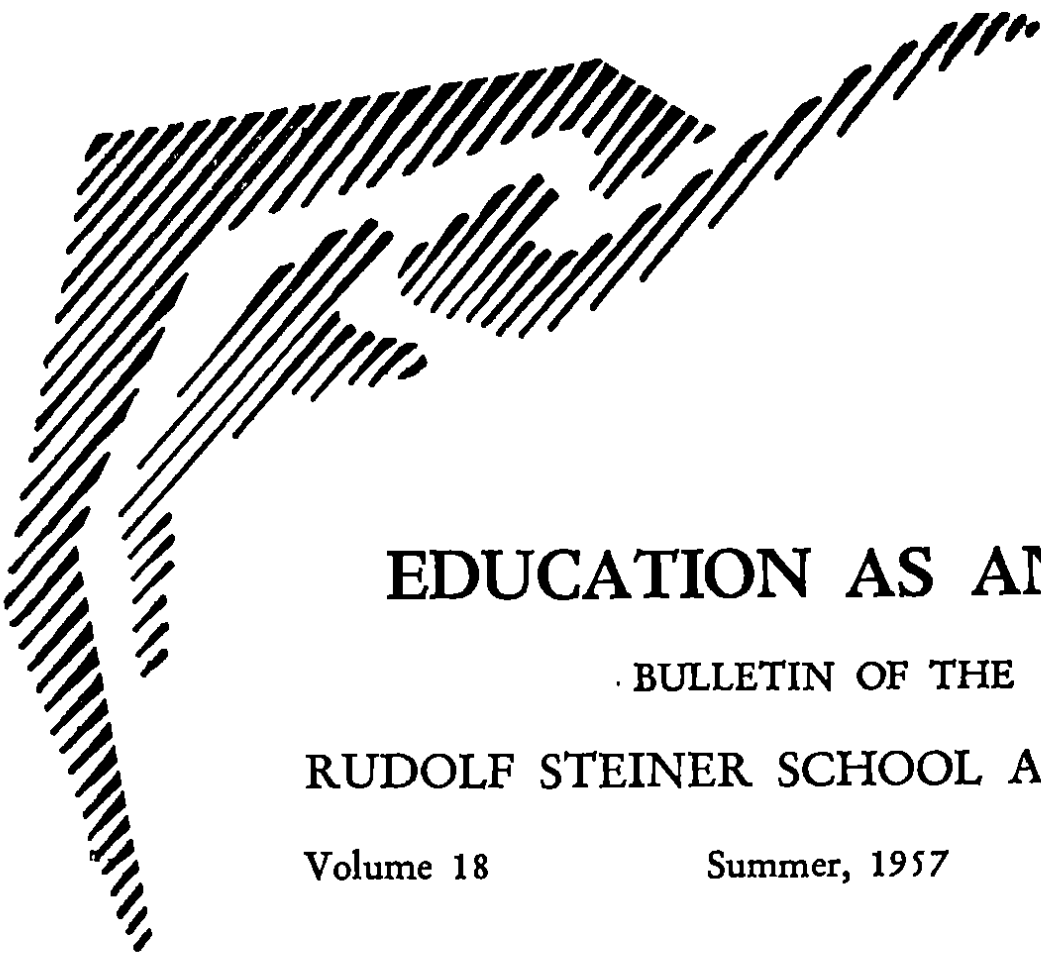




EDUCATION AS AN ART

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The following article is reprinted here by kind permission of *The Waldorf School News* of the Waldorf School, Garden City, New York. It also appeared as the lead article in the *National Education Association Journal* in February, 1957, and has been requested for use in teacher training courses by the Provost of Carnegie Institute of Technology. —*The Editor*

A child's world is fresh and new and beautiful, full of wonder and excitement. It is our misfortune that for most of us that clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost before we reach adulthood. If we had influence with the good fairy who is supposed to preside over the christening of all children I should ask that her gift to each child in the world be a sense of wonder so indestructible that it would last throughout life, as an unfailing antidote against the boredom and disenchantments of later years, the sterile preoccupation with things that are artificial, the alienation from the sources of our strength.

—Rachel Carson, "Help Your Child to Wonder,"
Woman's Home Companion, July, 1956

The study of language can be very revealing. This is the case when we come to compare the two words, *curiosity* and *wonder*. It is especially interesting for an educator to reflect upon the fact that while wonder is still a known word, and is occasionally still applied as Miss Carson has done to

the earliest years of childhood, it is generally speaking out of date in educational circles. Among the many banner concepts that fly at the masthead of education today one continually encounters that of 'intellectual curiosity', but almost never that of simple wonder. Why is this?

The distinction between curiosity and wonder leads us to the heart of Waldorf education: to its methods as well as to its goals. One way of expressing the objectives of Waldorf education is to say that it tries to prolong the epoch of wonder through all the school years and on into adulthood, that it attempts to make of wonder — and gratitude! — the matrix for the whole learning process.

* * *

Wonder is the word of an older time. It was in fashion with ancient peoples and endured down to the time of our own grandfathers; but many an educator today would feel as uncomfortable using it as some modern psychologists would feel to be heard speaking plainly of 'soul' and 'spirit'. *Curiosity* is the word that has, at least until very recently, better represented the temper of modern times.

We have grown accustomed to hear that a teacher's goal is to awaken children's curiosity; but wonder in a pragmatic age seems an almost useless attitude. It rings strangely in our ears. We are indeed not sure just what it may mean. Is wonder a kind of gaping astonishment, is it some form of friendly but empty-headed piety? If so, our self-esteem must take a dim view of it; for we prefer to feel secure in the tidiness of selfhood, and wonder threatens to bring us, intellectually and emotionally, beyond ourselves . . . Wonder can appear to be a mood without a point, a stimulus without any action goal; and if it strikes us so, it offends our sense for practicality. While we want only to get on with the business of life, wonder seems to bring useful enterprise to a standstill. Wonder is plainly on the side of contemplation and contemplation is an ideal that Western culture generally has long since abandoned in favor of so-called positive action.

Curiosity, on the other hand, has a more congenial sound to modern ears because it indicates a limited, surveyable form of mental behavior. It sets the self in motion solving problems, pursuing its own intellectual purposes. Curiosity may be 'keen' or it may be 'idle,' but in either case we can visualize a quite definite personality asking quite specific questions of life. Curiosity starts from one item and goes on to another. Like a burning fuse it follows a determinate line that strives to penetrate the given subject and to set off some form of overt action.

Yet from a realistic point of view, curiosity should sometimes be unmasked as a wolf that parades in sheep's clothing. Curiosity in this sense is a greedy hunger which consumes knowledge but is not adequately nourished by what it consumes. It has the peculiarity of being able to permit malnutrition on a full stomach. We should not overlook the fact that such curiosity can become as neurotic and obsessive as the need to step on every crack in the sidewalk or to bite every fingernail. And while we may count as a virtue its attraction to the greener pastures that lies just beyond, we must reckon as a vice the sad fact that it actually cares little for the grass already under foot. Who has not observed that for the *merely* curious person, to 'know' is to pass at once beyond the point of interest!

* * *

Wonder is that state of being in which the soul opens fully to truth. Ordinary interest alerts and begins to waken the mind, but for a full awakening love must be added to interest. A deepened interest, purified of egoism, becomes love; and the mind that is motivated by love achieves wonder. Such a mind thinks with the heart as much as with the brain.

While interest may be based on mere curiosity, wonder requires of us respect, even reverence. That which we regard as morally indifferent may arouse our curiosity; but we permit ourselves *wonder* only in case of things that have moral significance. Wonder, in other words, is an exercise of moral intuition as well as of aesthetic feeling and intellectual curiosity. As imitation is the sincerest flattery, wonder is the sincerest form of cognitive attention.

Wonder is based upon the feeling that at deepest levels the world and man's true self are one. This means that the aspirations and ideals, the beauty and goodness which are natural to the human heart lie somehow also at the center of the natural universe; that therefore standards of beauty and goodness are not superimposed upon the realities of an indifferent world, but are pertinent to the study of universal events: quite as pertinent as the quantitative standards of physical science.

Take away from wonder its quest after the beautiful and the good, and what remains will be a sharply limited search for the 'true.' This more or less describes the path followed by the impulse known as intellectual curiosity. Take away from wonder its sense of inmost kinship with the universe: what remains will be a curious onlooking, the analysis of externalities. Such an approach may lead for a time to certain scientific successes, but eventually it will bring about *rigor mortis* within the whole scientific enterprise.

* * *

It could be said that modern education is based on the doctrine of 'interest.' The interest of children usually is spoken of in terms of 'needs' and of 'problem-solving.' Needs lead to problems which in turn must be solved. Thus the child is said to move from interest into action, and to 'learn by doing'.

But modern education has tended too strongly to identify interest with self-interest, and needs with personal desires or impulses. Until a few educators began recently to speak of the need for *self-transcendence* as one of the fundamental longings of the human condition, the impersonal and objective in man — his universal self, the higher being that he is — had been left out of account. Needs and interest were thought of as biological in origin and (even though their fulfillment was often sought in social relationships) they remained basically self-serving. The discipline and subject matter of the school were therefore regarded as contributory to the purposes of the personal ego. Hence the modern habit of characterizing language study and mathematics as 'tool' subjects; the physical sciences as 'instrumental' in function; the social sciences as providing 'techniques' and 'skills' for living with people.

Education that starts from wonder and leads to wonder appeals at all times *through* the personal self to the impersonal. It does not ignore the lesser selfhood but leads it beyond itself. Thus the personality does not regard the great world as primarily raw material to be harnessed for personal uses, but rather as a macro-cosmic being, full of wisdom, beauty and virtue, from whom one issues wondrously, in whom one lives gratefully, and with whom one aspires to cooperate ever more consciously.

— John Gardner

The following quotation came out in the next number of the Waldorf School News, its appearance suggested by Mr. Gardner's essay.

The sheer delight of a child's apperception is based on wonder; and deny it as we may, knowledge and wonder counteract one another. So that as knowledge increases wonder decreases. We say again: Familiarity breeds contempt. So that as we grow older, and become more familiar with phenomena, we become more contemptuous of them. But that is only partly true. It has taken some races of men thousands of years to become contemptuous of the moon, and to the Hindu the cow is still wondrous. It is not familiarity that breeds contempt it is the assumption of knowledge. Anybody who looks at the moon and says, 'I know all about that poor orb,' is, of course, bored by the moon.

Now the great and fatal fruit of our civilisation, which is a civilisation based on knowledge, and hostile to experience, is boredom. All our wonderful education and learning is producing a grand sum-total of boredom. Modern people are inwardly thoroughly bored. Do as they may, they are bored.

They are bored because they experience nothing. And they experience nothing because the wonder has gone out of them. And when the wonder has gone out of a man he is dead. He is henceforth only an insect.

When all comes to all, the most precious element in life is wonder. Love is a great emotion, and power is power. But both love and power are based on wonder. Love without wonder is a sensational affair, and power without wonder is mere force and compulsion. The one universal element in consciousness which is fundamental to life is the element of wonder. You cannot help feeling it in a bean as it starts to grow and pulls itself out of its jacket. You cannot help feeling it in the glisten of the nucleus of the amoeba. You recognize it, willy-nilly, in an ant busily tugging at a straw; in a rook, as it walks the frosty grass.

They all have their own obstinate will. But also they all live with a sense of wonder. Plant consciousness, insect consciousness, fish consciousness, animal consciousness, all are related by one permanent element, which we may call the religious element inherent in all life, even in a flea: the sense of wonder. That is our sixth sense. And it is the natural religious sense.

Somebody says that mystery is nothing, because mystery is something you don't know, and what you don't know is nothing to you. But there is more than one way of knowing.

Even the real scientist works in the sense of wonder. The pity is, when he comes out of his laboratory he puts aside his wonder along with his apparatus, and tries to make it all perfectly didactic. Science in its true condition of wonder is as religious as any religion. But didactic science is as dead and boring as dogmatic religion. Both are wonderless and productive of boredom, endless boredom.

D. H. Lawrence

Hymns in a Man's Life, *Selected Literary Criticism*,
Viking Press, New York, 1956

WHAT CHILDREN READ

The Proof of the Pudding by Phyllis Fenner, The John Day Company.

In Miss Fenner's own opening words: "This is a book for fathers and mothers and grandparents who want to, and should, buy and borrow books for their children. Also it is for the proverbial maiden aunt who usually buys the wrong book for the right child." It will help you to guide your own children in their reading. It tells you what appeals to different kinds of children and about a wide assortment of children's books.

If you love the cunning, chaotic and whole-hearted ways of children, you will enjoy her enjoyment of them. She tells countless tales of the little and big ones whom she has known in her thirty-two years as librarian, and gives you picture after picture, realistic and humorous, of adventures with books which she has shared with them.

She describes fairy stories, funny stories, adventure, horse, dog and cat stories, fact, biography, books for beginners and for non-readers, poetry and classics, and, best of all, stories to tell or read aloud. It is a veritable gold mine because she tells a little about each one, enough for you to guess whether it is what you are looking for, or give you an idea as to a book your child knows all about and you don't know.

It is of special interest to the Bulletin that in this lively and helpful volume there is reprinted *The Winged Horse*, An Essay on the Art of Reading, by Henry Barnes, which first appeared in our own pages in 1950. It is one of two essays on children's reading included at the end of the book. The other is *Imagination and Children's Literature* by Padraic Colum. "They have helped me in my work with children. You will find them beautiful and inspiring," Miss Fenner says in her introduction.

Padraic Colum and Henry Barnes both speak of how it is the power of imagination which leads children on to read, how one need not fear too much that long and difficult words will trouble them so long as they are carried on this "buoyant" element. "In learning to read," says Mr. Barnes, "the key to success is the love and enjoyment of the great stories and poems which are the element in which the reader swims. Before a printed reader is ever opened, we must have done everything in our power to strengthen the inner muscles of the imagination and to awaken a love and enthusiasm for the living literature which the child is to read . . . For reading is an art — the art of entering with one's whole soul into an experience outside oneself."

"Imagination," Mr. Colum says, "is the faculty of revealing things freshly and surprisingly . . . not merely a faculty for stringing improbabilities together and making up a world that is wholly unreal. "At present our

systems of education are directed toward training the will or training the intelligence, but perhaps the time is at hand when we will have an education that will be directed towards training the intelligence and the will through the imagination."

As it is the goal of every Rudolf Steiner school teacher to fire the head, heart and will of each child through the imagination, and to present all that he teaches in as artistic a form as he is able, it is an especial joy to quote this here. "For, he goes on, "imagination is one of our great faculties: it is the one quality common to all great men — to soldiers and statesmen, to saints and artists, to scientists, philosophers and great businessmen."

We recommend heartily Miss Fenner's *Pudding*, confident that readers will find it well stocked with all manner and variety of plums.

GERBERT GROHMANN

Dr. Gerbert Grohmann, the author of *The Living World of Plants*, from which the *Bulletin* is running a series of excerpts, passed away on July 23rd of this year, in Stuttgart, Germany, at the age of sixty. The editor has asked me, as one of his old friends, to write something about him. Since I have no data at hand, I must write from memory.

We met in 1923 at the University of Tübingen as members of a group of students who were preparing themselves privately to become teachers in a Rudolf Steiner school. Gerbert had just received his Ph.D. from the University of Leipzig as a pupil of the famous botanist and philosopher, Driesch. He had renounced the prospect of a career as a university professor and already decided to dedicate his life to the development of a spiritually founded botany and the ideals of Rudolf Steiner's art of education.

He was the son of a Protestant minister in one of the big cities in Saxony. When our study group had fulfilled its purpose, he became one of the leading members of the staff of the Rudolf Steiner School in Dresden. After the second world war he joined the faculty of the newly reopened Waldorf School, in Stuttgart, where he taught botany, zoology and chemistry.

His first literary attempts were printed in magazines. Then he published his main work *Botany*, an outline of the science of plants from an anthroposophical viewpoint. The book was very well received and found a relatively wide circulation. He strove continuously to revise and perfect it. It was reprinted several times and established his reputation as scientist and writer.

In the course of the following years he wrote several other books, among them *Pflanzen Lesebuch für Kinder*, (*The Living World of Plants*) and *Zoologie Lesebuch für Kinder* — (*A Zoology Reader for Children*). There appeared during the last years of his life, the charming book of rhymed riddles — most of them about plants. For several year he was very ill and no longer able to teach. This became his most active and creative period of writing.

Gerbert was a personality with vivid, world-wide interests. He was a lover of music and often took part in chamber music with his cello. His lectures and conversation were always spiced with his typically Saxon humor: witty remarks, "smiling" observations, fine, illuminating jokes.

His passing is a grief to his friends and pupils and a loss to science and our pedagogical work.

—Karl Ege

THE LIVING WORLD OF PLANTS (*Continued*)
by Gerbert Grobmann, translated by Virginia Field Birdsall

THE BIRCH *

The birch (This description refers to the White Birch) is also a catkin-bearer, but is altogether different from the willow. The willow loves the water; the birch, the light and air. It gets along in the poorest soil and even penetrates far into the cold northlands.

The birch gives an impression of youthful freshness. Especially in spring-time, when it has just put forth its leaves, its light green shines brightly in the dark green evergreen forest. You can very easily recognize the birch by its dazzling white bark on which are coal-black scars. But its whole form likewise distinguishes it plainly from other trees. Its thin twigs are pliant and elastic. No other tree is so slender, nor sways so happily in the wind.

The leaves of the birch are triangular and pointed in shape. You can see clearly that they are formed by the light, and it is this which makes them so graceful. In the fall the birches turn to a bright yellow, and a yellow dye can even be obtained from the leaves.

In comparing the birch and the oak, one discovers a significant fact. The birch is really at its best when it is young; the oak, on the other hand, reaches its full strength at a great age. The powerful trunk, with its wood hard as iron, the knotted branches, and the full crown are developed only in quite ancient oaks. Young trees, on the contrary, show much less clearly the true characteristics of the oak.

The birch presents exactly the opposite picture. When it is old, it loses its fullness and its graceful growth; the wood, naturally soft, becomes brittle or rotten.

A birch is most beautiful in the morning; an oak, in the evening, when the sun goes down.

The birch is not dioecious like the willow. Pollen and pistil-catkins are formed on the same twigs. The pollen-catkins hang loosely down, as in hazelnuts and poplars. They can be seen, even in the winter, contracted in pairs on the branches. The fruit-catkins of the birch stand erect at first, and, besides, are much smaller. Only when the seeds ripen do they tilt downwards. The birch is visited by *no insects*. In the place of insects it has the wind as companion. Therefore the birch-catkins lack both perfume and nectar. As the pollen is wafted by the wind, so are the seeds, which look like little beetles, borne forth when the ripe catkins flutter apart. Each seed has two paper-thin wings.

In the birch everything is light, airy, and full of movement.

Since the birch is so healthy, it has almost no insect enemies. But why — one may ask — does it form no real flowers? Why has it only colorless and scentless catkins? Is it too weak to produce fragrance and nectar? No, it is not too weak; it only acts differently from other plants. If, for example, one tastes young birch leaves, one finds that they are aromatic. They have a covering like balsam. Who has not noticed the resinous fragrance radiating from the birch? Even the bare twigs are fragrant.

The birch, one might say, behaves in a very special way. Its leaves, buds, and twigs exude a substance similar to that which other plants produce

* *The Willow* has been omitted.

in their flowers. In the white bark also — peeling off in shreds — there is contained a kind of *blossom* substance.

This tree produces no nourishing fruit, but in the layers of its bark, rich in sap, it stores up sugar and oil. For this reason some native tribes eat the birch bark or make it into bread when food is scarce.

In the month of May the birch sends its powerful, sweet, and delicious stream of sap from the roots into the crown. If at that season one bores a hole in the bark, placing therein a little tube, the sap will drip out. Some tribesmen make wine from this birch sap, or use it in its unfermented state as medicine, for it restores youthful strength to the sick. From the leaves, too, health-giving drinks are made.

We use the wood of the birch as timber, or make brooms out of the twigs. For the people of northern Europe and Asia, the birch tree is even more necessary for life. In these countries it is of such great benefit to mankind that without it life would be impossible. For the people of the North, the birch is quite as important as is the olive tree for those living in the Mediterranean regions.

The bark, too, has many-sided uses. It is skilfully peeled off and used as leather. Pouches, straps, drinking cups — yes, even shoes — are made of it. Larger pieces furnish roofing for houses, for birch bark is impervious to water and almost indestructible, containing as it does a great deal of tannin. Naturally, therefore, it serves for the tanning of animal skin. When a beam which must last a long time — a house-beam, for instance — is to be placed in the moist ground, it is first wrapped in a layer of birch bark, so that it will not rot. In Finland the little children are laid in cradles made of birch switches. These baskets are hung from the roof by long cords and made fast to the birch trunk, so that the grandmother can easily rock the babies back and forth.

In view of all these facts, it must be admitted that the birch is an important gift to mankind. If at the same time you realize how unassuming and modest it is — that it endures frost and drought as can no other tree without suffering harm, you must indeed feel an affection for it. For it makes no show of its good qualities, nor does it boast of them. Yet it has much inner strength and beauty, for it is penetrated through and through with light. Anyone making use of it soon learns to treasure it justly.

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