circumstances where the localities in which one was born and grew up were more enclosed than they now are and certainly less superficially exciting. Memorable experiences were fewer and smaller, there was change but it moved at a slower pace; life could be hard but the rat-race as we know it now was in its infancy. They were also somewhat narrow circumstances which bred little concern with what might be going on outside the locality and none at all with world affairs. But they were intellectually innocent rather than positively dull, uncrowded rather than vacant. For there was in these circumstances a notable absence of the ready-made or of oppressive uniformities of thought or attitude or conduct. If experiences were fewer, they were made to go further; if they were smaller they invoked imaginative enlargement. And the natural world was never so far distant as it now often is and the response to it was allowed to be naive and uncluttered, a response of wonder and delight. In all this School was important; but it was a place of its own. I often recollect that memorable sentence from the autobiography of Sir Ernest Barker: 'Outside the cottage, I had nothing but my school; but having my school I had everything'. There, in school, the narrow boundaries of the local and the contemporary were swept aside to reveal, not what might be going on the next town or village, in Parliament or in the United Nations, but a world of things and persons and happenings, of languages and beliefs, of utterances and sights and sounds past all imagination and to which even the dullest could not be wholly indifferent. The going was hard; there was nothing to be got without learning how to get it, and it was understood that nobody went to school in order to enjoy the sort of happiness he might get from lying in the sun. And when with inky fingers a schoolboy unpacked his satchel to do his homework he unpacked three thousand years of the fortunes and misfortunes of human intellectual adventure. Nor would it easily have occurred to him to ask what the sufferings of Job, the silent ships moving out of Tenedos in the moonlight, the terror, the complication and the pity of the human condition revealed in a drama of Shakespeare or Racine, or even the chemical composition of water, had to do with *him,* born upon the banks of the Wabash, in the hills of Cumberland, in a Dresden suburb or a Neapolitan slum. Either he never considered the question at all, or he dimly recognized them as images of a human self-understanding which was to be his for the learning. All very innocent, perhaps even credulous; and in many cases soon overlaid by the urgencies of current engagements. But however superficially they might be appreciated, these were not circumstances which generated a positive resistance to the invitation of liberal learning in a university. Indeed, their very innocence nurtured a disposition to recognize it.

But these circumstances are no longer with us. The way we live now, even though it may contain notable relics of the earlier condition, is somewhat different. The world in which many children now grow up is crowded, not necessarily with occupants and not at all with memorable experiences, but with happenings; it is a ceaseless flow of seductive trivialities which invoke neither reflection nor choice but instant participation. A child quickly becomes aware that he cannot too soon plunge into this flow or immerse himself in it too quickly; to pause is to be swept with the chilling fear of never having lived at all. There is little chance that his perceptions, his emotions, his admirations and his ready indignations might become learned responses or be even innocent fancies of his own; they come to him prefabricated, generalized and uniform. He lurches from one modish conformity to the next, or from one fashionable guru to his successor, seeking to lose himself in a solidarity composed of exact replicas of himself. From an early age children now believe themselves to be well-informed about the world, but they know it only at secondhand in the pictures and voices which surround them. It holds no puzzles or mysteries for them; it invites neither careful attention nor understanding. As like as not they know the moon as something to be shot at or occupied before ever they have had the chance to marvel at it. This world has but one language, soon learned: the language of appetite. The idiom may be that of the exploitation of the resources of the earth, or it may be that of seeking something for nothing; but this is a distinction without a difference. It is a language composed of meaningless cliches. It allows only the expression of

'points of view' and the ceaseless repetition of slogans which are embraced as prophetic utterances. Their ears are filled with the babel of invitations to instant and unspecified reactions and their utterance reproduces only what they have heard said. Such discourse as there is resembles the barking of a dog at the echo of its own yelp. School in these circumstances is notably unimportant. To a large extent it has surrendered its character as a place apart where utterances of another sort may be heard and languages other than the language of appetite may be learned. It affords no seclusion, it offers no release. Its furnishings are the toys with which those who come are already familiar. Its virtues and its vices are those of the surrounding world.

These, then, are circumstances hostile to a disposition to recognize the invitation of liberal learning; that is, the invitation to disentangle oneself, for a time, from the urgencies of the here and now and to listen to the conversation in which human beings forever seek to understand themselves. How shall a university respond to the current aversion from seclusion, to the now common belief that there are other and better ways of becoming human than by learning to do so, and to the impulsive longing to be given a doctrine or to be socialized according to a formula rather than to be initiated into a conversation? Not, I think, by seeking excuses for what sometimes seem unavoidable surrenders, nor in any grand gesture of defiance, but in a quiet refusal to compromise which comes only in self-understanding. We must remember who we are: inhabitants of a place of liberal learning.

FOOTNOTES

[1] When Francis Bacon identified human beings as exploiters of the resources of the earth and language as a means of communicating information about wants he added that this identity had been imposed upon us by God — thus identifying human beings *also* in relation to God. And even Karl Marx (inconsistently) recognized somethings called 'scientific' enquiry independent of the current conditions of productive undertaking.

[2] Tout ce qui fait le prix de la vie est curieusement inutile.

Book Review...

Dr. Ellin K. Scholnick teaches in the Department of Psychology, University of Maryland

Children's Minds, *by Margaret Donaldson,* New York: Norton, 1978

By Ellin Scholnick

Any description of child thought leads to four questions. What is the nature of thinking? How does it develop? Where and how can it be observed? How can we foster its development? Such is the case with Margaret Donaldson's book, *Children's Minds.* This review is a summary and critical evaluation of her answers to these questions. While there are many kinds of thought, Donaldson narrows her description to deductive inference and the three concepts on which she claims deductive inference rests—"compatibility," necessity and possibility. Like Piaget, she claims children always evaluate new information in terms of its consistency (compatibility) or inconsistency with past knowledge. Notions of necessity and possibility are derived from these initial evaluations. Since something cannot be consistent and inconsistent at the same time, the child grasps the idea of necessary opposites and the notion of necessity is then available for understanding other logical relations. Consistency is determined by a match between new and old information, but there are many alternative pieces of old information to match with incoming data, giving rise to the idea of possibility. Once the child is equipped with these three notions, the individual is ready to make the deductions which will permit acquisition of knowledge.

Donaldson claims that these logical notions are evident in early infancy if we gather the data in the appropriate circumstances. We must observe children performing tasks which fit into the context of comprehensible human actions and which match the child's own intentions. Children are expert logicians if they must make deductions about familiar people to achieve ends the child desires. They are expert linguists if we judge their skill by their ability to communicate to others not by their ability to state the formal rules of grammar. The course of development therefore should not be described, as Piaget has done, by the gradual evolution of logical skills but by changes in how the child applies the skills. Children at first use logic intuitively without any general consciousness that the skills are being used and that the skills have applicability to a wide range of situations. They use logic in situations where there is much familiarity with the context, many cues which point to the right conclusions and much investment in the outcome. The child develops by becoming aware of the means of thinking and by voluntarily being able to "disembed" the skills so that they can be used not just when the child wants to use them, not just in circumstances which are familiar, not just in interpersonal situations but in circumstances where the material is abstract like science and mathematics and the answers must be supplied because someone else demands them, not just because the child wants to know them. The process of becoming self-aware, of standing back from experience to notice what one is doing, of relying on logic alone, not supportive contextual evidence, is quite difficult.

Because of that, if one assesses the child's cognitive competence by examining only tasks which require abstract, context free knowledge, one seriously underestimates the child's ability. Donaldson is extremely adept at translating standard experimental tasks into exercises that appeal to young children and that show how really skilled they are. Urie Bronfenbrenner has described developmental psychology as "the science of strange behavior of children in strange situations with strange adults for the briefest periods of time." (1979, p. 17) Donaldson argues that as a consequence we underestimate children's mental ability.

She recognizes however that the child should not be expected to operate competently only within settings making interpersonal sense to them. The task of education is to free the child's logic so that it becomes more broadly applicable. She therefore proposes a program of education based on Vygotsky (1978). The teaching of literacy fosters disembedding. It takes time to analyse material and think of its implications. The relative permanence of a text provides that time. Texts also promote an awareness of language. Sounds do not always correspond with letters and words with specific meanings. Since rules for spelling are irregular and meanings are ambiguous, the child learns to appreciate the richness and complexity of language. Teaching reading also promotes the self-awareness and self-control which allow the child to step aside from immediate concerns to form abstractions.

Because children do not immediately appreciate the intricacy of the reading process, Donaldson recommends a process of guided discovery which is best carried out by teachers who inform the child why reading and text information are useful and who first teach rules in familiar contexts where instructions are compatible with the child's approach to the material. In that learning, the child should be taught to evaluate incoming material to determine its consistencies with old information and to find techniques to resolve inconsistencies. Thus we return to the starting point of basing

education on deductive inference which becomes refined and abstracted through education.

Donaldson's book is consistent with current developmental theory and research which seeks to redress the imbalance in Piaget's heavy emphasis on late acquisition of logical skills and neglect of the problems of application of logic. That balance is sorely needed but I am not sure Donaldson provides it because her emphasis is too exclusively on application of innate skills and because her approach to thinking, development, experimental methodology and education is often restricted and inexplicit.

Her theory of thinking is a case in point. She confines her theory to deduction, ignoring induction, and she assumes that, of all the possible notions which could underlie deduction, only three are given and that they automatically flow from one another. Her definitions of the concepts are themselves imprecise. For example, one key notion is possibility. But what does that notion mean? Our adult ideas of possibility relate to multiple causes, outcomes or relations, hypothetical events and statistical probability. Why should a child who makes a choice about whether an event is consistent with past information understand the choice involves possibility, and which connatation of possibility does the child understand? Does the child understand all the adult meanings? Similarly the concept of necessity is also complex since there is both logical necessity, which takes many forms depending on the kind of relation involved, empirical necessity based on known cause and effect relations and necessity which is derived from definitions of terms. If indeed the child understands that consistency and inconsistency are opposites, it is not automatic that the child derives necessity from that relation and then grasps any or all of the meanings of necessity. The relations among the three basic concepts are also complicated. Compatibility may imply necessity but it need not. The definition of a dog is compatible with its having white hair, but it need not. Necessity and possibility are also related in a complicated fashion. "I will go if it is sunny" implies I must intend to go on a sunny day but it is possible I may stay or leave when it rains. Outcomes may be both necessary and possible, necessary but impossible, unnecessary yet possible or neither necessary nor possible. Donaldson lacks a fully worked out logical theory with clearly defined terms. That deficiency may lead her to overinterpret the child's competence and to restrict development to the application of concepts rather than the acquisition of refined logical relations.

Having a diffuse theory of logic, she assumes that all the child has to do is free logical thought from one context to apply it elsewhere and that the process of transferring ideas will make the complex distinctions evident to logicians, evident to the child, too. But it may take more than the process of "decontextualization" to distinguish between possible and necessary causes or to decide adequate criteria for judging input to be inconsistent with established concepts. What constitutes consistency-identity, equivalence, overlap, inclusion, association? Where do these ideas come from?

Any theory describing thought as the application of a rule from one context to another has to specify the context from which the rule is derived and the context to which that rule will be applied so we can appreciate how difficult the task of application will be and what changes must be made so that the rule will become applicable in a novel setting. Donaldson describes the contexts of derivation and application only in terms of their consistency with "human sense". But other factors hinder application. Babies who see a desired toy before a light is extinguished reach for that toy in the dark, but if the toy is hidden behind or under another object, they fail to search for the toy. The baby likes the toy equally in each case, but the situations present different spatial changes. Lighting does not alter the relation between the child and the object but when a toy is hidden, a second object is imposed between the child and the desired toy. The child knows what he or she wants in both situations but in the latter the child fails to understand the spatial relations, not his own intentions.

Failures of comprehension occur for reasons other than violation of human sense. But what is human sense anyhow? Donaldson defines it as a context of comprehensible human actions and desired goals, yet she never defines what is comprehensible and desirable to the child. The vagueness of the definition opens it up to circularity. The child does not comprehend because the human actions involved are incomprehensible. Moreover by failing to specify the human context she rules out some possibilities for cognitive development. As we grow we may not only divorce our deductions from human sense but we comprehend differently what human sense is. People's communication should not always be taken literally. They do not always say what they mean. Behavior often reflects multiple competing motives, some of which are not determined by the situation at hand but by the personal and cultural background of the actor. Our very notions of people are conditioned by the cultural and philosophical framework within which we operate. Within that framework we can include experimenters who ask us to perform tasks of no particular interest to us and which are not very descriptive of our own competencies but which may tell the experimenter something about the general nature of solution strategies. Our concept of human sense may undergo evolution just as our logic does and the evolution of logic may lead to refinements in interpersonal understanding and vice versa. Perhaps development involves applying rules we discover in interpersonal contexts to mathematics and science, but it also may involve evolving a broader and deeper view of human interaction.

Donaldson also makes some confusing points about flaws in experimentation. It is undeniable that children fail to perform tasks because they do not understand the instructions rather than because they lack the requisite skills. But that is not the only reason for failure. Not all meaningful tasks are easy. Donaldson oftens transforms a task so that it makes sense to the child but it does not measure the intended logical concept. Because Donaldson lacks an explicit theory of the contexts in which rules are generated and the contexts in

which they are applied, her theory of education is vague. for example analysis of texts require stepping aside from material to appreciate its implications and the process by which implications are discovered. But where does one begin and how does one proceed? A careful reader of the exercises accompanying *Pixie* may learn more about the process of education than Donaldson will tell you.

In summary, read Donaldson if you want a popular critique of research on cognitive development written to advance the view that children are quite competent if they are observed under the right conditions. Read Donaldson for clever ways to find those conditions. Read the book for a description of development as expansion of competence through the process of generalization and self awareness. Read the book to find out about an educational program promoting freedom through literacy and guided self-discovery. Clearly the author has considerable respect for children's minds. But her book is not an elaborate theory of the nature of human thought or of the context where it operates best. It describes development as a process of decontextualization of three basic notions of necessity, compatibility and possibility without defining those terms unambiguously, or considering other aspects of development. It neglects the fact that as we grow, we not only divorce our deductions from human sense but we also grow to appreciate more what human sense is. Are we therefore liberated from the context of human sense when we think or have we broadened how we think about humans?

References

Bronfenbrenner, U. *The ecology of human development.* Cambridge: Harvard University Press, 1979.

Vygotsky, L.S. *Mind in society.* Cambridge: Harvard University Press, 1978.

Wally's Stories by Vivian Gussin Paley. Cambridge, MA: Harvard University Press, 1981. 223 pp. $12.50.

This is the story of a kindergarten class at the Laboratory Schools of the University of Chicago. In part it is the tale of how Wally, an impishly imaginative and highly sensitive kindergartner, began making up stories for dictation to the teacher, stories that the class then acted out. Though Wally's natural preeminence in story-writing was never seriously threatened, eventually all the children dictated stories and all helped act out the stories they and their classmates had written.

So this is a book of kindergartners' stories, plus commentary. But it is much more. It is also a collection of transcripts of class discussions. The teacher, Vivian Paley, follows the admirable practice of tape-recording class discussions and transcribing them daily. Good transcripts of discussions among five-year-olds are hard to find. (Piaget says there aren't any real discussions among children of that age;[1] but he is wrong.) This collection is the most interesting one I have seen.

Sometimes it's a child's story that triggers a discussion in Vivian Paley's class; but almost anything will do. Paley herself brings all sorts of interesting issues to the class for discussion, and sometimes, decision.

"Can I be Martin Luther King, even if I'm not next on the list?" asked Wally.

"You'll have to talk to the class," I replied. "Tell them why you want the rule changed this time."

Wally does.

Wally:	. . . See, I want to be Martin Luther King. But it's not my turn. So is it okay?
Eddie:	Why do you want that, Wally?
Wally:	Because my mother saw him once. And my grandmother too.
Eddie:	That's a good reason. Okay, I agree.
Everyone:	Me too. (108)

Vivian Paley seems to have little interest in philosophy; yet interesting philosophical topics arise, spontaneously, in her class discussions. Consider this exchange on thinking:

Wally:	. . . grown-ups don't remember when they were little. They're already an old person. Only if you have a picture of doing that. Then you could remember.
Eddie:	But not thinking.
Wally:	You never can take a picture of thinking. Of course not. (4)

(How one would like to continue that conversation with Wally!)

Or consider this exchange:

Eddie:	But some ideas come from your mother and father.
Wally:	*After* God puts it into their mind.
Deana:	I think it just comes from your mind. Your

mind tells you what to think.

Eddie: Here's how it happens: You remember things other people say and you see everything, and then your mind gives you spaces to keep all the rememberings and then you say it. (35)

Here's a nice bit of conversation on wishes and ideas:

Lisa: Do plants wish for baby plants?

Deana: I think only people can make wishes. But God could put a wish inside a plant.

Teacher: What would the wish be?

Deana: What if it's a pretty flower? Then God puts an idea inside to make this plant into a pretty red flower — if it's supposed to be red.

Teacher: I always think of people having ideas.

Deana: It's just the same. God puts a little idea in the plant to tell it what to be.

Sometimes a philosophical line of reflection persists in the face of a somewhat discouraging reaction from the teacher. Consider this exchange, which takes place after the class has planted lettuce seeds:

Eddie: . . . how do we know it's really lettuce?

Teacher: The label says "Bibb Lettuce."

Eddie: What if it's really tomatoes?

Teacher: Oh. Are you wondering about the picture of tomatoes with the lettuce on the packet? It's just an idea for a salad, after the lettuce comes up.

Warren: They might think they're lettuce seeds and they might not grow.

Earl: Maybe the seeds look the same as something else.

Teacher: Do you think they could make such a mistake?

Lisa: Just bring it back to the store if it's wrong.

Deana: The store people didn't even make it.

Eddie: You have to take it back to the gardener.

Deana: Maybe they printed a word they wanted to spell the wrong way. Maybe they mixed it up.

Eddie: They could have meant to put different seeds in there and then they turned around and went to the wrong table.

Wally: The wrong part of the garden. The tomato part.

Warren: So in case it's not lettuce it could be tomatoes. (183-4)

My family and I recently had a visitor who had grown up and lived most of her life in metropolitan areas. When we suggested taking pint boxes along on a picnic so that we could pick wild blueberries, our visitor was upset. "How will I know they are edible?" she asked. "We'll tell you," we said. "But then," she replied, "you'll put me in the awkward position of having to choose between offending you (by refusing to eat what you tell me is edible) and accepting something I have insufficient evidence for." But how do you know to believe the labels on the berries you buy in the store?" we asked. "I've had lots of experience eating those," she replied, smiling at herself.

Eddie's question seems to be about evidence and the warrant required for real knowledge. The other children join in immediately; they happily think of various possibilities that tend to undermind the justification we might have thought we had for believing that those seeds were indeed lettuce seeds. The teacher's summary comment is this:

> There was no suggestion of robbers or magicians; human error was the only factor considered. The ideas for distributing the lettuce crop were equally practical. (184)

Clearly it was the teacher's ideas in the dialogue that were "practical." The children's were more interestingly theoretical. They were trying out possibilities that might undermine a claim to know something. They were doing epistemology.

Vivian Paley obviously cares about children. She also cares about clear thinking. "Each year," she says, "I come closer to understanding how logical thinking and precise speech can be taught in the classroom." (213) Yet she, like almost all adults in our society, is quick to distance herself from children by a dismissive comment on their alleged irrationality. ("The endless contradictions did not offend them," she writes on page 18; "the children did not demand consistency." On page 137 she makes this comment: "The affirmation of an event carries its own validity — so says the child, but the adult does not agree.")

Early on in a section called "Man in the Moon" Paley remarks, scornfully, "Inconsistency is the norm, even in wishing." (62) There then follows the transcript of a delightful and highly ingenious discussion on whether there is a man in the moon and, if there is, how he can be there. Here are parts of it:

Earl: My cousin says you can wish on the man in the moon. I told my mother and she says it's only pretend.

* * *

Lisa: He's not real.

Deana: But how could he get in?

Wally: With a drill.

Eddie: The moon won't break. It's white like a ghost. The drill would pass in but no hole will come out.

* * *

Kenny: There is a face but my daddy says when you get up there it's just holes. Why would that be?

Deana: Somebody could be up there making a face and then when somebody goes up there he's gone.

* * *

Fred: There can't be a moon man. It's too round. He'd fall off.

Wally: He can change his shape. He gets rounder.

Eddie: The astronauts didn't change their shape . . .

Fred: I saw that on television. They were walking on the moon. But a real moon man would have to find a door. And if you fall in a hole you'll never get out.

Andy: Sure you can, when the moon is a tiny piece.

Warren: There *is* such a thing as a half moon. But the astronauts can't be cut in half. They can only go when it's round. A moon man can squeeze in half.

* * *

Eddie: There's no air there. No air! But air is invisible so how can there be no air?

Wally: Only the moon man sees it.

Tanya: Maybe there's a moon fairy, because some fairies are white that you could see through. (63-4)

What a marvelous discussion! (Without even a word from the teacher!) What wonderfully fresh ideas!

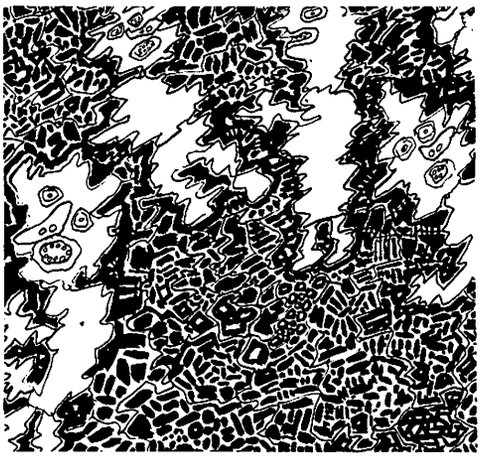
Imagine trying to reason out, with little knowledge of physics or astronomy, whether there could be a man in the moon. Imagine trying to put together (1) TV shots of astronauts walking on the moon, (2) pictures in books or newspapers of moon craters, (3) nursery-rhyme illustrations of the man in the moon and (4)various nighttime and, especially, daytime appearances of that mysterious object in the sky. Think about what could happen to the man in the moon when there is only a half-moon. Think about a region where there is nothing of something that, even where there is some of it, is invisible. Think about what something as wraithlike as the daytime moon might be made of.

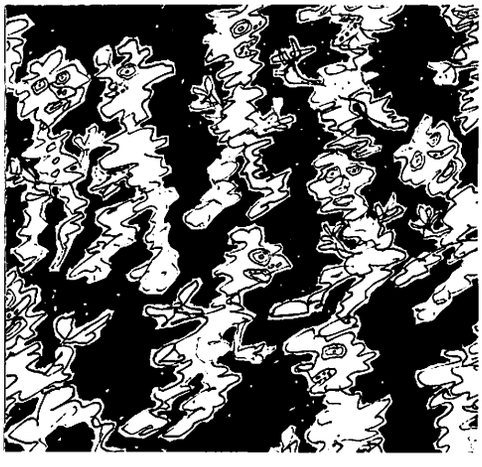
Immediately following this lovely moon passage the teacher comments, as if in summary judgment, "The credo at age five is to believe that which makes you feel good." (64) What a letdown! How can an adult who sets the stage for such a beautiful discussion, and records it faithfully for our great delight and instruction, see so little of its virtuosic ingenuity?

We tell our children wonderful tales of myth and magic. Then we invite them to reconcile fantasy with reality. When they fail, as we know they will, we sternly call them inconsistent. Why?

Wally's Stories is the record of a year in a wonderful kindergarten class that is presided over by an amazingly energetic and resourceful teacher. Unfortunately that resourceful teacher has little more respect for the ruminations of children than have the more ordinary and unresourceful adults in our unphilosophical society. Still, I'm sure I'd rather be in her class than in most any available alternative.

Gareth B. Matthews
University of Massachusetts/Amherst





FOOTNOTE

[1] "Until seven years of age children scarcely know how to have discussions among themselves and confine themselves to making contradictory affirmations. When they try to furnish explanations to others, they are not really able to put themselves in the place of the other person, who does not know what they are talking about; they speak as though they were talking to themselves. For example, while working in the same room or at the same table, each child speaks for himself, even though he thinks he is listening to and understands the others. This kind of "collective monologue" is really a mutual excitation to action rather than a real exchange of ideas." (Jean Piaget, *Six Psychological Studies*, D. Elkind, ed. & trans., New York: Vintage, 1968, 20-1).

Philosophy and the Young Child
by Gareth B. Matthews
Harvard University Press, 1980

Gareth Matthews says that he first became interested in the philosophical thoughts of children when trying to figure out how to introduce college students to philosophy. For many college students philosophy is a very strange subject—full of deceptively simple looking questions which seem only to give rise to even more questions. Furthermore, these questions do not seem to them to be the ones to which they might otherwise naturally be attracted. In short, for these students, philosophy is both discomforting and unfamiliar.

Professor Matthews' suggested remedy is to show his students that they are actually being *re*introduced to philosophy. That is, to show them that, very likely, there was a time when they were naturally philosophically curious.

When was that time? It could have been when they were five years old, like Jordan, for example:

> If I go to bed at eight and get up at seven in the morning, how do I really know that the little hand of the clock has gone around only once? Do I have to stay up all night to watch it? If I look away for even a short time, maybe the small hand will go around twice. (P. 2)

Questions like Jordan's are likely to be dismissed as unserious by most adults. Yet, as Matthews points out, Jordan's questioning might be related to philosophical puzzles about induction. Matthews comments:

> Are observed states and actions a reliable guide to unobserved states and actions? Jordan may have a friend at kindergarten who manages to make faces at the teacher whenever her back is turned, and not otherwise. How do we know that clocks are not like that? *Do* we know they aren't? Maybe induction rests on an assumption as naive as the belief that what Jordan and his friend do under the watchful eye of the teacher is a reliable guide to what they do when the teacher leaves the room or looks away. (P. 3)

This example occurs in Chapter 1 of *Philosophy and the Young Child.* The chapter is entitled, "Puzzlement." Matthews' treatment of Jordan's puzzlement reflects the tone of his entire book. Matthews is not a philosopher who thinks he has settled answers to philosophical questions. He shares the puzzlement of young children who sprinkle the pages of his book with delightful and often playful philosophical thoughts. Sometimes he tries to tease out what his young philosophers might have had in mind, or what they might have gone on to say if only someone had encouraged them to go on. At other times he uses a child's comments as a stimulus for his own philosophical reflection, or as an occasion for pointing out the similarity between the child's concerns and the concerns of philosophers such as Aristotle, Augustine, Descartes, Plato, Russell and Wittgenstein. The result is a clear demonstration of the potential for a continuous philosophical thread connecting our childhood with our adulthood.

At the same time that this is philosophically exciting and uplifting, it is also somewhat saddening. It is saddening because the potential for such a thread, for most, remains just that—a mere potential. For most, philosophical curiosity is dulled at an early age, perhaps never again to be seriously awakened. Matthews would say that it is largely because the philosophical queries usually fall on deaf or impatient ears. An illustration of how this might happen is provided in Chapter 2, a chapter entitled "Play." Matthews recounts that he once said to his eight year old son, "You can't be in two places at once." His son replied, "Yes you can. You can be in the bedroom and in the house at the same time." "But," replied Matthews, "I don't mean that!" His son, armed with a mischievious grin, retorted, "So what *do* you mean?" Matthews goes on to outline various ways in which such a conversation might continue, including speculation on the possibility that the town of Lloydminster as a whole could count as being in both Alberta and Saskatchewan.

But how do adults usually respond to a child's suggestion that perhaps what they said is challengeable? Matthews comments:

> Much of what we adults tell children is highly questionable at best and deserves to be challenged. Yet we adults usually turn aside a child's challenge with an irritated "Oh, you know what I mean!" How intimidating, how unfair, how desensitizing that response of annoyance can be! If we ever stopped to reflect seriously and honestly, it might come clear to us that, often enough, there really wasn't anything clear that we could have said to have meant. (P. 21)

Jean Piaget also receives harsh criticism from Matthews. Since much of Piaget's work consists precisely in asking children philosophical questions, one might expect Matthews to cite Piaget as an ally. However, for Matthews, Piaget presents himself as someone who thinks he has settled answers to philosophical questions and who, thereby, lacks genuine philosophical puzzlement. This, Matthews thinks, is one of the main reasons Piaget fails to mine the philosophical potential of children. The chapter entitled "Piaget" warrants careful reading by all who have turned to Piaget's work in trying to understand the intellectual development of children. Matthews nicely displays the philosophical assumptions underlying Piaget's stage theory of cognitive development—a theory that apparently would conclude that the thinking of the classical behaviorist John B. Watson, or the contemporary philosopher Peter Geach, was somehow unnaturally arrested. The problem, according to Matthews, is that Piaget is so convinced of the correctness of his own rather Kantian philosophical outlook that significant departures from the outlook are assigned a lower stage of intellectual development.

Another objection raised by Matthews is that Piaget attempts to validate his developmental theory by identifying the same patterns of responses in all children. But this means that unusual responses of children are discounted as unreliable ways in which children think. However, Matthews claims, unusual responses are likely to be the most interesting philosophically. Standard responses are more likely to be unreflective products of socialization.

Matthews' final objection to Piaget is that Piaget has no interest in "mere romancing." Romancing is coming up with an answer that one does not really believe (or which one believes only through force of habit). In explaining why he thinks romancing is important, Matthews shares with his readers an

amusing, but instructive, exchange he had with his son John, then age six. At one point John playfully suggests that the red warning light in the car may be lying about the condition of the car. They then have an extended discussion of the concept of lying, concluding that to lie you must yourself know that what you are saying is false:

"Do you think," I asked triumphantly as we put the car in the garage, "that the light might have *known* that what it was telling us was false?"

"No."

"Why not?"

"It hasn't got a brain."

I was pleased.

Then came the parting shot. "Okay, it wasn't lying," agreed my son, "but maybe it was just teasing." (Inveterate romancer!)

That last move was a good one. Analyzing the concept of teasing would postpone bedtime indefinately. I was tempted to go on, but not quite strongly enough. Instead of analyzing the concept of teasing with my young philosopher, I heartlessly hustled him off to bed. (Pp. 40-1)

By discouraging such conversations, Matthews concludes, Piaget also is discouraging philosophical thinking.

Matthews' example of romancing also suggests something else. A key to philosophizing well is being motivated to do so. There are times when children are moved to serious and somber philosophizing. But many children delight in what Matthews calls "conceptual play." John obviously enjoys this. John's last move also suggests that his philosophizing may sometimes have a more pragmatic basis—for example, it may enable him to stay up later.

We should not underestimate children's ability to turn philosophical thinking into practical knowledge. My daughter Susan provides a good illustration. (This example was presented to readers of *Thinking* in Vol. 1, No. 1, p. 23.) At age six she found it difficult to sit at the dinner table. On one occasion I found myself reprimanding her several times for leaving the table, not eating, and so on. Each reprimand was punctuated with an, "...and I mean it!" As my irritation was approaching rage, Susan calmly said, "Unfortunately..." and paused to let out a hearty laugh. "Unfortunately...?" I asked incredulously. "Unfortunately," she continued, "we're not playing 'I mean it' today." As my rage melted into laughter, she explained how this clever ploy had occurred to her. She said that she had seen a Peanuts comic strip in which Snoopy was brooding over his tennis game, saying, "I should have done this" and "I should have done that." Then he concluded, "Unfortunately, we weren't playing 'should have'."

In addition to displaying a rather nice bit of analogical reasoning, Susan also was engaging in a type of thinking that Piaget holds typically does not occur until about age eleven. Clearly, she was thinking at a meta-level about the nature of the activity we were engaged in at the dinner table. And, equally clearly, she was well motivated to come up with some kind of disarming maneuver. Perhaps greater concentration on the practical context in which children argue, talk, play, and amuse themselves would reveal a much earlier time at which children are capable of abstract, philosophical thinking than Piagetian interviews have suggested.

I cannot recall ever having enjoyed reading (and re-reading!) a philosophical book more than Gareth Matthews' *Philosophy and the Young Child*. Every page expresses deep respect and affection for children. One cannot read this book without learning a great deal about children and philosophy. One might only wish there were more to read.

If the book has a serious shortcoming, it is that it does not adequately consider the potential children have to engage in philosophical discussion among themselves. Nearly all of the examples are either short anecdotes or conversations between an adult and a single child. Some of these conversations (particularly those between Matthews and his son John) show that young children are quite capable of engaging in extended philosophical discussion with adults. Can they also do this with each other?

I believe they can. Nearly every issue of *Thinking* provides examples. In my own discussions with groups of fourth and fifth graders I have found that initially almost every child's comment has been directed to me rather than to the other children. My suspicion is that these children have been given little opportunity or encouragement in school to engage in intellectual conversation with one another in the classroom. This too is bad. One of the most exciting philosophical conversations I have had with children took place almost entirely without any direction from me. (This conversation appeared in the last issue of *Thinking*.)

There is so much in *Philosophy and the Young Child* that I have not mentioned. All of it is worth reading. Readers of *Thinking* are familiar with Matthews' regular column, "Thinking in Stories." His chapter entitled "Stories" contains a wealth of philosophical examples from children's literature. The chapter entitled "Fantasy" continues Matthews' attack on treating children with condescension and disrespect by taking aim on Bruno Bettelheim. And there is more. We all have much to learn from children. We should be grateful to Gareth Matthews for making this so abundantly clear.

Michael S. Pritchard
Department of Philosophy
Western Michigan University

■

Dr. Telegar Satish is a workshop director with the IAPC. The session with children which he describes was part of his preparation to become a teacher educator in philosophy for children.

The Relationship Between Knowledge and Emotions: Transcript of a Philosophy for Children Session in St. Paul, Minnesota

By Telegar Satish

The Weaver Elementary School in St. Paul, Minnesota gave me my first opportunity to work with children doing philosophy. I was there as part of my practical training to be a teacher-trainer in philosophy for children.

The children I worked with were selected for the high-potential program and came from fifth and sixth grades. They were ten to twelve in number. They all worked hard and co-operated with each other in tackling many fundamental issues in philosophy. Whether the mind was all-pervasive, if there was life after death, the meaning of life as a whole, the role of knowledge and emotions in one's life and their mutual relationship, whether numbers were real or fictitious and many other vital issues. In many discussions in which we were engaged, they displayed a remarkable ability to use language with clarity and purpose, and when they did grope for a word to express a new thought it was because they wanted to find the right word. What impressed me deeply was a trait of theirs lacking in much of adult discussions in philosophy, an uninhibited participation in what was going on. When they had an idea, they were willing to express it at the risk of being questioned. This quality made it easier for them to share each others' ideas and cultivate a sense of openness.

When I first met them and started on Harry Stottlemeier's Discovery, *I was not sure what to expect. I spent nearly three hours a week for about eight weeks from the last week of February to early May, 1981. My main concern as a teacher was to facilitate dialogue among my students. I was not sure as to what would spur them on. Quite a few things had become clear to me during my training in the Philosophy for Children program; the importance of not translating what the children said into our own preconceived terminology, and not to pressurize the discussion to move in any pre-planned direction. I*

could appreciate the value of these ideas, but I was not sure how I was going to give them practical shape. It was this aspect of my work which I found most challenging. Most of those who are in academic philosophy would do well to ponder over this issue of communication, where we are all too ready to express a point of view without wanting to find out what the other person has to say.

In a couple of weeks of work with the class, it became clear to me that their minds were extremely swift and that without very careful attention I would be left out. This made my task in many ways very easy and enjoyable. In our sessions, the children talked with one another quite naturally, sometimes agreeing at other times disapproving over a wide range of issues. Quietly, without our knowledge, a sense of community had crept in where each one discovered the others' perspectives.

Some of them talked more than others, but those who talked less were not necessarily behind. There was enough evidence that they had imbibed deeply from what was going on and were an invaluable part of the group as a whole.

I would like to express my thanks and appreciation to Mrs. Barbara Christensen, the co-ordinator of the High-Potential Program at Maplewood School District of St. Paul, Minnesota who first invited me to work in their district. She was also very eager to have the value of the Philosophy for Children program appreciated by educators in Minnesota, and she worked very diligently towards that end. Also, I would like to record my thanks and appreciation fo Mrs. Mary Schrankler, the principal of Weaver Elementary School and to Miss Analu Jurgens, the teacher of the High-Potential program for their co-operation during the two months that I spent at the Weaver Elementary School.

What follows is a transcript of a classroom session that was videotaped; we had just finished reading Chapter three of Harry.

Satish: Last time we met we talked about mind and quite a few of you came up with various ideas of what the mind is. Some of you said, I think, that mind is endless and others suggested that mind is like a factory. And what were some of the other suggestions made? Yes Eric.

Eric: Ah, that thoughts aren't endless but the mind is.

Satish: Yes Nan

Nan: Numbers

Satish: Your thoughts are like numbers, endless. Yes Linda.

Linda: Mind is like a room.

Satish: Yes, another suggestion was that mind is like a room — now, mind is like a factory, a room and also mind is endless. Do you see any problem there?

Danielle: They don't co-operate. They are different ideas. They couldn't be the same. Some people say that mind is endless and others say that it is a room and they can't be the same thing because a room is not endless and then how can mind be like a room? They don't co-operate with each other.

Satish: Right! There is a problem and as you say they don't co-operate, they don't go with each other when you say mind is like a room and when you say mind is endless. Yes, Andrew.

Andrew: Last week, we were going against it, that mind is like a room.

Satish: Yes. We were not agreeing with that position. We were coming up with ideas which questioned that position of mind being like a room. Yes, Paul.

Paul: I think that mind is endless because when a person is alive thoughts keep on coming in even when you are asleep. Some we dream and some we forget. So the mind's endless when a person is alive and when they die it's just no more.

Susan: Mind is endless when you are alive and when you die.

Paul: It's no more.

Satish: There is no mind. O.K.

Danielle: . . .Well maybe you never know . . . but who knows whether we can stop to think when the mind is in heaven.

Satish: Yes, how do we know? That is the question. We cannot say. Paul you seem to disagree with that

Paul: Oh, no, there is no way we can see because when you are in heaven you cannot come back to earth. So when someone is in heaven he cannot tell anyone who is on earth.

Satish: Alright, they cannot say but what about the man who is on earth?

Paul: He won't find out till he dies.

Eric: Right! You could think an infinite number of thoughts but you can't because you don't live for ever—long enough to have infinite number of thoughts.

Nan: You could have something of an infinite number of thoughts because in a year we think a lot of them — countless.

Satish: Yes, that's quite a lot. One could say it's countless but can one say it's infinite? You cannot count it really because there are so many of them.

Danielle: They can't be infinite because in a year you can have billions or trillions but yet infinity keeps going on and on. So we can't have infinite thoughts. Your thoughts keep on coming in you know, like I told you before you might be able to have thoughts in heaven.

Satish: Yes, you cannot keep counting it and it's always possible you can have thoughts in heaven — continue to have those thoughts.

Paul: When a person is alive, thoughts keep on coming in until he dies. So if a person lives forever he will be thinking forever — that means a person is thinking an infinite number of thoughts.

Satish: Yes, Tanya you wanted to say something.

Tanya: No.

Satish: O.K. then you have thoughts which are endless — mind in that sense is endless because it goes on developing thoughts. Anyway, now we have talked about mind and thoughts. What are the various things that your mind has? I am interested in asking that question. What are the various things you find in the mind, just is it thought alone? Yes, Danielle.

Danielle: Idea

Linda: Knowledge

Satish: Yes, Chris you wanted to ask something.

Chris: Facts

Paul: Emotions

Eric: Memories

Tanya: Answers to problems

Eric: Logic

Danielle: The outlook—like he said memories—you can look towards the future.

Satish: The outlook

Danielle: On life

Satish: The outlook on life

Danielle: Like you know, the future.

Satish: Oh, O.K. You can call it outlook on future. Sorry, I was a bit confused.

Beth: Imagination

Andrew: Dreams and the subconscious

Eric: Creativity

Satish: What do you mean by creativity?

Eric: The ability to come up with an idea that nobody has thought up before—invention.

Satish: Alright, creativity. So you can go on. Mind is not just the thing that has thoughts in it right? So we discover that mind has so many elements or things in it. Now what do you say: are these things separate from the mind or is the mind something that is separate from all this or something just present in all this?

Tanya: Everyone has the ability to do everything there, they just have to think about it. So it's in everyone's mind.

Satish: Everyone has the ability to—go ahead, could you just clarify it?

Tanya: Everyone has the ability to do that—they just have to somehow think about it.

Satish: Ability to do what?

Tanya: Like all the things on the board.

Satish: Oh! O.K. You are saying that all of us have the ability to go through all these various experiences, the emotions, facts, knowledge, creativity, imagination, etc. but we just have to get down to it, right? O.K.

Nan: Some people have more of it than others and some people have less.

Satish: Right. Some people have more of certain things than others — some people have more knowledge and others have more imagination. Probably some people are very emotional. Some are very logical, right! So it varies from person to person. Now what would you say mind is? I am using the word mind and I am saying thoughts are in the mind. I am saying so many things about the mind. Yes, Paul.

Paul: I think that anyone can know anything that anyone else knows. It's just that someone has to tell them and keep on telling them. So that they remember. Then there will be like no. 5 on the board, memories. Then they will know they have the knowledge. So someone tells them they will remember and they will have knowledge.

Satish: Right, when someone tells them they will remember and then they will know and everybody has the ability to remember to know, to understand to be logical, that is right but I want to find out something more. Yes, Eric.

Eric: The mind is something that collects the data and then processes it sort of like. . . if something happens you might get emotional about it. You might get logical or you might try and find an answer for it or turn it into knowledge or check it into facts.

Satish: So, mind is something that processes. It is something that is taking in information and digesting and passing it on, arranging it to use it. Is that what you are saying?

Eric: Yes, that's what I am saying.

Satish: O.K., the mind processes. What else does it do? Yes, Danielle.

Danielle: With the mind we can do everything we want because it's the center of almost everything we do.

Satish: It's the center of almost everything we do.

Danielle: It's . . . without the mind we cannot think or talk or even. . . we won't be able to do anything without the mind because without the mind we won't be able to think, without thinking we won't be able to understand and then slowly we won't be able to do things.

Satish: Right! Without the mind I cannot understand. I cannot go back from here to my home. I cannot drive a car — that's what you are saying, right! Yes, Linda.

Linda: Well, the mind helps to feel . . . like it helps to keep you from harm — it helps you to make decisions.

Satish: Right, it also keeps you from harm, you can decide certain things carefully. Yes, Paul.

Paul: Well, there are some things mind can do without like emotions. There is not going to be some problems— we wouldn't need psychiatric treatment or anything like that. Without emotions feelings are dead.

Satish: So what you are saying is that these emotions and feelings are not necessary.

Paul: Ya, you can live without them.

Satish: You can live without them, ah, that's an interesting point. Now let's see if we can talk about it. Paul has made this very interesting point; he says we can live without emotions and feelings. What do you all say? Yes, Eric.

Eric: Without emotions life wouldn't be very interesting, we have to take good with the bad.

Tanya: Without emotions you just feel like a robot — we wouldn't be able to love anybody. We wouldn't be able to hate anybody.

Nan: Well if you had no emotions you couldn't tell the difference between the good people from the bad.

Paul: That would be knowledge.

Satish: Between good and bad people, you are saying that good people are those you are emotionally attracted to. . .

Nan: . . . . .

Satish: Yes, Andrew.

Andrew: Well, some things the mind does is a luxury like the answers to a problem you just wanted to do it and mind wasn't there — even if you had the mind thinking. . . it is sometimes a luxury.

Satish: Oh, you mean knowledge sometimes is a luxury. O.K. Linda.

Linda: I don't think that knowledge sometimes is a luxury. I think it is not really a luxury because without knowledge you won't be able to do very much, it takes knowledge to do everything like learning to walk.

Satish: Yes, Andrew

Andrew: There are some things we can do without knowledge.

Satish: There are some things we can do without knowledge. Yes, Beth.

Beth: Although . . . without emotions — like somebody got you a birthday present and you are happy and they are happy that you are happy for the gift and the other person will be happy that they are happy.

Paul: No, the other person wouldn't be able to feel sorry for the person who wasn't happy for the gift because there wouldn't be no emotions.

Satish: Yes, go ahead.

Paul: Like I gave my dad a present for his birthday without no emotions he wouldn't be able to tell me his feelings whether he liked it, but then I wouldn't be able to express my feelings that I felt sorry for him.

Danielle: Then you wouldn't give him a gift because you have emotions. You give a gift because it means you feel happiness and love towards him . . .

Paul: He may have needed something.

Danielle: I know, but still that requires emotions too.

Satish: Without emotions also you could kill someone, you could kill the whole human race and they won't be able to even care that you did because everybody will start to do it, because if you don't have emotions and you start killing wantonly then nobody will feel sorry until you keep on going.

Paul: You still have knowledge.

Satish: Yes, Nan.

Nan:

Paul: There will be good knowledge too then there will be no reason to kill anyone.

Satish: Oh, what Paul is saying that if you have good knowledge you won't be going about killing people. Is that what you are saying Paul?

Paul: Yes.

Satish: Yes, Tanya.

Tanya: Before we were saying that if you don't have emotions then you wouldn't have any problems. But everything in life is a problem like in your house you can't keep the door open through the night.

Paul: Ya, if you have lot of knowledge and no emotions then you can solve those problems.

Danielle: Knowledge and emotions, they kind of blend in together sometimes because to me emotions have to decide what to do with knowledge.

Satish: So knowledge and emotions blend in together. See Paul was saying that if you have knowledge you won't do it and if you have emotions then there will be too many things we do. Yes, Marcie.

Marcie: But why should we blame emotions because if everybody walked around with the same expression on their face, somebody said a joke or something they couldn't laugh or couldn't say that it's dumb because they wouldn't know it. It would be boring.

Paul: It wouldn't be boring because if you had no emotions you couldn't say it was boring — so it would be just regular.

Satish: Yes, Linda.

Linda: Well, without emotions knowledge will not be useful.

Satish: Emotions are helpful to make use of knowledge. Yes, Neal.

Neal: If you don't have emotions you still have your knowledge that you don't kill somebody. You would still have the knowledge that if you hate somebody that you could kill somebody.

Andrew: They are talking about if you have no emotions — like slapping like this is an emotion, not caring is an emotion.

Satish: So you are saying that when you don't care for somebody that itself is an emotion.

Andrew: Like if you have no emotion, they would walk around plainfaced that itself could be emotion too because it would be like who cares for me.

Paul: There won't be who cares. There won't be any care at all, there won't be no hate, no love, it would be just regular — normal without any expression on the face.

Marcie: Regular is an emotion.

Danielle: They couldn't worry. They couldn't do anything.

Sara: They won't be people if there are no emotions.

Paul: There would be.

Eric: They probably get logical and do what was necessary for the replenishment of the species.

Satish: Yes, Nan.

Nan: If there are no emotions, there wouldn't be any surprises because everything you see would be the same — then this is boring, that is boring. There won't be any surprises.

Linda: . . . you cannot talk without emotions.

Satish: Yes, Sara.

Sara: Without emotions if you had knowledge then you would steal.

Paul: If you had enough knowledge then you wouldn't steal.

Danielle: Some people have bad knowledge.

Paul: Ya, but if everyone had good knowledge then you would not steal anything.

Marcie: Not everybody has good knowledge.

Paul: Not everyone has no emotions.

Danielle: But you just said that you don't need them.

Paul: Ya we don't we can live without them.

Eric: It would be so boring without no emotions, nobody would say anything other than necessary. They wouldn't say hi or they wouldn't talk anything other than completely necessary and so it will be pretty boring. And then people without emotions — everybody would get so that they didn't care about boring and they will commit suicide or something.

Paul: No. Suicide you have to have reason to

Andrew: That's knowledge too — it's boring.

Paul: It wouldn't be boring if you had no emotions and you had no reason to commit suicide if you had no emotions.

Eric: You just live like a robot if you didn't commit suicide — you wouldn't have anything to do.

Paul: You have no reason to die.

Eric: You have a reason to die because you have nothing else to do. (laughter)

Danielle: Also it would be pretty hard to get a job to do anything and also a lot of people like those who make clothes will not make them.

Paul: If they had the knowledge they would.

Danielle: I know but still, there won't be such things as Christmas or all kinds of holidays.

Nan: Ya.

Marcie: You couldn't be happy like on a birthday.

Paul: You couldn't be sad.

Sara: You couldn't be happy or sad.

Paul: I know you just be like a robot. We figure it's bad because we have emotions. But if we didn't have emotions, we wouldn't think it is good or bad because we wouldn't know what it would be.

Satish: Yes, Beth.

Beth: Like Danielle said because your mother has enough emotions we can eat food. She goes to the grocery store to buy food. But if nobody had emotions to care for the kids then there would be work for the psychiatrists.

Paul: There would be no reason for the psychiatrists.

Eric: Yes they are telling the truth.

Paul: If man began without emotions then there would never have been any problems anyway.

Linda: I think there would be problems because if people have so much knowledge they will try to figure out why they don't have no emotions and try to figure out a way to get to them.

Danielle: Because they would know what emotions are and they they exist.

Linda: Yes, Eric.

Eric: Without emotions people would become nothing more than animals because the only reason for us to live was to get food and do what was good for the species. Nothing else — after you have done with that you just sit around doing nothing.

Andrew: If you didn't have emotions you would be just by yourself. You wouldn't like anybody else you just be with you. You would be your own nation because you wouldn't be doing anything to the other person — you just wouldn't know him all your life and everybody do it everybody else.

Paul: There won't be no bombs dropped or no wars or anything else if there were no emotions.

Linda: Paul said there won't be any bombs if you have no emotions — people won't come and drop a bomb on you.

Marcie: If there was no such thing as emotions we wouldn't be really here because God made everything because he cared and he wouldn't have cared if he didn't had no emotions.

Paul: How do you know God made us anyway — maybe man evolved. How do they explain all created things?

Danielle: How did they get here?

Eric: Maybe God created evolution.

Paul: Ya, that's another thing.

Linda: O.K. Andrew.

Andrew: Well, if there are no emotions let's say the first two people on earth man and woman and if they didn't care for each other — could they reproduce?

Paul: They didn't have to care about each other all they

need is knowledge to reproduce.

Andrew: I know what if they didn't care for each other all they just would have knowledge.

Paul: They wouldn't hate each other. They wouldn't like each other if they had the knowledge.

Marcie: What if they didn't have knowledge.

Paul: If they didn't have knowledge and no emotions then the world will be gone.

Beth: You must have knowledge you know.

Paul: Everyone can learn.

Tanya: You need feelings to learn.

Beth: Experience.

Linda: Each other to learn.

Satish: Yes, Tanya.

Tanya: Before we said that if we didn't have any emotions we will just sit around and learn nothing. Well, why would you learn if you didn't have emotions?

Linda: Ya.

Beth: Ya.

Sara: Ya.

Satish: This is very interesting. Some of you say that emotions give rise to learning because of emotions you want to give a present to your father, because of emotions you want to paint and some of you probably have said that knowledge is all that is required. Let's talk about knowledge and emotion. Do you find an emotion without knowledge? Yes, Nan.

Nan: Well, emotions you have to know if you like somebody you have to know you like them.

Paul: Without emotions you won't like the morning any more.

Satish: O.K., so you say that when you have emotion there is some knowledge also — that's what you are saying — what about you, Beth?

Beth: If you don't have emotions, knowledge isn't good for work as with emotion, so really you must have both.

Satish: O.K., you must have both.

Beth: Because knowledge needs emotion and emotion needs knowledge.

Sara: Because if you have emotion like hate — you wouldn't know what hate means without knowledge.

Marcie: Ya.

Sara: So many words go out of the vocabulary.

Andrew: You know, emotions and knowledge blend so much together that without emotions there would be no knowledge.

Satish: O.K. Without emotions there won't be knowledge, what about emotions without knowledge?

Andrew: In life, if there are no emotions, then nobody would care about knowledge. They wouldn't do anything.

Paul: With knowledge people would want to learn things. There won't be no emotions but with knowledge they will try to make it better for themselves.

Chris: But how can they without emotions, they wouldn't want, they couldn't, they wouldn't learn there would be nothing.

Paul: No., computers they don't have emotions but they learn a lot.

Beth: That's because we aid them.

Paul: If we have computers put inside us they would still live.

Andrew: Nobody has done...

Paul: Ya. If someone did, with no emotions they could still live.

Sara: It would be boring.

Paul: It wouldn't be boring for them because they wouldn't have any emotions to say it was boring. If they could somehow put a computer brain into someone, the person could live even if he had no emotions — if they could do it to one person, they could do it to another.

Sara: How are you supposed to do it?

Paul: Knowledge.

Sara: Knowledge, but...

Paul: Knowledge to choose.

Danielle: You have to have emotions — which one to choose.

Sara: Ya.

(chatter)

Sara: O.K. Linda.

Linda: Well if you had the mind of a computer, nobody would be able to learn anything new because somebody would program somebody.

Satish: So there is nothing new if you have a computer.

Linda: If you have a computer mind.

Satish: Yes, Danielle.

Danielle: Oh, your vocabulary would be so much shorter... unbelievable you would not have any words to say — words that have emotions, you wouldn't be able to say anything to anybody and also if you had a computer for a brain what happens to the rest of the parts of your body? They wouldn't be able to work, you'll have to have jingle bells. (laughter).

Paul: Body would work — whoever it was could live without emotions.

Danielle: What happens to the rest of the parts of the body?

Paul: Nothing.

Andrew: Ya. You would rot — humans couldn't live forever their body will rot and the computer would be working and you would be dead. (laughter).

Beth: Yes, like Paul said you have to have knowledge to work a computer and if he doesn't care he has to go and find a new job or something.

Neal: He has to find a job.

Sara: He wouldn't care.

Chris: He must have emotions to build the computer.

Satish: Alright, Chris said something now. You must have emotions to build the computer, right?

Chris: He would have to have emotion like he would have to be happy to build the computer...probably he wouldn't want to hate the computer or something.

Paul: Machines can build parts. They have no emotions.

Danielle: That's because we are intermediaries.

Paul: Still machines have no emotions and they can do it.

Marcie: Machines have no emotions.

Tanya: They don't love.

Eric: If they have a computer for a brain, they wouldn't become any better. Humans surely

evolve — but the robots wouldn't — only way they could evolve is by collecting knowledge and processing it. To make something better than what they are they have to think and to think they wouldn't be computers anymore. They would be almost alive.

Satish: Right! So Eric is saying if you have heard him clearly, machines don't evolve by themselves, you got to have minds which are motivated to make changes and develop new ideas. Yes, Beth?

Beth: O.K. Like Paul said, if men can put computer in themselves, they if they reproduce how do they know that kids are going to end up the way they are?

Paul: Knowledge.

Beth: I know. How do they know that the kids are going to be born programmed like them?

Danielle: Knowledge is tied up with emotions, with the aid of knowledge you can do it but you need emotions to really want to do it.

Paul: But still you can do it if you really wanted to do it.

Eric: Force.

Paul: If you force them you can do it.

Beth: Ya.

Danielle: You are in control of knowledge.

Eric: The only thing that can force you other than somebody else is emotion.

Satish: Alright now, where are we? We are saying that without emotion we cannot make use of knowledge so emotion is important — and in emotion there is some knowledge. Is that correct? Did we agree upon that — what would you say, Paul?

Paul: Well, let's see here. O.K., two people liking each other and have nothing in common. There wouldn't be knowledge in that.

Danielle: There would be something in common. They are grown up people... they are both alive.

Paul: Not that kind of common.

Danielle: How do they know that they are not having anything in common?

Beth: You have knowledge that people are different. You have to have knowledge that they are different.

Sara: How do you know that they like each other?

Paul: Uh? I am mixed up. (mild laughter)

Satish: Alright, now we have some idea of how knowledge and how emotions are related — there are more things to it probably, and we will discover it as we go on talking about it. At least we have come to some understanding of what is knowledge and what is emotion and how they are related. In order to function, to drive a jeep you got to have knowledge. So let's talk about knowledge a little more carefully. Yes, Nan.

Nan: Ability to know something.

Danielle: You have to know it to have knowledge.

Eric: Knowledge is knowing.

Satish: Knowing is knowledge. You are in the process of reading a book, you are getting to know something — an idea or a story.

Andrew: Learning something.

Satish: Yes, Linda.

Linda: Knowledge is already having learnt something. Because if you have no knowledge, you couldn't do anything.

Satish: Knowledge is having learnt something, whatever it is — driving a car, etc., so knowledge means having learnt something...The process of learning something and what else is involved in knowledge? Would you say that memory is involved in knowledge?

Paul: Have to be, because if you din't have memories then if someone tells you that 1 plus 1 equals 2, then every time we see it, we wouldn't know it if you didn't have memories.

Satish: O.K. great. Yes, Danielle?

Danielle: I think all those things on the

board are tied in with knowledge.

Satish: Alright. They are all tied in with knowledge. Yes, because you have emotions, facts, ideas, memories, answers to problems, outlook on future, imagination, creativity, and so on and so forth. So many items there which are tied in with knowledge. Yes. Beth.

Andrew: How is sub-conscious tied in with knowledge?

Satish: That is a good question. Shall we talk about it? Yes, Danielle.

Danielle: Well, how do you know that if you have sub-conscious? You have to know that you have sub-conscious.

Satish: That's the first step. So Andrew, did you get that? Yes, Paul.

Paul: Maybe your sub-conscious keeps your heart beating and things like inside the body – internal organs in it — that's what your sub-conscious does — if your sub-conscious is without knowledge you would be dead — your heart won't be beating.

Satish: Yes, Chris.

Chris: I don't think without memories you can know nothing because you can remember nothing.

Satish: Yes, Danielle.

Danielle: Let's say like memory — memory is part of knowledge, but knowledge is not part of memory.

Satish: Memory is part of knowledge, but knowledge is not part of memory is that what you are saying? O.K. Yes, Andrew.

Andrew: Knowledge is part of memory.

Satish: Yes, Linda.

Linda: Knowledge is part of memory because you don't remember anything you wouldn't know anything.

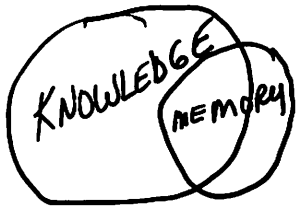
Beth: Memory is like knowledge, knowledge is like memory... it's both ways.

Satish: O.K. Tanya.

Tanya: She is trying to say like the two circles we have in the book... like memory goes into knowledge, but not all of knowledge goes into memory.

Satish: What is memory? And what is knowledge?

Beth: Memory is the smaller circle.



Satish: You are saying that knowledge is more than memory. OK.

Nan: You have to have more circles than one inside knowledge.

Sara: There have to be many.

Satish: Oh yes! Lot of circles for various parts of knowledge, memory is just one circle. OK, Beth.

Beth: How do you know that knowledge is bigger than other circles? For....logic.

Paul: Knowledge is part of logic.

Eric: Part of knowledge is logic.

Paul: Logic is knowledge.

Satish: Alright.

Neal: All of logic is part of knowledge.

Satish: Now we have talked about knowledge, we have talked about emotions and how knowledge consists of various parts — so there is no one thing which is knowledge. But there is one idea that Eric mentioned, is it creativity? Where did I write it?

Sara: You didn't write it.

Satish: I didn't write it. OK, creativity — how do we say it comes in the field of knowledge? Yes, Danielle.

Danielle: Creativity takes knowledge to be creative. To be creative you have to have knowledge to think what to do.

Satish: O.K. Linda.

Linda: The idea of creativity is to create knowledge.

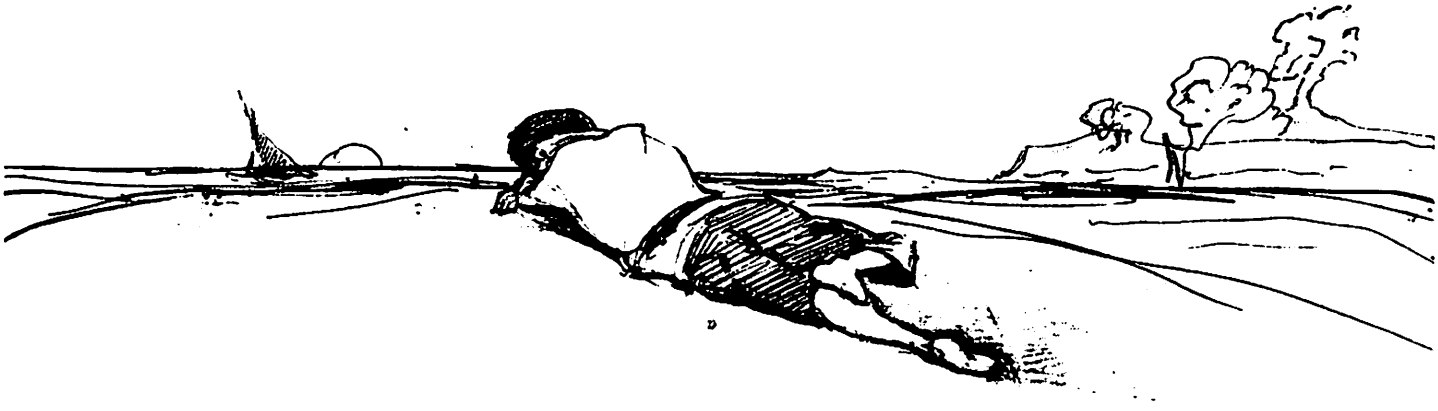
Satish: O.K., So you are creating something you already know. Yes, Eric?

Eric: Creativity is like the end project of all the processes of thinking, you know, like you run the .... data through all those things and what comes out could be a creative answer that only you have thought of your reaction to what has happened.

Satish: O.K.

Tanya: It takes an idea to create something and knowledge is part of idea.

Satish: Alright — when we meet again, we will start from where we left off today.



News Briefs....

The IAPC hosted its annual January workshop for professors of philosophy and philosophy Ph.D.'s from January 10th to January 22nd. Those in attandance included Prof. Tony Johnson, from the University of Texas *at San Antonio; Prof. John Thomas, Dept. of Philosophy,* Lewis and Clark College, *Portland, Oregon; and Prof. Dale Cannon, Dept. of Humanities,* Oregon College of Education *(for all three of whom, this was the second such workshop they had attended); Debra Pickering,* University of Denver; *Dr. Bernard Matt, now teaching Humanities in* Georgia; *Prof. Arsene Richard,* University of Moncton, *New Brunswick, Canada; Dr. Daniela Camhy,* Graz, Austria; *Dr. Catherine May, Dept. of Philosophy,* York University, *Ontario, Canada; Prof. Janet Susi, Department of Spanish,* Montclair State College; *Sr. Maria Hungerman,* Michigan; *M.A.T. students from the Institute, and Members of the Institute staff.*

//*

The National Humanities Faculty has awarded a $25,000 service grant to the Cider Mill School, Wilton, Connecticut, *beginning February, 1982. The cooperating institution is* Montclair State College, *and the grant period is 18 months. Wilton has been using Philosophy for Children for several years; this grant will enable it to obtain teacher education services both from the Institute and from the National Humanities Faculty. (In a recent survey of 97 students enrolled in philosophy at Cider Mill School, 82 said what they liked most about the* Harry *program was "Being able to ask questions or challenge ideas of other students," 81 liked "Being able to disagree with the teacher," and 78 liked "Being able to speak up easily and freely in a small group." All but one of the students said that, as a result of the program, they now felt "better able to tell whether or not someone is using good reasoning"!)*

//*

Prof. Miriam Minkowitz, who for three years was a member of the IAPC staff, and is now Assistant Prof. of Philosophy at Coppin State College, *Baltimore, Md., has been working with Prof. William Carroll, Philosophy Dept. Chairman at Coppin State, to develop an Early Childhood Center in Philosophy for Children. She reports today that a major step has been taken in that direction: the College has approved a Minor in Philosophy for Children, to be taken in conjunction with a Major in Education. The Minor would consist of 9 credits of Philosophy for Children and 9 credits of Philosophy. To our knowledge, Coppin State is the first college to have initiated such a program.*

//*

Kio and Gus, *a philosophical children's story, will be published by First Mountain Foundation this spring. Designed for grades K-2,* Kio and Gus *tells of a summer spent by Kio and Suki on their grandparents' farm, and of Kio's friendship with Gus, who lives with her family not far away. Gus helps Kio become aware of the world as the blind experience it, and of some of the differences that characterize the creative activities of the blind. In the process, a broad range of philosophical contrasts is explored: make-believe and reality, friendship and neighborliness, consistency and inconsistency, living and extinct, and courage and fear. There are even some traditional philosophical stumbling-blocks, such as the question of whether the existence of things is dependent upon our perception of them, the reality of perceptual qualities, and the relationships between making, saying and doing on the one hand, and the beautiful, the true, the right and the good on the other. It is anticipated that an instructional manual to accompany* Kio and Gus *will be available this fall.*

//*

Prof. William Fish, of the School of Education, Oakland University, *Oakland, Michigan, and David Harris of the* Oakland Public Schools *will be conducting a teacher education workshop in Philosophy for Children this summer (June 28th to July 2nd) at Oakland University.*

//*

Dr. Daniela Camhy, of Graz, Austria, *will be making a presentation on philosophy for children this July in a conference on education in Graz. Dr. Camhy is translating* Pixie *and* Harry Stottlemeier's Discovery *into German.*

//*

The Department of Philosophy of San Francisco State College *is sponsoring a conference on "critical thinking" this March 24th. Among the invited participants will be Prof. Al Spangler, of the Department of Philosophy,* University of California *at Long Beach, who has been involved in teacher education both in Hilo, Hawaii and in Long Beach. Dr. Spangler will speak on philosophy for children.*

//*

Word from two projects funded by NEH—one in Middle Village, Long Island, *the other in* Kalamazoo, Michigan *and surrounding suburbs—is that they are moving along well. They are both pretesting and posttesting. Prof.Michael Pritchard, Chairman of the Philosophy Department at* Western Michigan *is doing the teacher-training in the Michigan experiment, while Dr. Mark Weinstein, of* Hunter College, *is doing the teacher-training at Middle Village.*

//*

The IAPC will sponsor a summer workshop in Pixie *and* Harry Stottlemeier's Discovery *from July 5th to July 19th at the Pocono Environmental Education Center, Dingman's Ferry, Pa. Six graduate credits from the* University of Scranton *will be available to registrants. Interested individuals should contact Prof. Ann Margaret Sharp, IAPC.*

//*

Members of the first M.A.T. Program in the Teaching of Middle School Philosophy will graduate this summer. Applications are now being received for the 1982-83 program, which will begin with a summer session at Montclair State College *from July 5th to July 30th.*

INSTITUTE FOR THE ADVANCEMENT
OF PHILOSOPHY FOR CHILDREN
MONTCLAIR STATE COLLEGE
UPPER MONTCLAIR, N.J. 07043