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Report from the Co-Directors

David Mitchell and Douglas Gerwin

We appreciate the comments we have received regarding the new look of the *Research Bulletin* as well as positive responses to the initial reports by our newly-appointed Research Fellows, who will continue with each issue of the *Bulletin* to track interesting and relevant educational research worldwide. The present issue includes their latest work and introduces an article by our newest Fellow, Philip Incao, M.D.

In imagining key research topics for future issues of the *Bulletin*, we have drafted a list of twelve areas of interest. They are listed below, not in any particular order. We welcome readers' suggestions and comments.

Twelve Research Questions/Projects

- Research the effects of physical movement on speech (e.g., fluency, syntax, grammar).
- Compare Phase II of our Waldorf Graduates Survey with results of a similar survey of Waldorf students in Germany and Switzerland.
- Analyze Phase II of this survey, especially with regard to the health of Waldorf school graduates. Explore how the physical and mental health of Waldorf school alumni compares with the wellbeing of comparable age groups.
- Research the health and resilience of present Waldorf school students, drawing upon the expertise of Waldorf school early childhood teachers and anthroposophical physicians.
- Support and disseminate recent research on the teaching of grammar in Waldorf elementary and high schools.
- Explore whether or not developmental stages in childhood have accelerated during the past two decades.
- Document whether or not Waldorf education prevents or retards premature sexual development.
- Research the effects of standardized testing on students.

- Investigate different forms of testing, such as multiple choice, matching, fill-in, and essay, and compare them to assessment by means of imaginative recall. Discover which methods best help students retain information.
- Research the effects of academic pressure on preschool children and gauge the effectiveness of play as an antidote.
- Undertake a study of class teacher resilience and longevity, including evaluations that schools use to determine whether or not teachers should carry their classes to the eighth grade or be replaced by specialists during the middle grades.
- Research the nature of the creative moment. Explore which bodies or aspects of the children participate in this moment and how this moment may be transferred to other aspects of the children's life. How do children characterize a creative experience?

We have recently become aware of an interesting European study on school readiness. Our colleagues in the International Kindergarten Association formed a working group, consisting of Margarete Kaiser, Claudia McKeen, Martyn Rawson, and Konrad Schmidt, to study thoroughly the transition from kindergarten to first grade. They devised and implemented research instruments to document child observations, stages of child development, and the learning capacities of children in Waldorf early childhood programs and in the first years of Waldorf schools. The project involved the collaboration of kindergarten teachers, class teachers, and school doctors.

This topic is of immediate interest to us in North America. The Research Institute is partnering with the Waldorf Early Childhood Association of North America (WECAN) and the Association of Waldorf Schools of North America (AWSNA) to translate and distribute this important work to Waldorf schools in North America. The issue of school readiness demarcates a new battle line in the assault of (mis)education on healthy child-

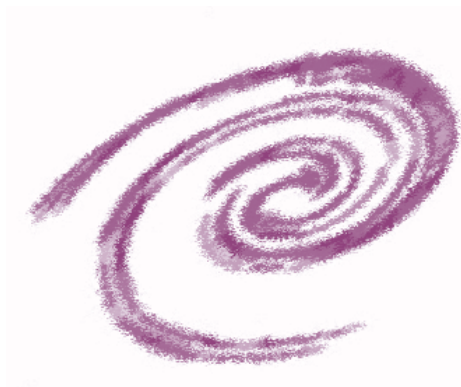
hood. In order to preserve and protect childhood, there must be a greater understanding of the unique nature of learning and development in the early years. In addition, Waldorf educators are increasingly being asked to justify—to parents and to authorities—why Waldorf schools do not introduce abstract academics into kindergarten and the early grades. We need to be able to support our practices with research and documentation.

The European study, once translated, will offer crucial evidence in the debate with government officials and the general public concerning “quality assurance” and policy issues such as the lowering of school entrance age and the early introduction of academic subjects.

It is our hope that every Waldorf teacher in North America will see the value of subscribing to the *Research Bulletin* and that some of them will join our research efforts by participating in the activities of the Research Institute. A new brochure that explains the Research Institute’s mission and activities and that provides a subscription form for the *Research Bulletin* is available by writing to us at

researchinstitute@earthlink.net

or by contacting us at (603) 654-2566.



Stephen Keith Sagarin

We are pleased to bring you this second issue of the *Research Bulletin* in its new format. Reading through the material in this issue we hope you will find research that supports your work and what you already know, and also material that provokes new thinking or that sparks further investigation. In our last issue, for example, a brief piece on spiritual research (“The Four Phases of Research,” *Research Bulletin*, Vol. XI, No. 1, p. 36) defined it in terms that set the concepts of spiritual or “alchemical” research against a concept of conventional research. Here, Aksel Hugo describes spiritual research as a series of extensions of conventional research. From different points of view, we find that both positions are valid and helpful. Martyn Rawson, in this issue, examines carefully several of the questions surrounding what is often called “first grade readiness.” Not all readers will necessarily agree with the course of his argument, but the conversation he opens is necessary and valuable. Fostering a more sophisticated approach to the question of school readiness will help all schools.

We hope, too, that you will notice the threads that connect the work of one researcher to the work of another, or the echoes of one voice in the work of another. Van James and Magda Lissau, independently, refer human experience to “the Seven Arts.” Read together, their very different articles reinforce one another in surprising ways. Similarly, Arthur Auer’s article on teaching reading is bolstered by recent research on creativity, which, in turn, supports James and Lissau. David Mitchell’s review of work on “nature deficit disorder” is closely aligned both with Philip Incao’s review of medical research and with Jon McAlice’s review of Kay Hymowitz’s work on “anticulturalism.” In reading these articles, an image of health arises in which body and mind are one, and in which human experience of the world is fundamentally associated with health or disease.

In order to educate, all teachers must have a view or an image, implicit or explicit, of what it is to be human. We could well say that this image

underlies any attempt or approach to teaching and to thinking about teaching. Previous such images in the history of education have included a notion of children born into original sin—sin that had then to be beaten out of them. Or children, as in Rousseau, born innately good and then tended, as a garden, in order to ward off the corrupting influence of society. Or children growing into community, as in Dewey, requiring socialization. In one way or another, each of the articles in this issue—and the work of the Research Institute in general—addresses or illuminates a portion of the image synthesized for us first or most clearly by Rudolf Steiner. This is true of previous issues, and it will be true of issues in the future.

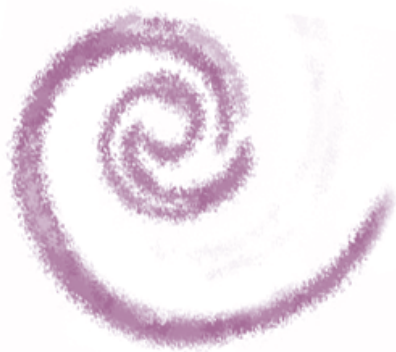
Reading through the contents that follow, however, brings this point powerfully enough to mind to mention it now. In particular, the image of a human being that appears strongly in different ways in many of the articles and reviews of the present issue is of a creative being. The arts, and creativity in general, are not peripheral enhancements to an education. They are the root of human experience of the world and deserve to be placed at the center of educational theory and practice. Further, as children grow and develop, they move from a physical engagement with the world—architectural and sculptural, according to Lissau—to a more internalized, mature engagement. True education addresses, as Waldorf schools attempt to do, the myriad and subtle transformations and experiences—and the ways in which adults can guide young people through these—that constitute a good education for a human being.

The Research Institute is seeking financial support to expand its work. If you wish to make a contribution or are aware of an individual or a Foundation that may be interested in supporting the research of Waldorf education, please contact David Mitchell or Douglas Gerwin at:

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Reading in Waldorf Schools Begins in Kindergarten and Avoids Clouding the Mind's Eye

Arthur Auer

Universal Literacy: A Recent Experiment in Evolution

Learning to read abstract alphabet symbols and words is a recent activity for most groups of people on the planet—a new experiment in evolution. For more than 100,000 years, through physical, hands-on interaction with the world and through oral communication, young *homo sapiens* have successfully sculpted the neural circuitry of a healthy intelligence without this skill. For most of the 5,000 years since the invention of writing, most human beings have not had the opportunity or the social need to learn to read. Only in the last hundred years or so has a significant percentage of the earth's population learned to read and write.

Because of the recent advent of literacy as a human convention, there has scarcely been the time biologically for primary neural mechanisms to evolve specifically for reading and writing. The brain has had to rig various secondary set-ups to accommodate this new unnatural function. According to neuroscience, the brain is resourceful and can “co-opt one structure that might have evolved for an entirely different purpose and apply it to another function altogether.”¹ As one neuroscientist points out, however, there is in this co-opting and improvising process an overlooked cost to acquiring literacy (see below).

It is no wonder, then, that children learn to read in a variety of ways—some by sight, others by sound, or others by a combination of different modes that depends on how the brain accommodates this new skill. It is also not surprising

that learning to read has been characterized as one of the most complex neurological acts a human being may undergo. And yet millions of children today pick up this symbolic deciphering with apparent ease. Many appear to teach themselves. In contrast to these successes, however, the mystery remains of that significant minority which does not so easily take to this modern innovation—the so-called dyslexics, the “dys-readers.” How do we account for their experience? What may their plight teach us?

Reading Embraces a Host of Activities

Reading in Waldorf schools begins in kindergarten and nursery. Early childhood teachers create a loving environment in which young children strengthen their ability to “read” the world. In so doing, they simultaneously “write” into their neural networks the full set of sensory, motor, verbal, and mental skills that belong to the repertoire of reading. As kindergartners listen attentively to a

fairy tale, they learn to aurally differentiate and decipher the meaning of sounds, words, sentences, and whole stories; simultaneously they begin to exercise the sequential inner imaging necessary for remembering and for good comprehension skills; and, above all, they are learning to devote increased attention to words.

Through rhythmic artistic activities such as singing and recitation, kindergartners act out, articulate, practice, and “write” into themselves the language sounding around them. Through painting, they “read” colors and

shapes on the two-dimensional surface reality of a page. This ripens their vision for surface, the necessary precursor for a more awakened, focused

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vision that they develop only later around age eight for reading small print. Further, in this process kindergartners use large “pencils with bristles” called paintbrushes, to put down strokes of color and strengthen the eye-hand coordination so vital to writing. In drawing with stick crayons, they start to more graphically and abstractly delineate their figures as a meaningful picture writing that tells a story through colorful images and movements.

Both painting and drawing involve hand activity that provides children with a major mode for “writing” experiences into their brains and bodies. Children “read” and interpret the things of the world constantly by grasping them first manually and then verbally and mentally. All of the fine hand motor and gross motor body movements and activities of a Waldorf school kindergarten contribute to this internal inscribing process, sculpturally shaping images in beeswax or dough into loaf forms or making those delicious mud pies; all the handcrafts and rhythmic activities such as sweeping and hammering at a little work bench; and singing and reciting rhymes with rhythmic hand clapping, gestures, and sequential stepping. According to Steiner’s research, we learn to grasp the contours of language and sentences with our legs and to modulate inflection and the plastic formation of words with our arms and fingers. Our whole body becomes the organ for the sense of word. That is why the art of eurythmy, which starts in early childhood and continues through grade school and high school, may be seen as the quintessential, unifying activity of Waldorf education:

When we let children do eurythmy, what are we actually doing then? Instead of giving them sticks of crayon with which to write an “A” or an “F”—an activity with which they have a purely cognitive connection—we let the children write into the world, through their own human form, what constitutes the content of language. The human being is not directed to abstract symbols but allowed to write into the world what can be inscribed through his or her organism.²

A Joyful Waldorf School Moment: Embracing Books, Writing, and Reading in First Grade

Eurythmy and all of the preliminary writing and reading activities of the kindergarten naturally flow into a Waldorf school first grade and are repeated at a more advanced, formal level, with new mental energies now available at school age. According to Steiner’s research, a child’s life forces have sculpted a major part of the physical body by age six or seven, resulting in a certain surplus. It was his remarkable discovery that this surplus of life energy then becomes ready and available for the mental life of the soul and the growth of imagination. (Plants turn light into life and we as

human beings turn life back into light, the inner light of knowledge.) At school age, children become able to retain the inner mental images that they “sculpt” in the mind’s eye, even when they are separated and abstracted from the immediate presence of sense percepts. This matured capacity for retained mental picturing and imagination is one of the significant factors that indicate school readiness. Children in the early grades gain the mental

power and eidetic ability to re-envision and recall pictures based on a matured memory capacity. They vividly reassemble and remember their experiences, synthesized from different parts of their brain, organism, and soul. All of this is possible because of new life forces that have been released for the next stage of life—a body of formative energy forces that Steiner characterizes as a “life body”:

With the change of teeth ... the time begins when the life body can be worked on through external education. We must be very clear about what works on the life body from the outside. The formation and growth of the life body means the shaping and developing of inclinations and habits, of the conscience, character, memory, and temperament. The life body is worked on through pictures and examples—that is, through a child’s carefully guided imagination.³

Furthermore, as they start school with a new kind of energy, many children manifest an increasing social interest in various aspects of life including society's practical symbols and signs—those little skeleton-like marks that grown-ups use for writing and reading. This interest constitutes an important moment in a child's life. Steiner therefore recommends that the first grade teacher build an intense anticipation and eagerness for formal reading in the first lesson:

Look how grown-ups have books and can read. You cannot read yet, but you will learn to read. When you have learned how to read you will also be able to take books and learn from them as grown-ups learn from them. Adults can write letters to each other; in fact, they can write down anything they like. Soon you will also be able to write letters, because you will also learn to write.⁴

In this first day proclamation, a teacher also creates a mood of reverence for what adults as role models have learned and for the wonder of human hands. Children, you are going to do something today! First graders right from the start plunge into hand activity and letter formation—with the help of action geometry—leading into writing and reading the books they themselves, with gusto, compose and illustrate. Soon parents start to report that children, with joy, are reading road signs on the way to and from school.

Timing and Pace are of the Developmental Essence

If many young children become so eager to read at around age seven, why not quickly focus on real factory-made books and imprint their fine machine print into children's memories and nervous systems? After all, it can be done rapidly and is being done earlier and earlier almost every-

How the language arts are approached in the first three grades has a major influence not only on the fine neuroplastic articulation of these speech areas but also on other centers of the brain, centers that are interconnected and share a common and limited pool of precious life energy for development.

where. Why do Waldorf school teachers take the first term of roughly four months in the first grade to artistically and rhythmically introduce the alphabet in such an animated, magical way? Why do the children read a carefully crafted selection of verses and sentences that they themselves have rhythmically learned by heart and then written down in their own hand?

Developmentally, we know that the nervous systems and sensory-motor capacities of children gradually ripen step by step. Of primary importance to all reading, writing, and overall language development, for example, is the gradual formation of language areas of the brain. Over the course of first, second, and third grades, these are still shaping themselves significantly. These areas are found on the left side of the brain in 95% of all individuals, left- or right-handed. They need time through the “nine- or ten-year-old change” and beyond to become established. (The so-called “nine-year-old change” is a shift in consciousness that takes place on average between the ninth and tenth birthdays. Children feel their souls as separate from the surrounding world.) How the language arts are approached in the first three grades has a major influence not only on the fine neuroplastic articulation of these speech areas but also on other centers of the brain, centers that are interconnected and share a common and limited pool of precious life energy for development. Recent studies of the brain have shown that language development is far more complex than previously thought and that all kinds of unsuspected functions become involved during language formation.

Recall that reading is “unnatural” and “co-opts” other functions. Overusing energies in one area can lead to shortchanging the proper shaping of others, especially in the highly formative stages of ages six to twelve. (This reallocation phenomenon often demonstrates itself to an extreme in mental handicaps where intense overdevelopment of one capacity is associated

with underdevelopment in another. For example, idiot-savants can have incredible calculating powers but can have difficulty in dressing themselves.)

Each child has its own complex neurophysiological clock and configuration. In my experience, neurological maturity for learning to read varies considerably in children and ranges widely from about six to eleven years of age, with a midpoint around ages eight to nine, a time when most children in Waldorf schools are in what I would call a “take-off stage” of reading. What also has to be taken into account and is often overlooked is that a child's eyes are only physically ready for focusing on print around age eight. Reading before then can overstrain young eyes. According to neurophysiologist Carla Hannaford:

The muscles of the eye ... play an important part in classroom learning. Before entering school, three-dimensional and peripheral vision allow the greatest environmental learning. They integrate the visual with the kinesthetic to understand shapes, movement of natural forms and spatial awareness. When children enter school, they are often expected to quickly develop their foveal focus for up close, two-dimensional paper work. At school foveal focus is necessary to see small, static, two-dimensional letters on a page. The transition from three-dimensional and peripheral to foveal focus is very abrupt and in many cases unnatural. . . .⁵

By age seven or eight, as the frontal lobes of the cerebrum mature, fine motor coordination of muscles throughout the body naturally develops. Before then, we have good peripheral and depth vision, but it is only when the frontal eye field of the frontal lobes matures that accurate enough eye teaming is possible for two-dimensional focus. Eye teaming occurs when the dominant eye tracks across a page of writing and the non-dominant eye follows the movements exactly and blends the information, binocular vision. . . . These fine motor movements ensure ease of information gathering and point to another physiological reason for not starting the reading process until age seven or, preferably, age eight.⁶

Given these critical factors of eye readiness and the complex diversity of neural maturity, it makes sense to proceed gradually in the early grades.

The Danish school system, respecting natural brain developmental patterns, does not start children in school until six or seven years of age. They teach writing and reading from a holistic, gestalt processing format and then move to the details later, around age eight, when the logic hemisphere is ready to handle it. Reading is not taught until age eight — and Denmark boasts 100% literacy.⁷

Given these critical factors of eye readiness and the complex diversity of neural maturity, it makes sense to proceed gradually in the early grades. Waldorf school teachers use rhythms and repetitions of verses, songs, and other artistic activities to help the language experience integrate itself organically into the child's whole being—into chest and limbs, with the head slowly awakening. The chest's rhythmic system of heart and lungs never seems to tire physically. Because of this, rhythm-based exercises buoy a child's interest and energy rather than wear them out. Such a method allows high quality artistic impressions to gently sink into the neural substrate and allow it to ripen organically:

[W]hen the right time comes, reading will not be anchored too loosely, which can happen, nor too tightly, as if each letter were making a kind of a scratch upon the tender soul-substance of the child.⁸

Overtaxing children's still maturing brains does not necessarily produce healthy neural formations for reading or for other, similar functions. Steiner strenuously objected to what he saw as a “pushing’ of a foreign body [reading] into the child's organism,” causing what he termed “malformations” and “damage by . . . introducing reading and writing . . . in the wrong way. . . . [For him,] what is learned more slowly at any given age is more surely and healthily absorbed by the organism, than what is crammed into it. . . .”⁹ Yet, societies today all over the world increasingly pressure many youngsters into reading print, as early as age three and frequently at age four or five. (I recently spotted a Reading Academy for three-year-olds in Florida.)

In contrast, writing and reading, in my experience of the Waldorf school approach, start only in first grade and reach a “take-off” phase after age eight as the child approaches the so-called “nine-to-ten-year-old change.” The process of learning to read in a Waldorf elementary school involves the following stages:

Initially, class teachers give first graders an extended time to neurologically digest alphabet letters, words, verses, and stories immersed in a multi-sided artistic process.

In first grade and the first half of second grade, students read what they have handwritten in relatively large letters in books that they have made themselves.

From the last half of second grade through third and into fourth grade they are increasingly gobbling down, in groups and individually, numerous printed readers consisting of high quality children’s literature. Having heard so many stories from their teachers directly, books become a vehicle to discover more of the same on their own and satisfy their healthy appetites for more.

In the upper elementary grades, 4 through 8, students rise to a new level: reading to learn. They love to devour and discuss a lot of good literature, literature that depicts moving life-issues. The enjoyment of reading has not been tainted by unconscious feelings of stress and anxiousness, or, even worse, phobia or burnout.

A Creative Compromise

Interestingly, Steiner’s recommendations for beginning reading in the early grades were a philosophical compromise. For him, the ideal time, developmentally, to learn the abstracting process of reading was around eleven to twelve years of age. This is the stage at which the brain and nervous system actually begin to develop abstract thinking. (Compare Piaget’s stage of “formal operations.”) Children who, for unusual reasons, have not been exposed to reading until age twelve have been known to pick it up very quickly. Steiner realized, however, that such a

delay would be impossible in a fast-paced modern society:

People will object that the children then [at age eleven or twelve] learn to read and write too late. This is said only because it is not known today how harmful it is when the children learn to read and write too soon. It is a very bad thing to be able to write early. Reading and writing as we have them today are really not suited to the human being till a later age—the eleventh or twelfth year—and the more a child is blessed with not being able to read and write well before this age, the better it is for the later years of life. A child who cannot write properly at thirteen or fourteen (I can speak out of my own experience because I could not do it at that age) is not so hindered for later spiritual development as one who early, at seven or eight years, can already read and write perfectly. These are things that the teacher must notice. Naturally you will not be able to proceed as you really should today because the children have to pass from your

independent school into public life. But a great deal can be done nevertheless when you know these things. It is a question of knowledge. And your knowledge must show you, above all, that it is quite wrong to teach reading before writing. In writing, especially if it is developed from the painting-drawing, drawing-painting that I have spoken of, the whole human being is active—the fingers take part, the body is positioned, the whole person is engaged. In reading only the head is occupied and anything that only occupies a part of the organ-

ism and leaves the remaining parts impassive should be taught as late as possible. It is most important first to bring the whole being into movement, and later on the single parts.¹⁰

Notice in the previous quotation that Steiner is speaking from personal experience. According to the academic standards of his day, he himself was apparently deficient in some areas such as spelling and writing in the early elementary years. Falsely accused of starting a commotion in school at age seven, his father withdrew him and he was

[T]he ideal time, developmentally, to learn the abstracting process of reading was around eleven to twelve years of age. This is the stage at which the brain and nervous system actually begin to develop abstract thinking.

taught at home for a time—homeschooled! Spared certain deadening educational methods early on, the development of his mental and spiritual make-up was unhindered:

...When, as is the custom to-day, a child is obliged as early as the sixth or seventh year to learn to read and write, it is torture for the soul that wants to develop and unfold in accordance with its own nature. I can only repeat what I have already told you in my autobiography, that I owe the removal of many hindrances to the circumstance that when I was twelve years old I was still unable to write properly. For the capacity of being able to write, in the way that is demanded today, kills certain qualities in the human being. . . . Modern civilization makes bodies unfit.¹¹

Steiner, in this particular lecture cycle, does not discuss the specifics of the educational practices that make “bodies unfit” nor does he discuss the positive qualities that are sacrificed. In other lecture courses, however, he gives numerous examples of how bad teaching can be correlated with specific illnesses in later life. More important, his educational talks contain many indications of the positive qualities and capacities that he wanted to be fostered by Waldorf school methods.

The Cost of Reading Too Early: Clouding the Mind's Eye

Perhaps the foremost example of such a capacity is the precious quality or capacity of imagination. It is one we know can be killed by deadening school practices. Steiner placed this faculty at the heart of Waldorf education. The ability to form and retain inner images (mental picturing) gives the human being both a memory of experiences and a personal identity as an “I.” Each of us, however, is able to go beyond just making immediate images in response to the moment or recalling memory pictures. We can also evolve images inwardly so that they transcend the present and the past. Mere picture-making in the mind takes wing, so to speak, and becomes imagination in its truest, most developed sense. Through this

expanded capacity we are able to create new configurations of images so that new ideas can come about. We can inwardly imagine something changing into future forms that have not yet existed in physical reality. This future-oriented, creative quality is of the highest universal value to all human beings in all walks of life. In fact, one can argue, imagination makes us truly human.

And we can learn from observing our children. Most children enter kindergarten and the early grades “trailing clouds of glory,” evidence of a burgeoning imagination. They begin to make the transition from picture-formation that is dependent on the presence of sense percepts to picture-formations that can be retained independently in the soul. These are then available to be more creatively evolved. At around age seven, according to Steiner,

**Imagination . . .
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practices.**

...the quality that makes a child under seven so wholly into a sense-organ now becomes more inward; it enters the soul life. The sense organs do not think; they perceive pictures, or rather they form pictures from the external objects. And even when the child's

sense experiences have already a quality of soul, it is not a thought that emerges but an image, albeit a soul image, an imaginative picture. Therefore in your teaching you must work in pictures, in images. Now you can work least of all in pictures if you are teaching children something that is really quite foreign to them. For example, the calligraphy of today is quite foreign to children both in written or printed letters.¹²

Teachers and parents, then, need to be aware that the first three grades see a gradual change through a new stage of pictorial thinking that heads gently toward a more intellectual thinking, one that only comes into its own around age twelve. A child's life forces must still be served by a learning process that has a strong motor and sensory component. But it is the new element of imagination, with plenty of colorful pictures for the mind's eye, that becomes the key to a wholesome transition:

Whatever is filled with deep meaning that works through pictures and allegories is proper for these years. The life body will unfold its

forces if a well-ordered imagination is allowed to take guidance from the inner meaning it discovers for itself in pictures and allegories—whether seen in real life or communicated to the mind. It is not abstract concepts that work in the right way on the growing life body, but rather what is seen and perceived—indeed, not with external senses, but with the mind's eye. Such seeing and perceiving is the proper means of education for these years.¹³

It is central to Waldorf education's mission to cultivate, nurture, and restore the imaginative quality with which young children are naturally endowed. Intrinsic to Steiner's educational approach to learning writing and reading is the effort not to interfere with imagination in its natural growth but rather to enhance and strengthen it.

Like childhood itself, however, the capacity of imagination in some educators' and researchers' minds might well be placed at the top of a cultural endangered species list. Recent discoveries in neuroscience are beginning to provide concrete clues about the challenge of fostering this faculty in today's world. There is provocative new evidence that the over-emphasis of left brain language development can and does occur at the expense of right-brain capacities such as imagination. Strong cultural emphasis on the sequential, logical, word-based intellect of the left brain can result in a dimming or even blinding of an innate inner picturing in the mind's eye. As neuroscientist Ian Robertson points out:

Western societies have largely lost the ability to think in images rather than words. ...[M]odern neuroscience backs [this up]. ...[I]t is the nature of words that they tend to transform experiences into a rather bloodless code that can starve our brains of the rich images that wordless imagining can evoke. Language is the great achievement of evolution—an essential ingredient in what makes human beings unique on the planet. But there are costs to the way we have grown dependent on the spoken and written word. Imagery consists of the mental sights, sounds,

smells, tastes, touch, and other bodily sensations that we can re-create with incredible vividness in that private, infinite universe within our skulls. The human brain is the most complex object in the known universe and it has the most incredible abilities, some of which—like imagery—are underused. Imagery is important, but in Western culture, language is king. In school we steadily wrap our children's brains in the “cool web of language” [as the poet Robert Graves calls it in his poem of that title]. It would be terrible if we didn't, but there is a cost to everything. By neglecting imagery we risk the withering of a whole set of quite remarkable mental capacities. . . . Children think mostly in images before word-dominated school clouds their mind's eye.¹⁴

Meeting the Challenge Artistically

If literacy, rooted so deeply in our culture, has a dampening and perhaps even blinding affect, it may seem that a diminution of imagination is hardly to be prevented. And yet that loss or cost is exactly what Steiner's new method strives to avoid. As a practical idealist, he recognized that in order to have a school in modern times, one had to have children start reading and writing in the first grade, but that “we must ensure that, when we do so, we are not hurting them.”¹⁵ He therefore ingeniously recruits some of that “whole set of quite remarkable mental capacities” and what we now describe as right-brain capacities, such as image formation and the experience of emotion—capacities that Robertson says would otherwise wither—and uses them to learn to read. Adverse intellectual effects are thereby balanced out, as both sides of the brain are used to elaborate a many-sided writing and reading ability. For his

method, Steiner enlists a full range of sensory and performance activities including image-filled storytelling, sonorous and well-formed speaking, picture making, action geometry, and beautiful hand-writing (“calligraphy” derives from the Greek *kali-graphia*, “good writing”). All of these form a rich language arts curriculum that culminates in

There is provocative new evidence [in neuro-science] that the over-emphasis of left brain language development can and does occur at the expense of right-brain capacities such as imagination.

reading abstract machine print. For Steiner, there was no better vehicle for this purpose than a variety of arts which exercise fundamental sensory and performance skills and shape the brain profoundly. His approach was intended, above all, to imbue the children's experience with imagination warmed by enthusiastic "hearts-on" and artistic hands-on activity:

The whole process of development is spoiled if the child is led straight away to what is abstract and she is taught to carry out any activity by means of a purely mental concept. On the other hand, a healthy growth will always ensue if actual activity is introduced first and the idea is only afterwards unfolded out of the activity. Reading is essentially a mental act. Therefore, if reading is taught first, and not after writing, the child is prematurely involved in a process of development exclusively concerned with the head instead of with the forces of her whole being. By such methods as these, education can be guided into a sphere that embraces the whole human being—into the realm of art. This must indeed be the aim of all our teaching up to the age of about nine and a half. Pictures, rhythms, measure—these qualities must pervade all our teaching. Everything else is premature. It is for this reason utterly impossible before this age [of 9-10] to convey anything to the child in which strong distinctions are made between herself and the outer world. Hence, when she first comes to school, ...[for example] we shall not merely speak of the plants, but we shall speak of them as living beings, as holding converse with us and with each other in such a way that the child's outlook on nature and man is filled with imagination. ...The more we enable the child thus to flow out into her whole environment, the more vividly we describe plant, animal and stone, so that in them weaving, articulate spirituality is wafted towards her, the more adequately do we respond to the demands of her innermost being in these early years. They are years when the feeling life of the soul must flow into the processes of breathing and of the circulation of the blood and into the whole vascular

Steiner's method calls for a balancing of multiple intelligences—volitional, emotional, and intellectual—that allows the truly human to incarnate as fully as possible.

system—indeed into the whole human organism. . . . It is of incalculable benefit to the child if we develop this element of feeling in writing and then allow a faint echo of the intellect to enter as she re-discovers in reading what she has already experienced in writing. There is then a gentle accompaniment from the intellect. . . . Between the ages of seven and nine or nine-and-a-half it is essential that the teaching shall make a direct appeal to the element of feeling. The child must receive the various forms of the letters into her life of feeling.¹⁶

The beginning reading process for six to eight year olds is not allowed to prematurely separate a child's consciousness of oneness with the world, as naturally happens further on at age nine or ten. In the first grade, cognitive intellect is present, but in the right age-appropriate proportion as a "gentle accompaniment," a slowly ripening seed for future unfolding around ages eleven or twelve.

Germinating intellect is balanced by the "breathing-enhancing, blood-warming" effects of inner visualization and the dynamic gross motor forces of eurythmy and other activities. Whole body movement and engagement are artistically congealed into the smaller, more academic format of fine motor painting, drawing, or writing of letters born from living pictures:

...And if we then do not take recourse to abstract symbols when we teach reading and writing [in grade 1], but do this through pictures, we do not distance ourselves from the real being when we must activate it, we do not let the human being get fully away from it. Through effort and practice we employ the whole of the human being. . . . When we teach eurythmy, when the movements contain the things the children are to learn in writing, we bring these two parts—body and soul-spirit—closer together. And in the children's artistic activities, when the letters emerge from pictures, we have one and the same activity—now, however, tinged by soul and spirit—as in eurythmic movements or in listening to singing, a process in which the children's own

consciousness is employed. . . . Children whose writing and reading activities are balanced by something else will grow into full human beings.¹⁷

Steiner's method calls for a balancing of multiple intelligences—volitional, emotional, and intellectual—that allows the truly human to incarnate as fully as possible. In addition to stimulating imagination, Steiner's method also enhances listening and hearing—abilities he sees developing into the creative resource of true inspiration in life and a quality of attentive openness. And when he describes the ability to “flow out into the whole environment” and be one with it, he is pointing toward another important human capacity, one that he calls intuition. He characterizes this as the ability of a person to project her consciousness into the world—into other beings and other things—in a loving, interested way. For Steiner, how we learn to read—and how we learn other subjects in our formative years—can either isolate us from or connect us with our surroundings and our fellow human beings.

Endnotes

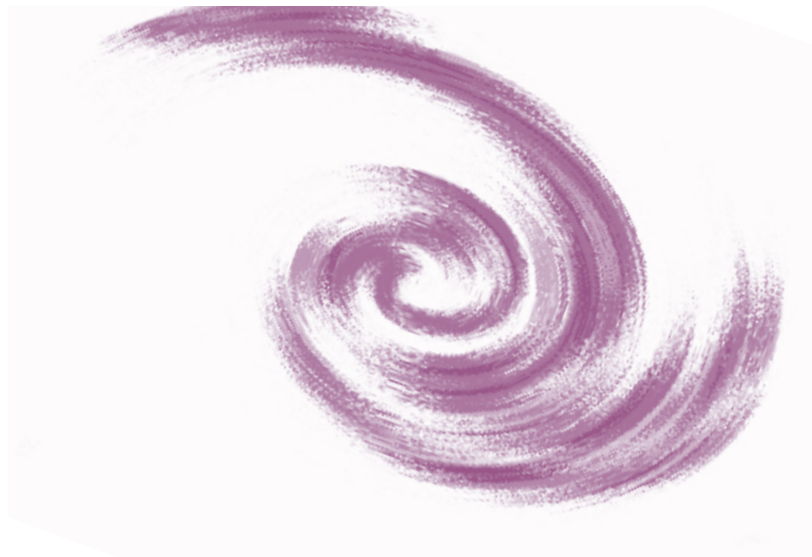
1. Ratey, 2001, 280.
2. Steiner, 1996a, 126–128.
3. Steiner, 1996b, 23.
4. Steiner, 2000, 49.
5. Hannaford, 1995, 104.
6. Ibid, 106.
7. Ibid, 84.
8. Steiner, 1996c, 117.
9. Steiner, 2004, 62–63.
10. Steiner, 1995, 26–27.
11. Steiner, 1981, 191–193.
12. Steiner, 1995a, 23.
13. Steiner, 1996b, 23.
14. Robertson, 2003, 2–3. Robertson beautifully reminds us of the richness of the inner world of imagery or imagination; that it includes not just the visual realm but also “sounds, smells, tastes, touch, and other bodily sensations.” See also his *Mind Sculpture*, 1999. For additional insights into the concept of the “mind's eye” in psychology today, see Todd Feinberg, *Altered Egos*, 2001.
15. Steiner, 1995b, 76–77.
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Universal Human Nature

The Challenge of the Transition from Kindergarten to Elementary School

Martyn Rawson

The global trend toward early schooling and the pressures on children to become early learners have grown considerably in recent years. Several factors have played into this, including the shock of PISA results;¹ the trend toward quality assurance in education through the introduction of standards; and the effects of globalization. Many countries have realized that if they want to compete they must have a better educated workforce. Their unquestioned assumption is that the earlier they start their education the better.

The Lack of a Unifying Image of the Human Being

These external political factors are powerful. What makes the trend to earlier schooling harder to counter, however, is the fact that the science underpinning our understanding of what it means to be a human being, and, in particular, what it means to be a young, developing human being, has also fundamentally altered. In the post-modern age, there is no consensus about human nature, no unifying theory, and not even an agreed-upon framework for development. Geneticists discover ever more structures within the human genome that influence this or that behavior or developmental pattern, but they have not found a universal timetable for children's growth. The clearest characteristic of the human being to emerge from contemporary genetics is just how plastic, flexible, and variable human beings are. One could say that which is universally human is essentially individual.

Brain science and developmental psychology have given us a picture of children actively co-constructing their minds, their language, and

their social relationships from the earliest weeks after birth.² Evolutionary psychology has offered us a picture of the origins of many human behaviors.³ The picture we have is dynamic, an interaction between genetically predetermined potential, self-activity, and social context. Even the concept of "critical periods" in development, periods in which specific behaviors or skills, including language, can emerge, are apparently far broader and more flexible than had been imagined.⁴ It is not surprising, therefore, that traditional ideas about developmental phases and thresholds such as school readiness are increasingly less tenable.

This general situation also applies specifically to the question of school readiness. Armin Krenz, an early years specialist at Kiel's Institute for Applied Psychology and Pedagogy, recently summed up a survey of theory and practice regarding school readiness with the word "chaos." "If it wasn't such a serious matter one could smile at the contradictions in the statements [of experts]—which rather cause us to frown."⁵

The Pedagogical Need to Review School Readiness

In 1998, the International Curriculum Research Group (ICRG) of the Pedagogical Section at the Goetheanum, Switzerland, responded to these

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trends by beginning an informal study in the form of hearings. As coordinator of the ICRG, I became closely involved in the issue of school readiness and, coincidentally, was commissioned to write a book on the subject.⁶ What became apparent in the course of our research was the fact that there seemed to be good reasons to examine the transition from kinder-

garten to school, irrespective of trends in public education policy. The main reason for this was the manifestly different circumstances that influence child development today.

As a symptomatic example of this trend, Hergart Asamoah, a school doctor with some 35 years experience investigating children for school readiness in a large German Waldorf school, reported to us, from her records, that 20 years ago only about 7 children out of more than 100 applying for school admission were found to be “not ready,” according to a detailed list of criteria regularly used in Waldorf schools to establish school readiness. In 2001, from a similarly large intake from similar family backgrounds, only about 20 percent were deemed to be ready, according to the same criteria. Clearly, something has changed. This anecdotal study—compellingly apparent when Dr. Asamoah showed us children’s drawings from then and now—highlights the problem.

The ICRG, constituted of teachers, early childhood educators, teacher educators, and school doctors, explored the issues for several years in a series of regular meetings. This led to the publication of a small booklet entitled *Guidelines for School Readiness*, followed by a revised edition especially prepared for the International Conference for Teachers at the Goetheanum at Easter 2004.⁷

Are Children Different or Do We Just See Them With Different Eyes?

Are children today really different when compared to those of a generation ago, or even compared with those of 5 years ago? The question is almost impossible to answer scientifically without major long-term studies that would take into account emotional and physical development and socioeconomic changes. Nevertheless, considerable anecdotal evidence suggests that Waldorf educators believe that children are somehow different. That we believe today’s children are different no doubt influences the way we see them, think

about them, and act with them. Are children really different or are we looking with different eyes and expectations? This is not an easy question to answer.

Last year, a research group of which I am a member was commissioned by the Association of Waldorf Schools in Germany (the Bund) and the International Kindergarten Association (IVW) to investigate the issue of school readiness in the context of new legislation that lowers the age of compulsory schooling and that imposes mandatory state curricula. The group began by carrying out a survey of kindergarten teachers, school admissions officers, and school doctors in German Waldorf schools. The results showed that most educators believed that today’s children are different in how they develop. This confirms Dr Asamoah’s findings. Different, essentially, is taken to mean less harmoniously developed by the age of six, the age of school entry. In the past, a few school age children could be allowed to spend a further year in kindergarten in order to mature. Today, this would mean leaving the majority behind; with the consequence that the grades would be empty and the kindergartens overflowing!

This perception that children are not ready for school has also led many Waldorf schools—to my knowledge currently over 50 schools—in Germany, Switzerland, and Austria to introduce new “moving classroom” methods, also known as the Bochum Model, into the elementary school, an approach which replaces desks and chairs with more flexible school furniture—especially designed benches and cushions—to facilitate more movement. This model also involves more practical activity to stimulate the development of the basic bodily senses of movement, balance, touch, and vitality (sense of life), as a precondition for the healthy development of higher faculties. For some years the perception has existed that children entering first grade lack basic competences, particularly in their motor development, but also in their social skills. The moving classroom approach is an attempt to address these deficits through restructuring the approach to teaching.⁸

A small but significant number of colleagues commented on new positive qualities that such children bring with them, such as spiritual openness, curiosity, openness for experience, and a surprising level of self-reliance.

How Different Are the Children?

The extent to which the evidence from Germany can be extrapolated as relevant for the U.S. and other countries can best be judged by observers and practitioners in those countries. My guess is that the evidence is similar elsewhere because similar external conditions influence child development in most modern Western societies.

Our survey,⁹ which includes responses from educators in more than 130 kindergartens and representing 84 schools, comparing children today with those of 10 years ago, finds children to:

- be less coordinated, have poorer fine and gross motor skills, and be clumsy;
- have more speech and language difficulties, be less able to listen, yet often have more to say for themselves;
- have shorter attention spans and be more often unruly;
- show more signs of nervousness and inability to concentrate;
- have poorer abilities to imitate, have poorer abilities to play and imagine;
- be more prone to infections and allergies;
- be often prematurely intellectually awake, requiring a more individual approach;
- be harder to integrate socially into class groups; such children often show what is described as a lack awareness of the space of other people;
- show greater differences between the genders, with boys generally experienced as more difficult.

A small but significant number of colleagues commented on new positive qualities that such children bring with them, such as spiritual openness, curiosity, openness for experience, and a surprising level of self-reliance. These observations are as important as the deficit analysis.

While there are still many robust and healthy children in our kindergartens and schools, children increasingly show signs of disassociation in their development; that is, various areas of development seem increasingly to develop more heterogeneously and less harmoniously.¹⁰

Changing Circumstances

In a period of significant social and cultural change, the conditions under which children grow up today are undeniably different compared to those of a generation ago. What has changed?¹¹

Increasingly pluralistic social and economic forms coupled with simultaneously increased individualization of personal roles and expectations have changed the way we live and work together.

Many more children are “only” children, live in patchwork families that undergo frequent career changes, and live with little structure and rhythm in their lives and little sense for boundaries.

Parents’ attitudes toward their role have also changed; an increasing number of parents treat their children as partners and, in other ways, expect a high degree of self-reliance.

Media consumption has radically increased, and children suffer overstimulation of their senses through electronic media more greatly than has any previous generation.

The World Health Organization (WHO) has frequently pointed to the unhealthy life styles and diet of children in many Western and [post]-industrialized economies.

In addition to these socio-economic factors, there is considerable evidence of general changes in children’s life patterns, such as the decreasing age of the onset of puberty and the general divergence between psychological and physical maturation.¹²

How to Respond?

It is obvious that these changes influence the way children develop. It is equally obvious that educational practice must respond to these changes, or at least review its methods and approach, and ask the question, “Are we sure we are doing our best to provide children with the best possible developmental environment in kindergarten or in elementary school?” Researchers in Waldorf education have begun to develop techniques of research and evaluation that can address this challenge.¹³

Many educators and politicians recognize these trends and respond by saying we must identify children’s developmental needs and remediate them earlier, not waiting until children are in school. Governments are concerned with declining

standards for a variety of reasons. Among the factors of most concern is the overwhelming evidence that poverty, neglect, and social exclusion influence child development and thus school achievement. In the U.K., the government drew up a “Framework for Early Learning;” in Germany the Conference of Federal State Education ministers drew up “Educational Standards for Early Years Education;”¹⁴ and in the U.S., the first goal of the National Education Goals Panel (NEGP) was that, “by the year 2000, all children in America will start school ready to learn.”¹⁵ These are typical of many international responses.

In the case of these policies, the concept of school readiness is not limited to a narrowly constructed, academically-driven definition of readiness, as is sometimes asserted in Waldorf school circles, but includes a broader definition that includes physical well-being and health, social and emotional development, language development, and cognitive readiness. In the case of the NEGP approach, a strong emphasis was also placed on schools being ready for children and on a supportive family and community context.¹⁶ These are laudable policies. So, too, is concern about the danger of applying assessment methods to the early selection and the labeling of children. The NEGP noted that assessment should only be used for diagnostic purposes and that testing should be supplemented with other sources of information, including information from parents and teachers.¹⁷

The Waldorf School Response

Within the Waldorf school community two responses can be identified, although some schools carry on as if nothing has changed. On the one hand, there have been attempts to exclude Waldorf school settings from legislation that lowers the school entry age or where funding is pegged to certain curriculum requirements. Here, Waldorf school negotiators have often been successful in gaining special status and even, on occasion, of influencing the formulation of the standards. Here, England, New Zealand, Norway, and the German Federal state of Baden-Württemberg are examples.

On the other hand, a reassessment of Waldorf school practice has begun, such as the introduction of moving classroom methods

referred to above. This reassessment has also led to the introduction of new forms of transition, such as the introduction of transition classes—*Brückenklassen* (literally, “bridge classes”)—in some German Waldorf schools. Without adequate and appropriate methods of pedagogical evaluation, however, and without a clear set of criteria, these innovations depend largely on the conviction of their practitioners. It is also noticeable that much of the impetus for innovation comes from the schools and relatively little from the kindergarten movement.

In essence, the Waldorf school movement needs both to address its theoretical basis and review its current experience with children. It requires a reassessment of the concept of development that informs our educational approach. If the socio-economic factors listed above—and, perhaps, spiritual factors yet to be fully identified—can influence developmental patterns and lead to developmental dissociation through acceleration of some traits and retardation of others, how should an educational approach based on an age-related and developmentally orientated framework such as Waldorf education respond?

Steiner's Concept of School Readiness

The concept of school readiness in Waldorf education is now essentially at odds with the various and often conflicting definitions used in mainstream education. The Waldorf school approach, here very briefly summarized, is based on Rudolf Steiner's descriptions of the significance of the first seven-year period of life and its transition to the next major developmental phase, as indicated by the change of teeth. In his own words, Steiner explained the significance of this developmental transition as follows:

When the change of teeth occurs we see in a certain way the emancipation of the child's etheric body. How does that come to expression? What comes to expression is that the child becomes able to form concepts and becomes able to bring movement into the process of mental imaging within the head organization that was earlier more integrated into the whole organism. We see approximately—and spiritual science sees this not only approximately but in reality, that the etheric forces withdraw at the change of teeth from

the head, while remaining in the [bodily—author's addition] rhythmic and metabolic-limb processes, and develop a free [i.e., non-bodily—author's addition] activity in the plastic formation of the head processes in which consciousness participates in mental activity. In a certain sense the head organization is freed at this age. And if I can express this process that really occurs in pictorial form, I would say that that which is driven out from within the whole organism to the surface and expresses itself in the second teeth is the result of the soul-spiritual processes that were previously active within the whole organism and are now freed in the head. Previously they penetrated the whole human being including the head. These forces gradually withdraw from the head and this process of withdrawal, which stops at the head, brings forth the second teeth. ...What occurs in human development does so in the most manifold forms of metamorphosis.¹⁸

The key concept here is the metamorphosis of the formative forces, Steiner's "etheric forces," from activity in the growth and development of the physical organism through withdrawal from the physical processes in the head, essentially the activity of the brain. These forces, once freed from the brain, not entirely but significantly, can now work at a higher level in shaping and forming mental processes such as memory, mental imaging, and concept formation, all of which are fundamental prerequisites for formal school learning. The forces freed at the organic level become active at the psychological level of mind.

What Steiner does not say in this quotation, but that is clear elsewhere in his work and here by inference, regards the negative consequences of withdrawing these forces from the organism too early. The long term, sustainable, and renewable health of the child will be negatively affected if the formative forces are withdrawn from the organism too early and the head or brain is taxed with the demands of premature intellectual activity too soon. A child is ready for school in Steiner's understanding when these formative forces have metamorphosed themselves sufficiently to become available for learning.

School readiness is a sign of a fulfilled childhood, as Armin Krenz put it.¹⁹ Steiner's idea of school readiness certainly also implies that schools be ready for children, that is to say, offer

an age-appropriate, artistic education in which the child's intellect is addressed through activity and through pictures.²⁰

How does this approach differ from that typical of mainstream education? A brief history of the term "school readiness" will be necessary.

A Short History of School Readiness

In the German language, two words are used in relation to school readiness: *Schulreife*, literally, "school maturity," which implies an organic ontological development and *Schulfähigkeit*, literally, "school ability," which describes the cultivation of certain competencies. This distinction is helpful in identifying two quite opposing views that have worried generations of psychologists and educators trying to define school readiness.

In simplistic terms these are two fundamentally different approaches. The maturity theory explains age-related behavior and ability as essentially the outcome of biological processes following a genetically determined timetable. The alternative—one could speak of a socialization theory—is to see the acquisition of school readiness as social-cultural competence.

In the first half of the last century, it was common to relate school readiness, and most other patterns of development, to certain physical symptoms of maturity, in particular to the proportions of the trunk to arms and legs, what was known as the change of body shape, *Gestaltwandeln*, literally, "form change," that statistically occurred around the sixth year.

Augustin Kern's concept of maturation,²¹ for example, assumed that:

- School readiness is the result of endogenously directed maturational processes;
- Each child in the course of her development uniquely reaches a developmental stage that is the precondition for the development of school readiness, which may vary individually;
- The various competencies usually mature synchronously and that identifying maturity in one area is a reliable indicator of other areas (e.g., bodily maturity, such as onset of second dentition). Kern's choice of indicators is a visual representation of one's own body as indicated by a child's drawing a picture of himself;

- School readiness cannot be hastened through teaching.

In effect, this view is akin to the image of apples ripening on a tree and falling when they are ready. Many today still hold the view that school readiness is a trait that one can easily identify.

Implicit in the maturity theory, however, is the idea that the outcome of maturation is the fully developed human being. Unfortunately, not all researchers of either the school of maturity theory or of socialization theory have taken the view expressed by doctor and educator Janusz Korczak. Korczak believes that we should not see maturation processes as a progression from lower to higher, from incomplete to complete; we should value each stage of child development as an entirely valid state in its own right:

How should the child be able to live tomorrow, if we don't consciously and responsibly let him or her live today? We should respect every moment. . .

. . . Crudely we divide the years into more or less mature. There is no immaturity today, no hierarchy of age, no higher or lower level of pain or hope or disappointment. If I play with a child or speak to him or her—then two equally valid moments of maturity in my life and in that of the child have united.²²

Once it becomes clear, however, that certain features associated with school readiness can be trained,²³ such as the ability to distinguish certain forms—e.g., as in a child's drawing of herself showing limbs and fingers—maturity theory is fatally challenged. Readiness is susceptible to learning. The aim is therefore no longer simply to identify and select children who are ready for school but to “modify” children, “which means optimization through changing the behavior or changing the conditions.”²⁴ This marks a paradigm shift in the question of school readiness and establishes the need for a differentiated remedial or therapeutic provision prior to school entry, which leads, in turn, to the development of detailed diagnostic instruments.²⁵

Korczak believes that we should not see maturation processes as a progression from lower to higher, from incomplete to complete; [rather] we should value each stage of child development as an entirely valid state in its own right

Horst Nickel established the most widely accepted view of school readiness in Germany.²⁶ He describes the problem from an ecological perspective, and describes school readiness as an interactionist construct. This means, first, that the question does not require us to look only at the child, but at the child's whole context. Second, it was assumed that school readiness is not necessarily directly observable, but rather could be deduced from a study of a range of factors and indicators relating to the context of the school and the child's personal and family context in mutual interaction. Nickel, himself, noted that the issue of school readiness is to a large extent not a problem in a school system that addresses the child's individual needs, such as in Montessori schools.²⁷ Indeed, studies have shown that children with similar levels of school readiness on tests achieve different levels of success in different

classes, even in parallel classes at the same school.²⁸

School readiness, following these arguments, is neither a purely biologically nor a purely culturally determined state. It reflects the norms of both pre-school and elementary school, and it is significantly influenced by socio-economic and family-based factors. School readiness,

therefore, can vary considerably. The key question in relation to the influence of state curricula is the extent to which the child is exposed to and influenced by binding socio-cultural developmental norms that traditionally have been seen as the task of school to cultivate.²⁹

School readiness is a form of cultural pressure³⁰ since children are obliged, at some point, to go to school and must therefore attain certain pre-determined developmental norms. The degree of pressure is determined by the education system. What we have today is a concept of school readiness as a developmental task, the timeframe for which is determined by the statutory school entry age and the criteria for which are determined by the nature of the school the child is to be prepared for. School readiness is therefore situation specific.³¹

Most interesting, in this respect, is a study based on the Australian program, *Who Am I?*,³² a diagnostic test developed by the Australian Centre for Educational Research (ACER) to identify children at risk. This has also been used to compare the developmental patterns of children in different cultures. In a detailed report of such an international comparison of child developmental patterns, published on the Government of Canada website (2002),³³ de Lemos questions whether the shift in thinking marked universally in children between five and seven is a consequence of schooling, in the widest sense, or, rather, the basis for schooling. De Lemos declares the question to be as yet unresolved. He concludes, however, that, “while there are differences in children’s cultural and social experiences across different countries and social groups, there are, nevertheless, commonalities in development that seem to be associated with underlying developmental processes.”³⁴

The crucial result, however, from the Waldorf school perspective, is that revealed by the *Who Am I?* study, which shows that “exposure to highly formal teaching programs at an early age leads to an acceleration of development.”³⁵ What the evidence seems to show is the interactive effects of age and education. Both factors mutually influence the other, as one would expect in any holistic model of human development. Education influences developmental processes and developmental processes naturally determine what is educationally possible.

Further, many authors now prefer to see readiness as a “bidirectional process of both school and child flexibly adjusting to each other to ensure success.”³⁶ This approach is based on Vygotskian socio-cultural theory³⁷ and contemporary transactional models of child development.³⁸ Vygotsky showed that learning precedes or leads development and transforms biological maturational processes, a view that modern neurology has confirmed.³⁹ The Vygotskian approach offers children social opportunities and scaffolded experiences. “Scaffolding” refers to a non-directional style of supporting a child in exploring the next level of skill rather than giving direct instruction.⁴⁰ In other words, a child does not simply grow into readiness but is gently exposed to situations in which she can acquire new skills and ways of being.

A new approach to school readiness, developed in the U.S., sees as decisive the socio-cultural

context rather than innate qualities of the child. Smith and Shephard see school readiness as:

those propositions about development and early learning that the teacher holds to be true, with what degree of credulity, with what kind and quality of evidence, in relation to what other beliefs, values, and emotional attitudes, and in the light of what consequences such beliefs have in the actions she takes.⁴¹

The study by Smith and Shephard⁴² showed a high degree of subjectivity in judgments about school readiness. These have been confirmed by Kammermeyer for the German context.⁴³

In summary, we can see that the issues concerning school readiness are largely unresolved, as openly admitted in some state plans. A document from the Baden-Württemberg Education Ministry, “*Schulanfang auf neuen Wegen*,”⁴⁴ describes the situation as follows: “The current position regarding the question of school readiness has been reached step by step, although this also includes steps backward and periods of no movement.”⁴⁵

As Meier points out,⁴⁶ the hopes of an efficient compensatory education that specifically is aimed at a homogenous school population and attempts at streaming, have not proved effective. One cannot arrive at standardized school-orientated states of school readiness. Furthermore, the discovery that age and developmental stage are not identical in children, which also means that learning ability is not age-specific, has undone most attempts to either train (through explicit formal learning) or foster (through implicit informal learning) school readiness, especially if this is based on an assessment of competencies.

As long as school readiness is used as an instrument to shape children in a particular way to suit the form of education subsequently offered in school, it runs the risk of ignoring the nature of the individual child. As Farran and Shonkoff put it:

The notion that children can be lined up at a starting gate and made roughly equivalent at a particular developmental point, after which education can begin, has little empirical support. In fact, much of the loss for children who have problems achieving in school is sustained after school entry (Entwistle and Alexander, 1990). For example, a recently published longitudinal study of more than 1,200 poor elemen-

tary students in Chicago concluded that the children gradually learned less and less each year following kindergarten until, by fourth grade, they were achieving only six months of academic growth for each year in school (Reynolds and Bezruczko, 1993). The losses these children exhibited came about after school entry, perhaps as a consequence of the school experience; they were not far behind when they entered the school environment. The dual assumptions that the child owns the problem and that the obligation of professionals is to fix him/her—often before school entry—have a particularly tenacious hold in special education (Harry, 1992b). Of perhaps greater concern, this paradigm has been generalized, so that now the numbers of students [and children in general] who are forecast to need fixing in some way or another has grown large.⁴⁷

How Does the Waldorf School Concept Relate to Readiness Theory?

Learning in a Waldorf school sense does not necessarily mean formal learning but informal acquisition of language, of manual and movement skills, of social competence, and so on. The Waldorf school view is that the child is the motor of her own development and that the educator's (and parent's) role before formal schooling is to provide a safe context, full of meaningful activities, to stimulate a child's will forces to participate in life, an approach simply summarized by the phrase "role model and imitation."

The Waldorf school approach has much in common with the ecological approach and certainly endeavors to make school ready for children. Though it is often presented as such, the link between the developmental phases of a child and a curriculum, and educational methodology is not causal but therapeutic. The Waldorf school approach does not assume a fixed schematic pattern of child development. Rather, the curriculum and approach aim to influence children by providing them with experiences that enable a harmonizing of developmental processes. The curriculum aims to provide a norm of developmental experience:

The principle of the seven-year rhythm has a salutogenetic significance when it is applied as a guideline in education. It marks a period of time

that is necessary as a kind of ideal measure designed to help children to help bring the complex web of bodily, psychological and spiritual organizations within the child to a certain stability within a given developmental phase and in which one sided and premature developments are gently held back and delayed developmental processes are expressly encouraged. Thus if the child can attune itself to this health-giving rhythm he or she gains a sustaining basis for life.

In this sense, the processes of metamorphosis that Steiner described need a healthy context in which to unfold. Just what this means in practice will have to be determined from situation to situation, which is why education is an art and not a program. The important thing is to identify which conditions foster this process and which hinder it. That means creating a universal context within which the individual can find his or her way and develop. Universal, in this sense, implies a number of qualities: open to all; permeated with a consciousness of the principles of human development; imbued with meaning; related in a real sense to real life (i.e., not isolated or artificial); seen as an entirely valid space in its own right, one that can adapt to any social context, not seen as a waiting room between two more important places. These are all basic principles of Waldorf education.

Endnotes

1. Program for International Student Assessment (PISA); a study carried out by the Organization for Economic Cooperation and Development (OECD); see *Research Bulletin*, Autumn 2005.
2. Tomasello, 2003.
3. Winston, 2002; Ridley, 2003.
4. Tomasello, 2000.
5. Krenz, 2003, p. 15
6. Rawson & Rose, 2002.
7. Rawson, 2004.
8. Carle, 2005.
9. McKeen et al., 2004.
10. Marti, 2002; Patzlaff and Saßmannshausen, 2005, p. 33.
11. Following Bründel, 2001, pp. 13–22, and others.
12. Gluckman and Hanson, 2006.
13. Mitchell, 2005; Rawson and Stöckli, 2006.

14. Fthenakis, 2005.
 15. The National Educational Goals Panel (NEGP), 1997.
 16. Huffman et al., 2000.
 17. Emig et al., 2001.
 18. Steiner, 1980.
 19. Krenz, 2003, p. 115.
 20. Steiner, 1976.
 21. Kern, 1951.
 22. Korczak, 1988, 28.
 23. Kemmler and Heckhausen, 1962, and Roth, 1969.
 24. Pawlik, 1976, p. 16.
 25. Nauck, 1992.
 26. Nickel, 1990, p. 217.
 27. Quoted in Faust-Siehl, 2001, p. 100.
 28. Ibid., p. 101.
 29. Faust-Siehl, 2001, p. 102
 30. Ibid., p. 102
 31. Graue, 1992, p. 225.
 32. de Lemos, 1999.
 33. <http://government.canada.gc.ca>, accessed 2002.
 34. Ibid.
 35. Ibid.
 36. Carlton and Winsler, 1999, p. 338.
 37. Vygotsky, 1978.
 38. Carlton and Winsler, 1999, p. 345.
 39. Spitzer, 2002.
 40. Berk and Winsler, 1995.
 41. Smith and Shephard, 1988, p. 309.
 42. Ibid.
 43. Kammermeyer, 2000.
 44. Baden-Württemberg Education Ministry, 2005.
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Art Awakener of Consciousness, Humanizer of Society

Van James

Art is an awakener of consciousness and a humanizer of society. These functions of art should be clear to all and they should be the cultural experience of all. Sadly, they are not. Hans Belting, art historian, said that “art,” as an understanding of art as an object outside of ourselves, began only about 1400 C.E. Ancient people did not have a word for art as we understand it today because artistic creations were an intimate part of their spiritual-physical lives. For them, original participation, original connection, or oneness with the world was a given.

Aesthetic Education

The word “aesthetic” refers to artistic experience. The antonym of aesthetic is anesthetic, which refers to numbness, a greyness of the soul that is non-aesthetic. This opposition throws light on the meaning of aesthetic. Aesthetic refers also to an “enlivened or perceiving being,” and refers to our ability to respond to the world around us. Because we have a “response-ability,” we therefore have a responsibility to the world to which we are responding. Aesthetic responsibility implies an ethical connection between subject and object.

The process of removing art from our everyday experience continued through various stages of human development, accelerating with the Industrial Revolution of the late eighteenth century. The word “manufacture” refers to things man-made, things created by the human hand. Prior to the industrial age, production involved craftspeople who had learned their skills through apprenticeships, who manufactured things on a small scale and by hand. Industrialization transformed production into large-scale, impersonal, machine fabrication. Today the word “manufacture” is generally understood to mean made by machine.

Aesthetic refers also to an “enlivened or perceiving being,” and refers to our ability to respond to the world around us.

Human input has been largely removed from our understanding of the processes of production.

The eighteenth century also saw the introduction of public education, which soon grew into large-scale, impersonal, product-oriented “edumufacturing.” Based on the factory model, education became an assembly line for learning and teaching.

Education was not, however, left entirely to the factory model. Romantics such as Johann Heinrich Pestalozzi and Jean Jacques Rousseau saw the value for education in the spontaneity of childhood, play, and creativity. In 1837, Friedrich Froebel established the first kindergarten, one that placed an emphasis on play. The artists Paul Klee and Wassily Kandinsky, and the architect Frank Lloyd Wright, attended Froebel-style kindergartens; these influenced their ways of picturing the world. The impressionist Claude Monet and the modernist Henri Matisse collected children’s drawings and admired their intense expression of creativity.

The twentieth century has seen the progressive school movement continue, in part, through the Waldorf schools’ curricula, which recognize the importance of art. “Art must become the lifeblood of the soul,” said Rudolf Steiner, the founder of Waldorf schools. Bring education through art and children learn to live in and work from their innate creativity. According to some, toward the end of his life, Rudolf Steiner advocated turning Waldorf education even more strongly in the direction of art, aesthetics, and practical activity.

Especially in our present age of technology do we require creativity and art. Robert E. Allen, Chairman and CEO of AT&T, said:

We live in an age increasingly ruled by science and technology, a fact that only underscores

the need for more emphasis on the arts. As we find science encroaching on every field of study, we need to ensure that our humanity does not become a historical footnote. That can best be assured with a solid understanding and appreciation of the arts. A grounding in the arts will help our children to see, to bring a unique perspective to science and technology. In short, it will help them as they grow smarter to also grow wiser.¹

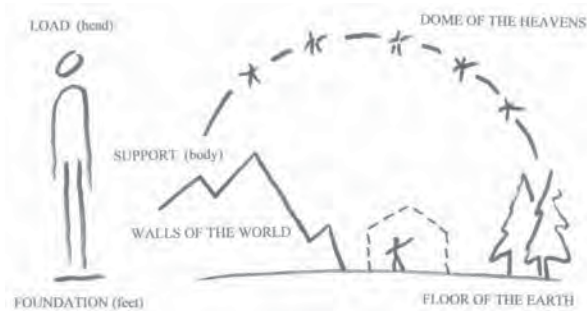


Figure 1. The Threefold Principle of Architecture

Architecture

Look at our bodies. We have two feet standing firmly on the ground. They are our foundation. Our two legs rise up as columns, and our trunks provide walls—they provide support for our bodies' architecture. Our heads are like our roof. They are cupolas or domes and express the load of our physical structure. Our two arms are like free-floating columns that may attach themselves and flexibly support numerous activities in the world. Our bodies, like all architecture, consist of foundation, support, and load (fig. 1).

Now, let us imagine that we are outside in nature. We are sitting on a rock or a tree stump. We can feel the firmness of the earth beneath us. The ground is our foundation. Above us is the dome of the sky, the heavens. It is the roof of the world. The stars above and beyond the light blue mantle of atmosphere form the cupola of the cosmos. This is the load that the gods put upon us from the heavens.

In Australia, when a group of aborigines was first given buildings to live in, they used them to store their possessions while they slept, cooked, and lived outside under the open sky. They couldn't bear to be in the small, enclosed spaces that the government built for them. Ancient peoples

slept under the roof of the world and felt protected by it.

To our right and left are mountain ranges and the trees of the forest; these act like supports, the columns and walls of the world.

When we construct a building around us, we place the laws of the physical body into nature as a kind of offering back to Nature. These laws already exist in outer nature and in the body that nature has fashioned for us. We then use these laws, these principles, when we create architecture, and they work back upon us.

Winston Churchill, during the rebuilding of London following the Second World War, said, "We shape our dwellings and our dwellings shape us." The art of architecture is a bridge and a mediator between the macrocosmic universe and the microcosmic human being. The art of architecture is also a bridge between the physical world and the spiritual world. Historically, the tomb is the first building. Architecture originally served to conduct the soul of the dead from the physical body back to the spirit world.

Architecture, it is said, is the mother of all arts for it provides a setting, or sets the stage, for all the other arts.

Drama

Drama might also fulfill the role of mother of the arts. Drama often features the other arts as its offspring. The arts that work with word, tone, color, form, and movement are synthesized in drama.

What is it like to act in a drama, in a room with three walls? What is it like to be part of an audience viewing the actions and story portrayed on stage? In Classical Greece, attendance at the theatre was free to all. Greek theater provided a transformative, healing experience for the audience as the audience beheld the play. The stories on the stage provide a multitude of pictures. The souls of the audience enter these pictures and undergo a catharsis. The art stimulates a response and thereby creates a responsibility to the stories. In this way art has long been the foundation of education and soul hygiene.

Rudolf Steiner placed a red, carved glass window in the back of the Great Hall of the first Goetheanum, above the west entrance. This was done so that the red light behind the audience, at

their backs as they entered the auditorium, could work therapeutically, could stimulate the will and inwardly engage the members of the audience. Such an architectural feature works with the performance on stage and enhances the interaction between audience and performers.

Here the question may arise, how do we make art the lifeblood of the soul, a part of our daily lives? How can our soul life pulse with the aesthetic experience of enlivened being? Our creativity makes us unique beings, and, at the same time, it unites us with all of creation. Every scientist, every homemaker, every mechanic, every teacher is, potentially, an artist. Artist and writer Guy Davenport said, "Art is the attention we pay to the wholeness of the world." We are all artists when we pay attention; evidence of our attention is our response. We must awaken this aesthetic response-ability that we all possess.

Who Is An Artist?

As young children develop, forces of growth are gradually released to be used as forces of imagination. These eventually transform again to become the power of conscious intelligence. Physical growth, imagination—the power of fantasy or creativity—and intelligence are linked.

Ask kindergarten children, "How many of you can draw? How many of you can sing? How many of you can dance?" All will agree that they can do these things. As Pablo Picasso pointed out, "Every child is an artist. The problem is how to remain artists as we become adults." Art is the lifeblood of the soul of childhood, but why is it so often lost to grown-ups?

Visual Art

Let us do an artistic experiment. I will speak a phrase of three words. Reflect on each word that I say and see what feelings or pictures you form from each of these words. I will leave some space between each word so you can observe the mental picture that arises from each.

"Smooth—Green—Stone."

As soon as a word is spoken, we get a picture. Everyone's picture is unique and the picture metamorphoses with each additional word. We participate in this activity thousands of times each day, making our own, individual mental pictures. We

constantly paint mental pictures throughout the day. Cognitive feelings first appear as pictures that are then turned into words and sentences. This often happens within a split second. We are all visual artists.

Imagine you are living at one with nature, in what Owen Barfield referred to as the state of original participation, in Paleolithic times. You are brought to a cave by one of the elders of your tribe and instructed to take some mineral substance from the ground, chew it, and mix it with your spittle. You are instructed to spit this pigment out, over and around your hand that is held against the rock wall of the cave. You become aware of your extended, paint-covered hand, and how your fingers end at the end of your hand.

This is the first time you've noticed this curious phenomenon—that your hand ends at your finger tips. Before this, your consciousness extended beyond your own body to everything that you touched or sensed, just as, in modern times, a blind person extends consciousness to the tip of a cane. Now, however, you have an awareness of living in the vital life forces of your hand, and you see the picture of your hand on the rock wall of the cave, separate from yourself. The picture on the wall helps you to hold a mental picture.

This is a first step on a path that, thousands of years later, develops into the ability of human beings to form concepts. Today, making a hand-print is still part of the initiation ceremonies and rites of passage of Australian aboriginals.

Artistic practices were the means by which human faculties, actual capacities, were formed. Today, we may have forgotten the purpose of art, but it still affects us and shapes us. We have to recreate an understanding for art and create or discover its new meaning in the world. The 1400s may have seen the beginning of art as we know it, but, in the 1960s, art, in its traditional sense, ended. Since the age of pop art and conceptual art, anything can be art. Today the definition of art depends more than ever on the artist's intention.

The Seven Arts

Music and architecture can be compared to one another, for music is invisible, flowing structure. It is like moving, ethereal architecture. Friedrich Schiller said, "Architecture is frozen music."

Drama paints a moving picture, while painted pictures tell a story and create a color drama. Dance and sculpture are also related as dance is moving, modeled form and sculpture fixes and holds fast rhythmic movements. These six arts are united by a seventh art at which we'll look tomorrow (fig. 2).

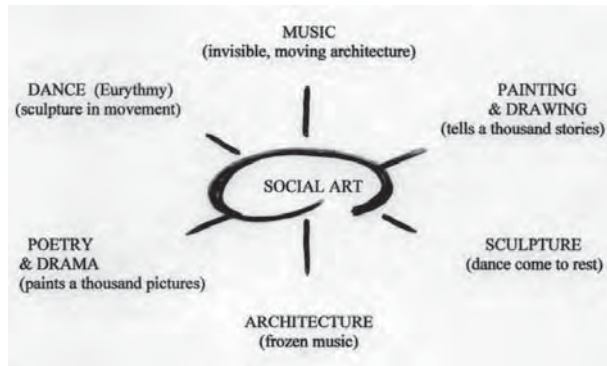


Figure 2. The Seven Arts

Let us do something with some of these arts. I would like you to form several concentric circles, holding the hands of the persons next to you. Without moving the chairs let's make the circles around the center in the floor of the auditorium. Form these circles close to each other and hold hands with the left palm up and the right palm down in a giving and receiving gesture like the one we see in the central figure of Leonardo da Vinci's painting, *The Last Supper*.

When we have our circles formed and we are holding hands, we will close our eyes and sound a tone to send up through the roof and down through the floor as a vibrating column of sound. It will be an invisible column of tone, a support pillar. First we will let the tone sound upward and then downward in concentric tonal shafts. We will call it, "A Tonal Column of Support for the Arts in New Zealand" (fig. 3). Imagine the potential for all the arts in Christchurch being supported and bolstered by your tone, by our tonal column. Then, let the vibration stretch out to all of the South Island and then all of New Zealand. That will be far enough for today. Please, don't feel awkward about doing this! This is not a scientific experiment. It is not a religious ritual or group meditation, although elements of science and religion, cognition and belief will certainly play a part in the experience. No. We are simply going to make art.

In his *Letters on the Aesthetic Education of Man*,² Friedrich Schiller says that the aesthetic education of humanity lies in the art of play. Between the form and duty of science on the one hand and the substance and freedom of religion on the other is art—the nature of which is revealed through play and creativity. We will now engage in serious play. I will join the outer ring and we will each choose a tone to sound. Change it and vary it as you will in response to what you hear around you. We will continue with this until it seems complete.

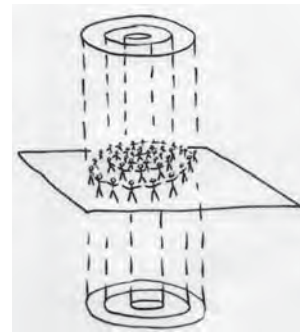


Figure 3. The Tonal Column of Support for the Arts in New Zealand

I have a question for all of you. How many of you can sing? How many of you can dance? And draw? Yes! We are artists. We are truly human when we engage ourselves as artists.

Anthroposophy involves awareness of one's humanity and certainly in an anthroposophical gathering such as this we should all be able to say "yes" to all of these questions. We are aware that we are creative beings. Art, also, involves an awareness of our humanity, and as such is a path from the spirit in the individual to the spirit in the universe.

Art as a Bridge Between Science and Religion

Let us now focus on how art promotes ethical individualism and moral imagination. Rudolf Steiner said:

True art stands beside real [scientific] knowledge on the one hand, and on the other, genuine religious life. . . . No artist could create in his medium if there were not alive in him impulses springing from the spiritual world. This fact points to the seriousness of art,

standing alongside the seriousness of cognition and religious experience. It cannot be denied that our materialistically oriented civilization diverts us, in many ways, from the gravity of art. But any devoted study of true artistic creation reveals it as an earnestness of humanity's struggle to harmonize the spiritual-divine with the physical-earthly.³

We have a picture here of art as the bridge between science and religion, between the earthly and the spiritual, between thinking and willing. (fig. 4).



Figure 4. Art as the Bridge Between Science and Religion

Proper and Improper Art

James Joyce, the twentieth century literary giant, had a vision of the arts. He saw the arts as consisting of both proper and improper manifestations. But he saw two kinds of improper art. This distinction between two types of improper arts is most important. One he called “pornographic” because it seduces one, pulls one toward it and sells itself. The other form of improper art he called “didactic” because it wants to teach one a lesson, whether or not one wants to learn it. It is in-your-face, avant garde art, pushing itself on one. Didactic art is true but not pretty.

Pornographic art is pretty but not true (fig. 5).

Improper Art 1	Proper Art	Improper Art 2
Pornographic		Didactic
Pulls one toward itself. Seduces one into liking it. Sells itself. Pretty but not true.	A thin line of quiet. A state of aesthetic arrest.	Pushes one away. In your face. Tries to teach one a lesson. True but not pretty.
<i>Sympathy</i>	<i>Epiphany</i>	<i>Antipathy</i>

Figure 5. Proper and Improper Art

The arts have a special and serious mission of engaging us on three fronts. Pornographic art, not in this case necessarily referring to anything sexual, appeals through our feelings to our will, while didactic art appeals through our feeling to

our thinking. These are forms of art that go too far in the direction of the metabolic-limb or will experience on the one hand or too far into the nerve-sense or thinking process on the other. They do not resound fully within the rhythmic, feeling realm in which, as Joyce calls it, an epiphany in the stillness of the heart can take place. They do not achieve a state of aesthetic arrest.

No Art!

Imagine there is no singing, no humming, no musical instrument. Imagine there is no music of any kind in the world. Imagine there is no dance, no creative movement, no eurythmy. Imagine there is no theater, no acting, no drama. Picture a world with no drawing, no painting, no special effects, no animation, no graphic design of any kind. Imagine no stories, no poetry, no literature. Imagine no sculpture, no architecture, no buildings. What kind of world would this be? We have the ability to imagine this and yet it is unimaginable, because there is no such thing as a natural world without human beings in it. In very early times, says Steiner, people put their hands into cold water as it was about to freeze and as the water hardened they found that they could make forms in the freezing water. Art exists in nature as potential.

The Seven Arts

Rudolf Steiner gives a picture of how the various arts are related to one another and also how they are linked to a human being (fig. 6). Architecture is based on the laws of the physical body. Sculpture arises out of the laws of the vital, formative forces, or etheric sheath. Painting is based on the laws and activities of our sentient experience, our sympathies and antipathies, or astral being. These three arts, architecture, sculpture, and painting, are the spatial, formative arts, or the visual arts. The three arts that have to do with time, otherwise known as the performing arts, are music, drama, and dance. Music is an expression of the laws of the human “I,” or ego principle. Drama and poetry, the literary arts, and the art of speech formation, arise out of the laws of the Spirit Self, the self that arises when the ego transforms soul forces or astral being. When the

ego is able to penetrate and refashion the habit and temperament, transform one's etheric sheath, Life Spirit results. Dance, that is, a movement art like eurythmy, unfolds according to the nature of Life Spirit.

Beyond these six arts lies the new Social Art that arises out of the principle of a still higher spirit member of the human being, out of Spirit Man. When the physical body is permeated by the ego, is transubstantiated by the work of the "I-principle," then a truly human higher spirit results. A new art form is possible when our highest member, that is Spirit Man, works into our physical body. The seven arts are related to and intimately bound up with the sevenfold nature of the human being (fig.6).



Figure 6. Sevenfold Picture of the Arts

The Healthy Social Life

Rudolf Steiner gave Edith Marion, his first appointment to head the Visual Arts Section of the School of Spiritual Science, a verse that by extension could be said to be for all artists. It is called *The Motto of the Social Ethic*:

Healing only occurs when
In the mirror of the human soul
Is pictured the whole community,
And in the community
Lives the individual soul's strength.

The individual must become a mirror of the community and share his or her virtues and strengths with the community. The community allows every perspective from every individual to make up its body and to encourage the virtues and strengths of all its members. How does every individual become a mirror for the community? How does the community form itself around the

gifts of each individual? And why the "social ethic" for artists?

The late avant-garde performance artist and German professor of sculpture, Joseph Beuys, who died in 1986, extended the concept of art to what he called *social sculpture*. A controversial member of the Anthroposophical Society, he said, "Every human being is an artist, a 'freedom being,' called to participate in transforming and reshaping the conditions, thinking and structures that shape and condition our lives." Beuys' extended concept of art is that we are all creative artists continually working on our greatest artwork, the masterpiece of our own lives.

We are all called to respond, to be responsible, to have a response-ability as artists. By working with forms, shapes, gestures, colors, and tones we are working with elements in a way that is a preparation for a greater Social Art that is yet to come. One can speak about colors as qualities, activities, energies, personalities, and, finally, as beings. One can come to the "beingness" of colors. Through color and engagement with all other arts, we prepare for this greater Social Art. Art is practice for our social future!

Leo Tolstoy said:

The task for art to accomplish is to make that feeling of brotherhood and love of one's neighbor ... the customary feeling and the instinct of all people. The destiny of art in our time is to transform the realm of reason to the realm of feeling the truth that well-being for men consists in being united together, and to set in place of the existing reign of force that Kingdom of God, i.e., of love, which we all recognize to be the highest aim of human life.⁴

This is an earnest social task.

The Spirit-Filled Work of Art

In 1909, Steiner spoke words at the dedication of the first building that he had designed, in the village of Malsch, Germany. This building—a very small proto-type of the first Goetheanum—was a kind of esoteric clubhouse. This verse contains the seed of the Foundation Stone Meditation, which he gave years later:

With the laying of this foundation stone of the Malsch building we entreat the blessings of the Masters of Wisdom and the all-high and highest

beings of the spiritual hierarchies that are connected with earth evolution. We entreat that all of your power of spirit may stream through in harmony together with what is brought, felt, willed and done here. On this building may there shine the light of the spirits of the East; the spirits of the West may they reflect this light; the Spirits of the North may they strengthen; and the Spirits of the South warm it; so that the Spirits of the East, West, North and South may stream through this building. In pain and suffering our Mother Earth has become materialized. It is our task to once again spiritualize her, to redeem her, in that through the power of our hands we fashion a spirit-filled work of art. May this stone be a first foundation stone for the redemption and transformation of our planet Earth, and may the power of this stone work a thousandfold.⁵

How do we transform the world into a spirit-filled work of art? Ten years later, while lecturing about the first Goetheanum, Steiner said:

If ideas underlying such works of art find followers—then people, who allow themselves to be impressed by these works of art and who have learnt to understand their language, will never do wrong to their fellow men either in heart or intellect, because the forms of art will teach them how to love; they will learn to live in harmony and peace with their fellow beings. Peace and harmony will pour into all hearts through these forms; such buildings will be “lawgivers” and their forms will be able to achieve what external institutions can never achieve. . . . However much study may be given to the elimination of crime and wrongdoing from the world, true redemption, the turning of evil into good, will in future depend upon whether true art is able to pour a spiritual substance into the hearts and souls of human beings. When human hearts and souls are surrounded by the achievements of true architecture, sculpture and the like [painting, music, literature, drama and dance] they will cease to lie . . . will cease to disturb the peace of their fellow men . . . [B]uildings [art] will begin to *speak*, and in a language of which people today have not even an inkling.⁶

True art and architecture will in future have such a moral force as to reorient the intentions of people. Not improper pornographic or improper didactic art, as described by Joyce, but proper,

true art, with its “thin line of quiet,” will promote moral judgment worthy of a human being. Harmony and peace will flow through artistic forms and human capacities will be transformed.

“Art is the creation of organs by which the Gods may speak to mankind,” said Steiner. Art is an instrument by means of which the spiritual worlds may speak to us. It is one of the most powerful gifts humanity has at its disposal. Art must become the lifeblood of the soul for it awakens consciousness and it humanizes society.

Endnotes

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The Seven Cosmic Artists

An Artistic View of Child Development

Magda Lissau

What power expresses itself through imagination? To understand this, let us look at childhood. . . . Free, creative imagination does not yet live and manifest in the child. . . . [I]magination lies hidden in the child; he is actually full of it. . . . In the shaping of his own organism the child is inwardly the most significant sculptor. . . . The child is also a musical artist, for he tunes his nerve strands in a distinctly musical fashion. To repeat: Power of imagination is power to grow and harmonize the organism.¹

— Rudolf Steiner

Waldorf education, education that follows the understanding of Rudolf Steiner, has its origin in a particular view of a human being as a being of body, soul, and spirit. In many of his lectures to teachers, or prospective teachers, in Waldorf schools, Steiner emphasized that we cannot understand Waldorf education unless we look at the human being from the viewpoint of spiritual science. We need to look at human beings as living before birth in spiritual worlds, and as having lived previously a life on earth incarnated in a human body of flesh and blood. Moreover, after death, human beings will again sojourn in realms of spirit, and work on their future lives and future tasks. They will do this both with the human souls with whom they share a destiny and with angelic beings, beings who are more highly developed than are human beings at this particular stage of earth evolution.

These views lead to a view of child development that is different from a traditional one. Processes that we may observe in early childhood, elementary school years, adolescence, and early adulthood gain a changed emphasis. Encouraged by several of Steiner's remarks, I would like to pro-

pose one particular way of considering the process of development.

In a lecture of December 29, 1914,² Steiner brings the arts into relationship with each part or body of the essential human being, including those parts or bodies that are already developed and those that are in preparation for future development:

Art	Respective Human Body
Architecture	Physical Body
Sculpture	Life Body (Ether Body)
Painting	Consciousness or Movement Body (Astral Body)
Music	Ego (Eternal Self)
Poetry	Spirit Self (Not fully developed)
Eurythmy	Life Spirit (Not fully developed)
The 7th Art	Spirit Human (Not fully developed)

Steiner emphasized that we cannot understand Waldorf education unless we look at the human being from the viewpoint of spiritual science.

Steiner also discusses, in this lecture, how one part of the human essence, for instance the ether body or life body, works down into the more perfected part, in this case the physical body, and that a mode of the respective art is used in that interaction. For example, the life body works into the physical body using sculptural principles. Life principles of the ether body transform the art of sculpture into the physical body of a living entity. The physical body itself,

through architecture, uses the materials and structural laws—such as gravity—of the external, physical, natural world. When we look at the higher constituent parts of human beings, however, much development lies far in the future. Steiner declares at the end of this lecture that, in the future, yet other arts, at present not yet imaginable, will come into being.

The above schema provides signposts for understanding children's development. I will elaborate on how this is so in the following pages.³

Developmental Periods

Steiner frequently mentions developmental periods of about seven years in length, but he also mentions divisions of each of these seven year periods into thirds of roughly two-and-a-third years each.⁴ I propose that in the middle period of each of these seven year cycle there is an event of great importance, one that manifests in the possibility of acquiring new faculties.⁵ The middle period of each seven year cycle invites a Cosmic Artist to begin working toward the incarnation of a child into her or his body. Each such event marks the gentle beginning of an essential aspect of human development. These new faculties in human life inspire artists and, when seen in the light of child development, they hint also at the broadening and deepening of human capacities and perception in general. During these middle periods, as well as at the beginning of each seven year cycle, a new feeling quality, a balancing quality—essentially an artistic quality—arises.

Cosmic artistic forces that accord with the art and artistic quality at work become effective every three-and-one-half years, and last in initial impact for seven years. These cosmic artistic impulses continue on in life, of course, and, in some cases, also manifest in a simple form earlier than we might predict. They set faculties in motion, initiated at certain points of a child's or adolescent's life, and impart specific capacities. Once born, these are now up to the individual to foster and develop.

1. The Cosmic Being of Architecture: Cosmic Morphology

From whence does the newborn child receive its human form? From whence come imperfections

and gifts?⁶ Whence comes the matter that builds up a human body? An individual prepares his or her particular form—not without help from the spiritual world—before birth. As Steiner indicates:

Here on earth we carry a body made of bones, muscles, arteries and so forth. Then, after death, we acquire a spiritual body, formed out of our moral qualities. . . . For what lies inside of man is the whole spiritual cosmos in condensed form. In man's inner organism we have an image of the entire cosmos. . . . The human being, who has undergone after death all the states described by me previously, now becomes manifest to the vision of Man himself. The human being is a spirit among spirits. Yet, what he sees now as his world is the marvel of the human organism itself in the form of the universe, the whole cosmos. Just as, on earth, we build machines, keep books, sew clothes, make shoes or write books, thus weaving together what is called the content of civilization, of culture, so above, together with the spirits of the higher Hierarchies and incorporeal human beings, we weave the woof and weft of

mankind. We weave mankind out of the cosmos. Here on earth we appear as finished products. There we lay down the spiritual germ of earthly man.⁷

Steiner's views, considered impartially, can help our understanding of a child's first moments, weeks, and months after birth. From the moment of birth, many influences bear on us, including influences from our physical and psychological environments. A child's own forces, however, hidden deeply within her or his being, take hold of the body and form it to its purpose.

Spiritual forces shape our physical being. The Cosmic Being of Architecture helps human beings to shape the houses within which they will lead their lives. Just as a house or a place of business or worship has particular structures—such as windows, doors, plumbing—our body, as the temple of our soul, also has particular features.⁸

For this reason I regard the cosmic forces that underlie architecture as the first formative forces for human beings. I deliberately use the word cosmic because these forces are active prior to birth. Architecture makes use of physical building materials, but architecture also requires detailed plans in order for builders to construct a building. The work that human souls undergo and in which they participate in spiritual worlds between earth lives may be seen as the making of architectural plans. We find elements of the physical world in the human body, but they are placed organically, marvelously, according to a plan. In the words of Rudolf Steiner:

Hence the body, the envelope of the soul, which clothes the ego, which is inhabited by the ego, is described as the temple of the ego within, the temple of the divinity dwelling in man, the temple of God. When, therefore, you form this body, you are building a future temple, that is to say, the new incarnation of the Earth.⁹

2. Perfecting the Human Body: The Cosmic Sculptor

Children don't merely grow, they also perfect the forms of their bodies. These forms become ever more capable of fulfilling human capacities, such as upright, balanced posture; speech; and personal memory and thinking. Steiner says:

. . . [A] supersensible contemplation of man will reveal to us, apart from his physical body, another finer body which we have called the ether body or the body of formative forces. From this ether body spring not only all the forces sustaining nourishment and growth, but it is also the source of the faculties of remembering and of making mental images, of ideation. It becomes an independent entity only during the change of teeth, at which time it is born in a similar way in which, at physical birth, the body is born from its mother. This means that up to the change of teeth the forces of the ether body are entirely working in the processes of the child's organic

growth, whereas after that time – though still remaining active in this realm to a great extent – they partly withdraw from these activities. . . . If we observe the gradual withdrawal of some of these ether forces until approximately the seventh year, we can see how in the first two-and-a-half years after physical birth the ether body frees itself from the head region, how in the following two-and-a-half years it frees itself from the chest region and finally, up to the change of teeth, from the child's metabolic and limb system.¹⁰

What might Steiner mean when speaking about an ether body that “frees itself from the head region, . . . from the chest region and finally, . . . from the child's metabolic and limb system”? Once a region is free, then that region's inherent forces and capacities come into play in a different form from that in which they existed previously. Although the sequence mentioned here occurs from the head down, that is not always the case.

In the case of the ether body of formative forces—the domain of the Cosmic Artist of Sculpture—the fact that it finishes first with the head region means that some of the finer formations of the brain, of the larynx, and of some of the sense organs are sculpted and near completion according to the requirements for this particular life, this particular individual.¹¹ A bit later, between two-and-a-half and five years of age, during the time when the ether body is working on the heart, lungs, and rhythmic system, the child opens itself to the next Cosmic Artist. Finally, during the last two-and-a-half years of its primary sculpting activity, the ether body finishes details of the limbs and the metabolic or digestive organs.

So the primary importance of the Cosmic Sculptor is to fine-tune the physical body, to

So the primary importance of the Cosmic Sculptor is to fine-tune the physical body, to ensure that all organs work the way they need to work to provide for the physical health of the incarnating human being.

ensure that all organs work the way they need to work to provide for the physical health of the incarnating human being. Anyone who observes carefully the growth of physical capacities, and also the concomitant awakening of mental capacities, will recognize, by direct observation, this fine-tuning activity of the ether body. Once the

ether body has finished its tasks in the head region of the infant, then mental capacities of language and, particularly, memory become possible.

Once the fine-tuning activity of the middle region of heart and lungs is accomplished, the possibilities for more detailed memory pictures arise; more on this to follow. And once the fine-tuning activity has been completed for the rest of the body, physical capacities of movement, endurance, and strength are enhanced. When the ether body has touched on all internal organs, checking their function and their life-sustaining capacities, after the approximate age of seven, certain childhood illnesses may arise. Steiner discusses these childhood illnesses as crucial experiences for the awakening personality, in that, through these childhood diseases, hereditary traits may be discarded. The child begins to come into its own, assuming its own body as a tool of its own individuality. Vaccination and other medical intervention to prevent these childhood diseases, then, may be seen as preventing the development of strong personalities.

The ether body, touching all parts of the physical body in sequence, enables a child to become a perfect imitator. (Steiner speaks on one occasion of the achievements of the first three years, of the first deeds of physical existence—uprightness, language, and thinking—as given to human beings through the Christ.¹²) As adults, when we sculpt, we use the qualities of the ether body, its inherent imitative capacity, to bring our ideas to life. From classical sculpture up through recent times, the human body was the main object of the sculptor. When, in the course of the twentieth century, sculptors began to make abstract sculptures, many individuals found these peculiar and inexpressive. We appreciate sculptures based on the human body because our ether body is an imitator, and we recognize universal human forms. Because of this imitative capacity, adults who work with, or spend time around, small children must act and speak morally:

Therefore education during these first two-and-a-half years should be confined to the self-

education of the adult in charge who should think, feel and act in a manner which, when perceived by the child, will cause it no harm.¹³

The apocryphal gospels mention an incident in which the Jesus child makes twelve sparrows of clay on the Sabbath, makes them live and fly forth. Such a story relates sculptural activity to life, to the ether body.

3. Picturing Capacities: The Cosmic Painter

Around the age of three young children develop the capacity to picture inwardly what they experience and observe in their surroundings. This capacity, as is appropriate for the age, relies to a large extent on imitation. When small children play, they often imitate, or mimic, the adult world.

Three- and four-year-olds who are having a tea party in the sandpit; imitating bus drivers or daddy driving the car; imitating the dog chasing a squirrel; imitating mother cooking; imitating father painting the house. This imitation takes place when a child imitates, repetitively, movements and words that adults use in performing their actions. These motions and words are usually fairly exact copies of the adults' words and actions. Sometimes, these are quite amusing, but often they are irritating to adults, who do not

[C]hildhood illnesses [are] crucial experiences for the awakening personality, in that, through these childhood diseases, hereditary traits may be discarded.

understand the need of these young children to instill what they observe into their own memories, and so strive, through their repetitive actions and words, to engrave visual and verbal memories ever more deeply. In imitating, young children are practicing memory. When young children imitate their

elders, they carry memory pictures away from the location of the actual occurrence, transplant the imaginary event to another location, and then continue to re-live, re-experience, re-construct, and thus re-member the event. They place themselves in the center of this living memory picture. In other words, they are able to have an inner picture, one that they carry with them.

This new capacity to picture the world around them may be attributed to the inspiration

of the Cosmic Painter. His gift enables children from the age of three or so on to picture, in their minds and their souls, either a physical event or object, or an imagined event or object. Dreams reveal a similar process—an often jumbled concoction of real events or objects thrown together with imagined events or objects. Small children often have vivid recurring dreams or nightmares at this age.

According to Steiner's description of the arts, the astral body—the movement and consciousness organization of the human being, an entirely non-physical part of the human makeup¹⁴—works into the life organization to express itself in the art of painting. A picture is not a reality. Artists, at least the great artists of the past, designed their paintings in accordance with the artistic traditions of their age in order to bring a particular content to the viewer. This content is an intention, living in the astral organization, that imprints itself into the life organization.

This life organization of the human being, like all living entities in nature, obeys laws in its functioning, experiencing rhythms in time and in space. The life organization is also related to the liquid element, to water. Consciousness working into a plane of liquid—that is the painter's art.¹⁵

The capacity to have visual memories enables a child, at a later stage of development, to pull or form precise memories from a flexible, one might say, fluid, pool of memory.¹⁶ Young human beings begin to paint, as it were, into their fluid organization their memory pictures of observed events. Human understanding is intimately bound up with this memory pool. Throughout life, we rely on accurate memory capacities. We cannot learn to read, write, or do arithmetic without an accurate memory pool. The best preparation, then, for later academic learning is to develop visual and aural memory through the natural tendency of children to imitate their environment. The environment, however, must be worthy of imitation. An environment immoral in action and attitude defiles the essence of humanity; small children are forced to imitate what will hinder their development as worthy members of humankind.

All learning from school age on needs this picture-forming capacity. Without it, the imagination of a child will not become active; with it, truly remarkable creations of imagination may take place.

4. Rhythm, Number, Voice, and Harmony: The Cosmic Musician

Steiner repeatedly discusses music in his pedagogical lectures. According to Steiner, the human astral body—the consciousness and movement organization of the human being—is built up primarily by musical elements, beginning in a child's seventh year:

The best preparation . . . for later academic learning is to develop visual and aural memory through the natural tendency of children to imitate their environment.

. . . [C]ertain of these forces begin to work more in the child's soul and spiritual realm, affecting especially the rhythmical movement of heart and lungs. . . . It [the child] has a real longing for this interplay of rhythm and beat in its own organism.

Consequently the adult must realize that whatever he or she brings to the child after the change of teeth, has to be given with an inherent quality of rhythm and beat. . . . If, at this stage, the rhythm of breathing and blood circulation is not treated in the right way, the resulting harm may extend irreparably into later life. . . . At this stage the child's muscles vibrate in sympathy with the rhythms of breathing and blood circulation, so that the entire being of the child takes on a musical character. . . . [N]ow the inner musician begins to work, albeit beyond the child's consciousness.¹⁷

Music demonstrates a threefold division—rhythm and measure; harmony; and melody. The Cosmic Sculptor works down from the head, through the rhythmic system, and into the metabolism and limbs. The Cosmic Musician, by contrast, whose function is to establish the nervous system as servant of the human mind, as servant of an individual's will, feeling, and thinking, works from the limbs and metabolism upward toward the head. As teachers, we are faced with the necessity to aid the development or perfection of the nerves of the limbs of a child from approximately seven to nine years of age. The first com-

ponent of music, rhythm and measure, is of vital importance beginning roughly at age seven. Teaching must engage students appropriately with rhythm and measure, which are best experienced through movement of the limbs. Fundamental facts of math, for example, may be memorized effectively via rhythmic movements. Every subject taught during the first years of elementary school needs to be taught, not in an abstract vacuum, but through engaging movement.

On a personal note: In 1975 I had the privilege as part of a year-long sabbatical from Michael Mount Waldorf School in Johannesburg, South Africa, to travel to many schools in Europe. In many locations I saw students even in Waldorf schools seated during main lessons, not moving, listening to the instructions of their teachers, but not experiencing the content of the lessons through their own movements. At that point I resolved to become a missionary of movement.

I further based this on the following teaching experience: Inspired by Max Stibbe, a Waldorf school pioneer in South Africa, I had begun to teach primary subjects first of all through movement; I followed this with artistic and feeling-emotional expansion, and, finally, toward the end of the subject block, by stimulating intellectual conclusions. I had practiced this for the elementary grades, although in the higher grades the movement portion became shorter. I intended to prove to myself that an initial experience of movement would form the basis for awakening the intellect, as Steiner describes.¹⁸ I concluded that, indeed, when introducing subjects through movement, students are engaged, memory is strengthened, and thinking capacities are aroused.

During the second seven-year stage of development, the soul capacities of will, of feeling, and of thinking develop from their home in the human astral body, making it apparent that music will help us best to guide our students.¹⁹

If people work physically, they move their limbs. That means they swim totally immersed in the spirit. This is not the spirit dammed up in that person, it is the spirit outside. . . . Rather, what is important is the extent to which people are purposefully active. Purposefully active—these words must permeate us if we are to teach children.²⁰

Purposeful activity may include not only dance and eurythmy, but also the enactment of a usually abstract subject or process, such as arithmetic. It depends on the ingenuity of the teacher to transform such an abstract subject into a movement experience—so that education is experienced, is enlivened.

Melody is, in its purest form, a single voice. A melody is like a sentence or a statement. Our inherent musical capacity enables us to complete a melody even if we hear only the first two or three bars. In this relation of melody and sentence we see the work of the next Cosmic Artist.

The crisis that children may experience around the age of nine or ten is also a herald of the next Cosmic Artist. This crisis appears in the middle of the second seven-year stage when the melodic element is important. The crisis is due to a newly awakened capacity for critical discernment, and no one, not teacher, parent, classmate, other adult, or the world in general, is exempt from critical appraisal. This critical appraisal, moreover, is directed toward the child itself. The appearance of this capacity for critical appraisal signifies the awakening of self-experience, self-respect, and separation from the world at large. Parents and teachers need to understand this crisis as a vital step toward selfhood. Adult understanding of students in this transformative stage is essential, because students expect adults to understand what they undergo. Because this awakening selfhood announces itself during the melodic stage, we can say that from this age on each individual is singing her or his own song. The full expression and potentiality of the new capacity will reveal itself only when we consider the next Cosmic Artist. Social life becomes more important toward the end of the elementary school years when students' voices begin to change. Students begin to understand consciously working with others and the social context of their actions, feelings, and insights. Context—or harmony—becomes important during this last phase, approximately between twelve and fourteen years of age. This is also the stage at which students begin to gain intellectual understanding, begin to develop the rationality expected of adults.

Musical experience is, among other things, related to what Steiner often describes as the

“outside” spiritual world, the world in which the planets are related in musical ratios, the harmony of the spheres, according to Johannes Kepler. In ancient times, the strings of lyres (I suspect also of other instruments) were tuned in such a way that the bass string was related to the earth element, the next string to the water element, the next string to the air element, and the last string to the fire element—thus linking music directly to the cosmos.²¹ When we use music in our teaching or when we bring musical elements to subject matter in purposeful movement, we relate our students to the world, to the macrocosm, and to the world of the spirit around us.

5. Poetry and the Power of the Word: The Cosmic Poet

A human being is born four times. The first birth, physical birth, is obvious. The birth of the ether body, as Steiner repeatedly asserts, takes place around the change of teeth. The astral body—the movement or consciousness organization—is born at about fourteen years of age, and the ego—the eternal essence of an individual—is born at about twenty-one years of age. The first two births place a human being firmly on and into the physical world of earth, of space, of time, and of nature, but the latter two are purely spiritual. They leave the earthly physical and ether bodies behind during sleep, for example, and experience purely spiritual events while out of the physical body.

At the crisis we are considering, around age nine, human individuality turns or reorients itself. In the first years of life, when physical and ether body become established, a child is oriented toward the past—that is, toward past incarnations as well as toward her or his sojourn in spiritual worlds before birth. Around age nine, a change of direction, a turning toward the future takes place. From about the ninth year on, a child becomes alert to the physical world, enters more deeply than before into sensory experiences, begins to reason, and thus, rejecting or confirming the world around in critical appraisal, begins to assert her- or himself. In other words, the individual now begins to experience her- or himself as the center of the present incarnation. We may picture this turn-around as a yin-yang figure, with the past coming into the center, and the future radiating from it.

This critical turning point sees the influx of the Cosmic Poet, or the Cosmic Word. The power of language, the power of poetry, the power of individual expression now becomes a possibility for the student. Aspects of grammar, of writing, of spelling, of reading may have been learned previously, but the possibility of using language as a tool of individual expression, and thus of becoming creators of a new world, becomes achievable. Not every child is gifted enough to create poetry, to write potent stories of imagined events or retellings, or to write moving letters, but many do. As with the other Cosmic Artists, the Cosmic Poet endows with power the language a child uses. Circumstance determines how this power of language is grasped and utilized for individual expression.

One might also consider that the power of the Cosmic Word is a power expressly manifest in human beings. While scientists may teach apes sign language, and some animals may understand some words (or simply respond to the emotional essence), speech organs are unique to human beings. Language provides the uniquely human ability to create a commonality with other human beings; to understand and to be understood; to be social.

Human beings express their individuality in their particular language, and this gift is with them as they turn to the future, to how they will live this life, how they will bring their spiritual potentiality to physical expression. One example from a Waldorf school curriculum may suffice to illustrate this point: In fourth grade, stories are often taken from Norse mythology. The stories of gods and giants, dwarfs and men are exciting. The story of the Norns who spin the lives of men is relevant here as children confront their own destinies. The Norse myths may be used to teach the correct forms of past, present, and future verbs. They can also yield recitations of alliterative poems, which emphasize repetitive sounds. These alliterative poems give teachers the opportunity to accompany recitation with strong movements. From movement and recitation through grammar to destiny, Norse myths relate mundane and cosmic in developing children.

According to Steiner, whatever relates the human being to her or his higher senses, especially what expresses itself in the higher arts, is connected to the working of the time spirits—they

work into our sense of hearing; while thinking, we are connected to the working of the archangels; when exercising our capacity of memory we are permeated by the world of the angels; and when using our ego, our individuality, we make the fullest use of our physical body. . . . Simply through the human constitution we are in continuous relationship to spiritual worlds.²² It is crucial for human beings to regain the consciousness that spiritual beings give the gifts of memory, intelligence, and sense perception, gifts that allow us to become truly human.

6. Dance and the Power of Building Community: The Cosmic Dancer

The next Cosmic Artist begins working on the adolescent around the age of fourteen. At that time it becomes essential that a person learn to work with others. What better way to learn to adjust to others than to move together in a dance, in eurythmy? The success of a dance or drama depends on split-second timing; its enjoyment depends on a group-awareness; its satisfaction depends on the performers' social awareness. If students work together in practical and artistic endeavors in high school, they will develop a social conscience. The lack of this social conscience, unfortunately, is woefully obvious in today's youth worldwide.

What does the Cosmic Dancer develop? The future quality of what Steiner calls the "life spirit" working into the individual, the "spirit self." At the present stage of human development the life spirit is a distant promise, not yet a fact. It is a promise that the capacities of life sustaining processes may be controlled, ordered, and directed by individuals themselves. The natural rhythms of life that develop when working with others in harmony may eventually transform into a capacity for guiding our own life processes.

It will soon be essential that human beings demonstrate a social conscience. Today we are training for it; today's problems—social, econom-

ic, or political—provide the training ground; today, we are challenged to heed our social conscience. Materialism—and the egotism that results from it—provide challenges to the emergence of a social conscience. Nevertheless, a social conscience is needed, and its development is facilitated by the practice of dance, eurythmy, and drama in the formative years from fourteen to twenty-one.

The human ego, preparing to work into the social fabric from about eighteen years of age, also develops as it works into the astral body in these years. In contrast to the astral body, which takes hold of the physical nerves along the paths of limbs, chest, and, finally, head, the ego begins with the head. Teenagers, through intellectual rationalizations, seem to be able to disprove everything that adults state. The self, as with the ether body, again incarnates from the head downward, so logic lights up first, and with it the endless and provocative ratiocinations of adolescents.

Then, in the middle years of this period, from about sixteen to eighteen, the battle for emotional equanimity is joined. Now it is crucial that the ship of the self is not wrecked by emotional insecurity, wild desires, or unattainable goals. Gradually, maturity of the feeling life, of the social conscience, has to be established for future well being, for future functioning in the adult world.

At this stage, adolescents are most at risk and are highly influenced by the environment. They fight a battle for balance, which, for many individuals, continues into adult life. They must find the middle ground between fear and rage, between the bestial and the arrogant, for example.

The third phase of adolescence has to do with the application of the human will. Work in the larger community, in whatever form, helps expand the reach of individual will. It is a challenge to carry out what the self desires. Another challenge is to prepare for one's future, to picture oneself in a future profession, to find a star to follow. This phase begins at the end of high school, when adolescents begin seriously to consider their

It will soon be essential that human beings demonstrate a social conscience. Today we are training for it; today's problems—social, economic, or political—provide the training ground; today, we are challenged to heed our social conscience.

futures, and when role models become ever more important. High school teachers need to introduce worthy role models to their students as preparation for coming adulthood. In this way, young women and men prepare for the dance of life.

7. Who Are We? The Cosmic Self-Development Artist

During the years of adolescence the eternal self begins to mature in preparation for the earthly self, the ego, which is born at about twenty-one years of age. In the middle years of adolescence fundamental questions arise: Who am I? What am I supposed to do in the world? What is my mission? What is my task? These questions may arise, largely unconsciously, well before the age of twenty-one. Maturity, however, raises a corollary question: How will I go about becoming who I want to be?

The twenties yield the possibility of acquiring knowledge and expertise but do not demonstrate the assurance and certainty shown by more mature persons. This is also the period of life when, traditionally, learning takes place in universities and apprenticeships. While the self has come to a realization of him- or herself as a person active in the world at large, much fine-tuning is required during one's twenties.

From twenty-one to twenty-eight years of age, the eternal self faces the challenge of permeating as fully as possible that part of the human soul which Steiner characterizes as the sentient soul—an extension of the astral body:

The sentient soul not only receives the impressions of the outer world in the form of sensations but also has a life of its own that is fructified both by sensations from one side and by thinking from the other.²³

Now thinking verifies the tasks that the eternal self chooses as its work in the world. Often, but not always, during these years we meet those who become our life teachers or mentors. The future beckons, training ceases, we begin to make our own lives. Our own goals become the star that guides us into the future.

Conclusion

The Cosmic Artists continue their work after our twenties, but now they transform themselves from agents of bodily and soul development to agents of renewal and rejuvenation. We can experience this through the practice of their arts.

In his second lecture to those who would work with severely challenged children, Steiner explained that, through their own efforts, these teachers would be able to effect changes in those children whose fundamental organization is lacking, who are not able to progress in the same way, or with the same speed, as most other human beings. Steiner explains that, in order to further physical bodily development, a teacher's ether body should have a healthful effect. To further the development of a student's ether body, a teacher's astral body should exert itself in self-development. In order to ameliorate what lives in a student's astral body, a teacher's ego must work on itself. And, in order to have an effect on a student's ego, a teacher's spirit self—though not yet fully developed—is called upon. This spirit self often shows itself in all that lives in humanity at large as moral impulses.²⁴

As adults, we may work on our own development and we may learn from each other. Something that is well developed in a friend, acquaintance, or co-worker may influence a part of us. Community develops in this way. And it is in this manner that the arts may have a healing and rejuvenating effect on human beings. The Seven Cosmic Artists, who help all children to develop toward their adult lives in the service of humanity, show us by their unwavering example that as teachers and as parents we help growing children when we strive to develop ourselves, using the gifts of spiritual worlds, to the best of our ability.

Endnotes

1. Steiner, Rudolf. *The Arts and Their Mission*, Lecture 8, Oslo, May 20, 1923, CW 276, Spring Valley, NY: Anthroposophic Press, 1964.
2. Steiner, Rudolf. *Art in the Light of Mystery Wisdom*, CW 275, London: Rudolf Steiner Press, 1970.
3. I have lectured about this particular description of child development, but here these ideas are presented in writing for the first time.
4. Steiner, Rudolf. *Soul Economy and Waldorf Education*, CW 303, Spring Valley, NY: Anthroposophic Press, 1986, particularly chapters 7 and 9.
5. See below regarding artistic impulses related to the heart-lung rhythmic system.
6. We do not denigrate here the importance of genetics. But scientists themselves have doubted that genetics also determines the form, the morphology, of living beings. See, for instance Weihs, Thomas J., *Embryogenesis in Myth and Science*, Edinburgh: Floris Books, 1986.
7. Steiner, Rudolf. *Man's Being, His Destiny and World Evolution*, CW226, Hudson, NY: Anthroposophic Press, 1952, Lecture of May 17, 1923.
8. Third grade students in Waldorf schools, when learning about houses and buildings, often express their recognition that buildings are like human bodies.
9. Steiner, Rudolf. *The Apocalypse of St. John*, CW 104, Chapter 9, London: Rudolf Steiner Press, 1977.
10. Steiner, Rudolf. *Soul Economy and Waldorf Education*, op. cit., Chapter 7.
11. Small children clearly see, hear, and experience their surrounding differently than adults do; for instance, many small children have invisible companions.
12. Steiner, Rudolf. *The Spiritual Guidance of the Individual and Humanity*, CW 15, Hudson, NY: Anthroposophic Press, 1974.
13. Steiner, Rudolf. *Soul Economy and Waldorf Education*, op. cit., Lecture 7.
14. Steiner, Rudolf. *Theosophy*, CW 9, Anthroposophic Press, 1994, gives a detailed descriptions of the parts of a human being.
15. In the first book of the *Bible*, Genesis, the spirit of God hovers over the waters.
16. Steiner, Rudolf. *The Destinies of Individuals and of Nations*, CW 157, London: Rudolf Steiner Press, 1986, lecture of March 16, 1915.
17. Steiner, Rudolf. *Soul Economy and Waldorf Education*, op. cit., Lecture 9.
18. Steiner, Rudolf. *Foundations of Human Experience*, Hudson, NY: Anthroposophic Press, 1996, Lecture 11.
19. I have described these techniques in some of my other books, *The Temperaments and the Arts* and *Awakening Intelligence*, both published by AWSNA.
20. Steiner, Rudolf. *Foundations of Human Experience*, op. cit., Great Barrington, MA: SteinerBooks, Lecture 13.
21. Paraphrased from Rudolf Steiner's *Occult Signs and Symbols*, CW 101, Lecture of December 28, 1907.
22. Paraphrased from Rudolf Steiner's *Spiritual and Social Transformations in the Course of the Development of Humanity*, CW 196, lecture of February 13, 1920.
23. See Rudolf Steiner's *Theosophy*, CW 9, Great Barrington, MA: Anthroposophic Press, 1994, Chapter 1.
24. See Rudolf Steiner's *Education for Special Needs*, CW 317, London: Rudolf Steiner Press, 1998, Lecture 2.

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Rudolf Steiner

In the autumn of 1923, Rudolf Steiner gave a lecture at the Waldorf School in Stuttgart concerning the forces which lead to health and to illness in education. He raised the question: Which forces do we really use in pedagogical work? He then continued as follows:

Fundamentally, this question cannot be answered from the usual present day point of view. We can indeed say that the outer life in which we stand demands of man that he do something which as a child he could not do by himself and which must be taught him. It demands, perhaps, also the attitude which we must take as adults in order to help the child accomplish through education those things which he could not achieve alone. The answer to the question, however, "Why do we educate?" remains to a large degree external today because as grown-ups we do not find such great value in what we ourselves have become through our own education. We do not look back with deep gratitude on what we received through instruction and education. Ask your own heart whether this gratitude is always alive.

Surely single instances will be found, it is true, but on the whole we do not think with deep gratitude about our own education, about our own instruction, because we do not fully grasp the importance of what education truly is, what instruction truly means, which forces of the human being's nature must truly be made active. For this reason it is so difficult today to arouse pedagogical enthusiasm in people. Basically, all our methods in education, even the most ingenious and thoroughly elaborated methods, have for this reason only a limited value. For the answers to the questions, "How do we do this? How do we do that?" have only a limited value. What is of the greatest value,

If we wish to be true teachers, the greatest value . . . is that we have enthusiasm in our activity, and can also fully develop this enthusiasm in our work.

however, is that we have enthusiasm in our activity, and can also fully develop this enthusiasm in our work, if we wish to be true teachers. This enthusiasm has a contagious power and it is this alone that works wonders in teaching. The child follows willingly this enthusiasm, and, if he does not follow the teacher, it is usually an indication that this enthusiasm is lacking.

Often in classes, or in the whole work of a school, one sees a certain heaviness, and this heaviness must be overcome. Such heaviness can also express itself in an artificial enthusiasm. Yet this can never accomplish what is needed, but only that kind of enthusiasm which is kindled out of the way in which we ourselves enter into the material we are dealing with in the classes. And here it is necessary that we work toward the development of a special kind of consciousness.... This we can do only if, deeply in our own hearts

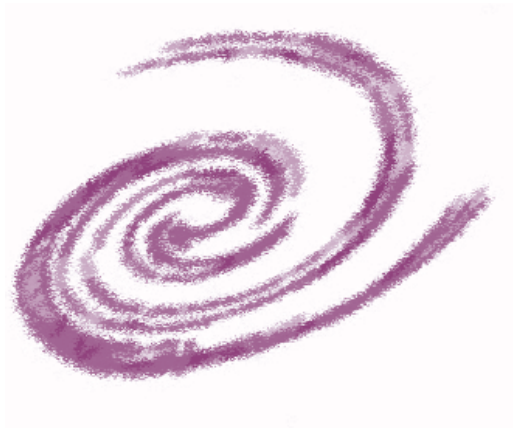
and not merely in external phrases, we come directly to a true experience of spiritual values in the field of pedagogy. Yet, again, we shall only be capable of this if we have a clear understanding of what has been lost in the education of the present time, has been lost for the past three or four hundred

years, and must be found again. What has been lost is the knowledge that, in reality, man, when he comes into the world, is essentially a being who needs to be healed. It is this connection between education and healing which has been lost....

Throughout the Middle Ages there was indeed a radical belief that man, as earthly man, is ill and that he must be made healthy, ... that something must be done to make man truly man. This is subsequently discussed today, but in much too conventional a manner. There is much talk about raising man to a higher level, but it is abstractly and not concretely dealt with. To be concrete

means actually to bring the activity of teaching into direct connection with the activity of healing. When a sick person is healed, we know that something has been accomplished. When a person is made well, he is raised to a higher level, to that of a normal, healthy human being. It may sound unreasonable to say that from the point of view of the higher nature of man there is something of the nature of illness in the fact that we have continually to battle with the forces of the body until death. But without such a radical conception, we cannot find our way through to the reality of what education means. In education there must be an element of healing.

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Nurturing Human Growth

A Research Strategy for Waldorf Schools

Aksel Hugo

The development of Waldorf education is not conceivable without the development of a culture of research that is in touch with the core of Steiner's pedagogical impulse. What does this mean? It means that we need a research strategy for Waldorf education. And it means that this strategy must be meaningful to the public, to Waldorf teachers, to Waldorf schools and the school movement, to Waldorf teacher training institutions, and to the Pedagogical Section of the Anthroposophical Society.

Why: The Purpose of a Research Strategy

Ultimately, we need public research in order to discuss Steiner education in a world in which education—lifelong and flexible—is a growing focus of attention for governments and for businesses. The survival of Steiner's impulse for a genuinely human and humane education relies on such a dialog. The more immediate aim is to develop a culture of research and inquiry among teachers and Waldorf schools. A strong oral culture of educational practice based on dialog, one that may be built upon, exists in schools. It needs, however, to be voiced and embedded in a continuous written culture of inquiry.

The aim of the Master's Degree Program in Oslo, Norway is to develop students' independent research capacity in the context of the two cultures of research mentioned above—oral and written. In addition, research activity among staff members and related to program activity is crucial. What holds true for our Nordic program, schools, and community, we believe, also holds true elsewhere.

What: The Profile of a Research Strategy

Referring to Wittgenstein's critique of how academic institutions tend to create a conceptual world that loses contact with lived experience in the field of activity it is meant to serve, the

Scientific Committee pointed to the inherent danger that the Master's Degree Program, in its approach to research and education, may lose contact with the culture of education, embedded in Steiner schools, that it is meant to serve. Put in simple words, there is a large danger, when establishing academic activity in Waldorf education, of creating a conceptually closed world and losing contact with the "ground"—the life world of the schools—and with "heaven"—Steiner's educational impulse. It is in danger of becoming blunt, of shaping an academic profile out of what is expected and commonplace.

Taking Steiner's epistemology¹ as a point of departure, four methodological qualities may shape the identity of a research strategy:

1. An Extended Concept of Action

A first characteristic of our research profile is an expanded concept of action research. In contemporary educational research, action research is not so much a method as a general approach to research. The basic idea is to involve practitioners by offering cooperation between them and a team of researchers. Practitioners pose questions from their experience, questions that are often of a practical nature, such as, how can we achieve this or solve that? The researchers then transform these questions, if necessary, into questions for research; that is, what do we need to know in order to be able to achieve this or solve that? The next step is to choose the appropriate research methods, which could be anything from statistical tests to qualitative, in-depth interviews.

Our extended concept of action research further includes an ever-closer link between researchers and practitioners because they will be, ideally, the same persons. The first step in this extension is to see the relevance for research of Schön's notions of reflection-on-action and reflection-in-action.²

A second step is to extend the concept of action and see that a human deed or practice

does not necessarily consist merely of outer action, bodily doing or speaking, but may include “inner attentive action” connected to soul and mind. This realization establishes a link to Steiner’s philosophy of spiritual activity as he presents it in *Philosophy of Freedom*.³ The extension of the concept of practice to include the movement of attention that is embedded in all activity of sensing and thinking shows how the core of scientific activity itself is spiritual.

The realm of practice connected to spiritual life is thereby opened for inclusion in the ontology of science. A third step, on this basis, is to extend Schön’s methodological concept of reflection-in-action to analyze the structure of this pure attentive activity through self-observation.⁴

2. An Extended Concept of Observation

Building on the tradition of phenomenology, current pedagogical research extends the concept of observation in educational research to include qualitative inquiry⁵ and individualized research design.⁶ Research connected to creative arts and therapy takes this approach one step further and introduces the concept of “art-based research.”⁷ A research strategy in Waldorf education must focus on the fruitful interplay between the science and the art of education. The intimate relations between art and science are both implicit and explicit in Steiner’s theory of knowledge⁸ and point to reappraisal of Goethe’s scientific method⁹ and Schiller’s aesthetic framing of education.¹⁰

The phenomenological critique of cognitively-biased research is also becoming visible in the field of philosophy of science education.¹¹ Science education in the Waldorf schools builds on a long phenomenological didactic tradition ranging from the lectures of Michael Faraday¹² to the 20th century and the works of Portman, Barfield, Bortoft, Julius, Ott, Schad, Kranich, Mackensen, Holdrege, Skaftnesmo, Rask, and others.

As indicated by Ostergaard,¹³ it is useful in educational action research to extend the phenomenological approach from typical observa-

tions of natural phenomena to include also observations of the learner (being a being) and of all activities (will at work) inherent in the act of teaching. Brierley¹⁴ takes this one step further in his didactics of geography in Waldorf schools, in which soul observation of the child plays a central role, soul observation that is entwined in the context of the teaching and learning process.

An extended concept of observation that builds on Goethe’s method does not mean that conventional quantitative methods are not also valuable. In Steiner’s own terms, an extended concept of observation includes soul observations (*seelische Beobachtungen nach Naturwissenschaftliche Methode*). It implies an emphasis on the schooling of the senses of the educational practitioner and researcher, thereby bridging the spheres of soul and science, and pointing to an extended concept of schooling.

3. An Extended Concept of Schooling

Educational theory connected to vocational training and to education in the arts, and crafts generally focuses on schooling or training elements of mastery.¹⁵ Building on this perspective on schooling and mastery, our research strategy for Waldorf education extends this concept to focus

on the interplay among schooling of thinking, of feeling, and of will. Further, any cognitive capacity is primarily a skill of practice, of moving attention, separated from but also embedded in the attentive movements of our emotional and bodily modes of knowing.¹⁶ A cognitive capacity may hence be strengthened by a more explicit focus on complementing and entwining it with the practical,

emotional, and aesthetic dimensions of learning.¹⁷

An epistemological basis for such an activity-sensitized ecology of knowing is worked out by Hugo.¹⁸ It builds a bridge between traditional concepts of schooling in education within the sports, arts, crafts, and the many exercises directed toward the schooling of the soul of the teacher or educational researcher developed by Steiner in connection with the Waldorf school.¹⁹ In his dissertation on the German philosopher and poet Novalis, Florian Roder beautifully demonstrates

A research strategy in Waldorf education must focus on the fruitful interplay between the science and the art of education.

the full spectrum of such an extended concept of schooling, framing Novalis's concept of universal science.²⁰ This concept is based on the silent power of man transforming his thinking, feeling, and will life, and thereby building new organs of perceptive communication with the lives of other beings. An extended schooling of the senses will build organs of increased sensitivity toward other beings, improving the senses of communication.

4. An Extended Concept of Communication

The existentialists within educational theory, like Bollnow and Buber, emphasize the being-to-being sphere of education and learning.²¹ For them, the central phenomenon in education is the "meeting of beings" and qualities related to this meeting. Where there is no meeting between human beings there is no real communication and no real human growth. Our research strategy in Waldorf education can relate to this and to current communication theory, with a special focus on qualitative research interview methods.²² Our strategy is also open to the extension of the concept of communication to encompass encounters between beings in a world of beings in dialog.

In Finland, Professor of Educational Science Simo Skinnari recently developed a phenomenology of education in which the concept of "pedagogical love" is central.²³ Such a concept is a potential revelation because the concept of love has no space or place in current, conventional educational theory. In America we see similar things happening: Building on the therapeutic traditions of Carl Jung and James Hillman, Robert Sardello develops the concept to include a phenomenology of the soul in its meeting with nature and future.²⁴ Similarly, Arthur Zajonc shows how a university course can build a bridge between the two worlds of knowledge and love.²⁵

Keeping in mind that, a.) spirit is at work in the key activity of science—moving attention in sensing and thinking, that b.) soul and body

accompany this activity, and that, c.) we thereby construct our incarnated organs of perception, we see how life nurtures processes of knowing. An extended concept of communication adds to this

In educational action research this form of attention needs to be acknowledged and taken into the arena of conscious, creative inquiry It is by the gateway of [consciousness] that we bring the self-understanding of science in touch with moral life and the cosmos.

image of outer life in magical touch with inner life by showing us the opposite gesture: The inner life of the researcher—his moods and movements of soul and spiritual attention—in touch with outer life. In the classroom, we all know the reality of this "in-between-ness" of beings

in attentive touch. In educational action research this form of attention needs to be acknowledged and taken into the arena of conscious, creative inquiry. It is the link from the arena of educational research to the arena of schooling personal and professional "virtues."²⁶ This is so because, when dealing with soul, "...we are dealing then with the distinctly human realm, where the creating factor is absolutely unavoidable. That is to say, investigation of soul is also soulmaking."²⁷

An extended concept of communication is a bridge to Steiner's epistemology and to his spiritual science. It is by this gateway we bring the self-understanding of science in touch with moral life and the cosmos. In his beautiful study on information and remembrance in water, the German researcher Bernd Kröplin demonstrates how every drop of water carries its own biography and also how thought and emotion make an imprint on images that the water shows.²⁸ In a simple manner, he demonstrates a bridging of the self-understanding of science from being purely detached observation to becoming participative communication.

How: A Research Strategy for Waldorf Education

A research strategy encompasses researchers, educators, and practitioners of Waldorf education. They represent an ecology of modes of knowing that mutually support one another. Schools can develop only when the research attitude embedded in Steiner's educational impulse



Figure 1. An Ecology of Ways of Knowing in Education

fosters cultures of inquiry in pedagogical, didactic, and social questions related to teaching and school development. And teacher education needs to nurture a research attitude in the development of teachers.

The figure above (Figure 1) illustrates how the whole ecology of “ways of knowing in education” can be reflected in an ecology of participating organs in a common research strategy. In an organism, the different ways of knowing must be differentiated and unified. They depend on each other. The image in this figure has been developed in dialogue with the different actors involved as a common foundation for a long-term research strategy.

The figure illustrates how a double bridge, practical and spiritual, between spiritual science—anthroposophy—and the educational world can be built by a joint culture of practical, soulful education, and soulful educational research. It also matches new policies in educational research, which demand tighter relations and interplay between the world of educational research and the world of everyday school life. Teacher education holds a key position here in linking these worlds of educational research and practice, with the bachelor’s level reaching more strongly into the school world and the master’s level reaching more strongly into the research world.

Who: Shared Ownership of Shared Tasks

A challenge of our time is that we learn to cultivate our own questions. Individually, they can unite elements that tend to fall apart in academic life, namely our personal, professional, and scientific quests. Fruitfulness in research is linked to intensity and long-term commitment in the way we live with questions. When we see this in our own biographies, we can also learn to see the “holding-together effect” of shared questions in forming cultures of inquiry. The key factor is shared ownership of shared tasks. A community of innovative practice has a task that it gives or chooses itself, linked to its own questions. The intensity and ecology of shared questions build the “carrying capacity” and growth structure of research culture.

Endnotes

1. Steiner 1886, Steiner 1920, Steiner 2000, Kiene 1984, Barnes 2000, Schieren 2000, Welburn 2004.
2. Schön 1982.
3. Steiner 1894.
4. Witzmann 1983, Hugo 1995. Witzmann uses the precise term “produktiv-indikativ Methode” in order to define the quality of this extended concept of action research, where we also are “creating what is being observed” (Sardello 2000).
5. Schwandt 2000.
6. Robson 2002.
7. McNiff 1995.
8. Steiner 1886.
9. Schieren 1997.
10. Schiller 1795, Nobel 1996.
11. Dahlin 2001.
12. Faraday 1861.
13. Ostergaard 2001.
14. Brierley 1989.
15. Schön 1987
16. Hugo 1995.
17. Gardner 1998.
18. Hugo 1995.
19. Smit 1990.
20. Roder 1997.
21. Bollnow 1976, Buber 1983.
22. Kvale 2000.
23. Skinnari 2002.
24. Sardello 1995.
25. Zajonc 2005.
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27. Sardello 1995.
28. Kröplin 2001.

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Nature Deficit Disorder

David Mitchell

In the early 1900s, more than 90% of the population of North America lived in rural areas where farming was dominant, while only 10% lived in urban centers. As recently as the 1950s, most U.S. youngsters still had a connection to agriculture in some form. Even in towns or cities, kids played ball in dusty sandlots or spent hours building forts against fences, in garden shrubbery, or in parks. Their unregimented play allowed them to be at one with nature. That kind of exposure to the outdoors has reportedly faded dramatically in recent decades, but our need for nature—as both psychological and physiological aid—has not. “Neurologically, human beings haven’t caught up with today’s over-stimulating environment,” says Michael Gurian, family therapist and author of *The Wonder of Boys*.

By the beginning of this millennium, demographics from the 1900s had reversed themselves. Now, more than 90% of the population resides in urban or suburban areas. Interestingly, during this time, we have also seen a dramatic increase in Attention Deficit Disorder, ADD, and Attention Deficit Hyperactive Disorder, ADHD. Children diagnosed with these disorders have trouble paying attention, listening, following directions, and focusing. They may also be aggressive, antisocial, and prone to academic failure. Based on high-tech images of the brain, some scientists report that ADD and ADHD children show altered levels of some neurotransmitters and slight shrinking in the part of the cerebral cortex that governs attention and impulse control. But scientists are not clear whether those differences indicate a cause for the disorder, perhaps due to a genetic defect, or are simply manifestations of another cause or causes.

According to the National Survey on Children’s Health,¹ about 8% of children between

the ages of 4 and 17—a total of 4.4 million—have a diagnosis of ADD or ADHD, and more than 50% of them take stimulant medications, many of which are addictive.² Children diagnosed with ADHD often receive “little more than prescribed medications—with no further guidance from a physician, therapist, or educational counselor.”³ Statistics gatherers admit, however, that “non drug, psychosocial treatment may be helpful if it continues long enough.”⁴ This leads us to a consideration of the correlation between ADD, ADHD, and the phenomenon of children of today spending less and less time outdoors in unstructured activity.

Last Child in the Woods: Saving Our Children from Nature Deficit Disorder by Richard Louv appeared last May.⁵ Louv coined the term “nature deficit disorder” after spending ten years traveling around the country, interviewing both parents and children about their experiences in nature, in both rural and urban areas. He compared their anecdotes with a growing body of emerging scientific research that suggests children who are given early and ongoing positive exposure to nature thrive in intellectual, spiritual, and physical ways that their “shut-in” peers do not. Over the past 30 years, he says, children of the digital age have become increasingly alienated from the natural world. Citing skyrocketing rates of childhood obesity, diabetes, depression, and ADHD, he links a lack of interaction with nature to a slow but steady erosion of mental, physical, and spiritual health.

A camp counselor told Louv of the counselor’s experience of taking a nighttime walk with a 9-year-old girl who had never left the city in which she lived. “She looked at the night sky, gasped, and grabbed my leg,” the counselor recalled. “She had never really seen the stars before. That night,

I witnessed the power of nature on a child. She was a changed person. From that moment on, she saw everything, even the camouflaged lizard that everyone else skipped by. She used her senses. She was awake.”⁶

Louv advocates “nature play” as a way to reduce stress, sharpen concentration, and promote creative problem solving. He believes it could also emerge as a promising therapy for attention deficit disorder and other childhood maladies.

Speaking on Nation Public Radio in February 2006, he stated that our culture’s sterile rejection of nature is harming children in body and soul. He argued that kids’ free time is so structured with youth sports, dance, gymnastics, and so forth, and children are so plugged into television and video games that they’ve lost their connection to the natural world. He states, “We don’t do well when we lose our connection with the trees, hills, sky, and streams. Humanity in the western world has lost its balance.”⁷

Rhoda Clements, in “An Investigation of the Status of Outdoor Play,”⁸ supports Louv’s findings. Her study discusses the extent to which children in North America today participate in active, outdoor play, compared with those of the previous generation. Eight hundred and thirty mothers nationwide were surveyed regarding their active, outdoor play experiences as children, and their children’s play experiences today. The mothers’ play experiences, compared with the children’s, clearly indicate that children today spend considerably less time playing outdoors than their mothers did as children.

The following bullets identify some of the problems children face, problems that may be aided by addressing “nature deficit disorder”:

- The number of children diagnosed with ADHD has skyrocketed—by 33 percent from 1997 to 2002.
- Prescriptions of stimulant medications such as methylphenidate (Ritalin) and amphetamines (Dexedrine) have risen as well, especially for preschoolers.

From 2000 to 2003, spending on ADHD drugs for children younger than five rose by 369 percent.

Scientists have yet to definitively explain these trends. One theory is that ADHD may be

over-diagnosed; pharmaceutical companies have intensely marketed medications, and school officials often urge parents to seek treatment for disruptive children. A suspected cause of ADHD symptoms is over-stimulation, especially from television viewing.

The following research seeks answers to the problems outlined above:

Harvard biologist Edward O. Wilson’s “biophilia” hypothesis argues that humans have an affinity with the natural world. When we aren’t exposed to a natural landscape, we suffer.⁹

In ongoing studies by the Human-Environment Research Laboratory at the University of Illinois, researchers have discovered tantalizing evidence for a new view of the syndrome. In a 2004 study published in the *American Journal of Public Health*, the laboratory found that children as young as five showed a significant reduction in ADHD symptoms when they engaged with nature.

Parents and guardians were asked to identify after-school or weekend activities that left their children functioning particularly well or poorly. The study measured responses to two types of activities: those in green landscapes—such as grassy backyards, parks, and farmland—and those in indoor playgrounds and paved recreation areas. The researchers designed the study to account for any effects of physical exercise so they could measure only the influence of green settings. They also factored out age, gender, family income, geographic region, size of community, and the severity of diagnosis. In fifty-four of fifty-six cases, outdoor activities in more natural settings led to a greater reduction in ADHD symptoms than activities in less natural areas. The only instances in which symptoms worsened occurred in artificial environments. In a related experiment, the laboratory found that children could focus on specific tasks better in green settings.¹⁰

The University of Illinois team has also suggested that nature therapy could be a third option, after prescription medications and behavioral therapy. The study recounts how one parent began taking her son to the local park for thirty minutes each morning before school, which she indicated reduced his ADHD symptoms. “Come to think of it,” she told the researchers, “I have noticed his attitude toward going to school has

been better, and his schoolwork has been better this past week.” Another parent of a boy with attention deficit symptoms began engaging him regularly in outdoor activities, such as fishing, with similar results. “When I read the results of your study,” he reported to the researchers, “they hit me in the face. I thought, yes, I’ve seen this!”¹¹

A 2003 Cornell University study reported that the more nature a child encountered at home—including exposure to indoor plants and window views of natural settings—the less he or she was affected by negative stresses.¹²

A 2003 study by researchers at the New York State College of Human Ecology reached similar conclusions. Nancy Wells, the lead researcher, said that exposure to nature resulted in “profound differences” in children’s attention capacities and that “green spaces may enable children to think more clearly and cope more effectively with life stress.” That, in turn, could strengthen a child’s attention and potentially decrease the symptoms of ADHD.¹³

In a study in the *American Journal of Preventive Medicine*, gallbladder surgery patients with trees outside their hospital windows recovered more quickly than those with views of a brick wall.¹⁴

Michigan prisoners whose cells faced inward suffered 24% more illness than peers whose cells looked out on landscapes.

Nature also appears to reduce stress and stimulate creativity. In another Michigan study, office workers with views of greenery reported significantly less frustration and more job enthusiasm than colleagues without such vistas.

Swedish research has shown people who walked for 40 minutes in nature returned to perform better in proofreading tests.

Stephen and Rachel Kaplan, husband and wife environmental psychologists at the University of Michigan, have developed an “attention-restoration theory.” The Kaplans take their inspiration from philosopher and psychologist William James, who, in 1890, described two kinds of attention in adults: directed and involuntary.

In the early 1970s, the Kaplans studied the impact of a range of activities and found too much directed attention—this could include computer tasks, homework, or studying for a test—leads to what they call “directed-attention

fatigue,” marked by impulsive behavior, agitation, irritation, and inability to concentrate. Directed-attention fatigue occurs because neural inhibitory mechanisms become overstressed by blocking competing stimuli. Subsequent research, including more than one hundred studies linking exposure to nature to stress reduction, has supported the Kaplans’ theory—and the salutary influence of what they called “the restorative environment.” According to the Kaplans, nature can be the most effective source of restorative relief.¹⁵

A new report on American’s eco-literacy is a significant read for all teachers. The report, *Environmental Literacy in America*, comes from the National Environmental Education and Training Foundation, a nonprofit foundation chartered by Congress in 1990 to promote environmental education in its many forms. In the issue *Eco-Literacy and America’s “Nature-Deficit Disorder,”* Kevin Coyle lays the blame for children’s falling grades in eco-literacy on, in part, unprecedented cultural pattern changes in how young people relate to nature and the outdoors:

As kids become more “wired” than ever before, they are drawn away from healthful, often soul-soothing, outdoor play. The age-old pattern of children spending hours roaming about and playing outside is becoming close to extinct due to a combination of electronics, cyberspace, and parental efforts to keep their children indoors and, in their minds, safer.¹⁶

Ellen Britt, co-founder of Primal Waters and an expert in stress resiliency, argues that it’s not only children who suffer from nature deficit disorder, but adults as well. A recent Environmental Protection Agency study found that most adults in the United States spend 90% of their lives indoors.

A conservative, main-line consideration of this problem can be found in *The Harvard Mental Health Letter* of the Harvard Medical School (February 2006) in an article titled “Attention Deficit Disorder: Old Questions, New Answers.” It states that ADHD is not “just a set of behavior problems but a biologically based disorder of brain function.” It has the strongest genetic component among psychiatric disorders. Evidence is reported that children with ADHD have a disturbance that occurs in a “circuit that runs between the frontal cortex, seat of judgment and planning, and the

basal ganglia, which control habitual actions and convey reward signals.”

Following a statement advocating a decrease in television viewing for children, however, *The Harvard Mental Health Letter* states:

Not only less exposure to television but more exposure to nature might be good for children with attention problems. Several recent studies have found that impulse control and other ADHD symptoms improved when children had more access to grass and trees. This evidence, like the evidence for damaging effects of television, is limited, and its practical significance might be doubted. Still, it can't hurt any child to spend less time as a couch potato and more time outdoors in parks and playgrounds, woods, and fields.¹⁷

If arguments about nature deficit disorder resound in us as Waldorf school teachers, then a walk in the woods is an ideal activity. Before or after school, it will restore us to ourselves. With our classes, it may be an essential salutogenic practice. A concern for nature deficit, however, also calls for an awakening. It beckons us to “scale back industrialism, redesign homes, schools, hospitals, and cities, and expand the access to open space”—none of which can be encapsulated in a pill.¹⁸ To the extent that we, as associates of Waldorf schools and Waldorf education, can take up this challenge, we will help our students and their families at least as much as we do through our daily practices.

Endnotes

1. See <http://www.cdc.gov/nchs/about/major/slaits/nsch.html>.
2. See <http://www.health.harvard.edu>.
3. See the *Harvard Mental Health Letter*, Volume 22, Number 8, February 2006, p. 5.
4. Ibid.
5. Richard Louv has written for the *New York Times* and the *Christian Science Monitor*, and is a long-time columnist for the *San Diego Union-Tribune*. He is the author of seven books, including *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*, published in April by Algonquin Books of Chapel Hill. He lives in San Diego. Louv also serves as a columnist and editorial advisory board member for *Parents magazine*, as well as a commentator on Monitor Radio. He is

an advisor to the Ford Foundation's Leadership for a Changing World award program. A partner in The Frameworks Institute and a member of Citistates, an association of urban observers, Louv also helped found Connect for Kids, the largest child advocacy site on the World Wide Web. Louv has appeared on the CBS Morning Show, NBC National News, Good Morning America, Today, Donahue, Bill Moyers' Listening to America, NPR Morning Edition, NPR Fresh Air, NPR Talk of the Nation, PBS News Hour with Jim Lehrer, Minnesota Public Radio, and many other national and regional programs. He lives in San Diego and prefers fishing to writing.

6. See <http://www.npr.org/templates/story/story.php?storyId=4665933>.
7. Ibid.
8. For the complete paper, see <http://www.waldorfresearchinstitute.org>.
9. See http://arts.envirolink.org/interviews_and_conversations/EOWilson.html.
10. See <http://www.lib.niu.edu/ipo/2004/ip041122.html>.
11. See <http://www.herl.uiuc.edu>.
12. See <http://www.news.cornell.edu/releases/April03/nature.kid.stress.ssl.html>.
13. See <http://www.normanbirdsanctuary.org/whatsnew.shtml>.
14. See http://www.elsevier.com/wps/find/journaldescription.cws_home/600644/description#description.
15. See a comprehensive article on nature deficit disorder and the pioneer work of the Kaplans at: http://www.lifetimefitness.com/magazine/index.cfm?strWebAction=article_detail&intArticleId=436.
16. Environmental Literacy in America, October 2005, can be downloaded at <http://www.neetf.org/pubs/index.htm> or write to: The National Environmental Education & Training Foundation, 1707 H Street, NW Suite 900, Washington, D.C. 20009-3915.
17. See *Harvard Mental Health Letter*, Volume 22, Number 8, February 2006, p. 5.
18. See <http://www.oriononline.org/pages/om/05-4om/Louv.html>

On Creativity

Stephen Keith Sagarin

We have written child-labor laws and we have outlawed, for the most part, physical torture, but we subject our children daily, with all good intentions, to soul torture. Young children, who should be imbibing the world through all their senses, are taught to read before their minds are fruitfully prepared for this (see Auer, p. 7). Older students are increasingly subject to standardized tests, indoctrinated in the blinkered thinking that these require. Recent studies and expert opinions add to the growing evidence, evidence we seem as a nation unable to assimilate in our classrooms, that creative experience is humanizing (see James, p. 17) and should be at the heart of any educational program. An opinion in *EdWeek* by Robert Sternberg¹ and a study from the UK by Sue Rogers² neatly bookend the problem for us.

Sternberg, having segued in his career from studying intelligence to studying creativity—not that there’s a bright line dividing these—sees creativity as a habit, a perspective that is shared in one way or another by others who study creativity, including especially Howard Gruber, for whom “a long and well-worked through apprenticeship is vital to the development of a creative life.”³

Yes, “eureka” or “aha” moments occur, but only after long periods of learning and application. They occur in a context of knowledge and work. As Sternberg says, “Knowledge is a necessary, but in no way sufficient, condition for creativity.” You and I may be bombarded every moment by a hail of mathematical insights direct from Plato’s intelligible realm. But unless we apply ourselves to learn sufficient math, we will remain forever ignorant of these. Archimedes leapt from his bath not because he was lucky but because he had devoted his life to studies that enabled an insight previously granted to no one else to light up in him.

Creativity involves discipline and hard work. For Sternberg, this work has the character of habit—the paradox, virtually an Aristotelian balance, of “routinely approach[ing] problems in novel ways.” Routine without novelty leads quick-

ly to death. Novelty without routine leads to diletantism and the illusion of creativity.

Habits can be encouraged or discouraged. And Sternberg sees the pressure toward standardized tests and machine grading of essays as—inadvertently—profoundly discouraging the habit of creativity, treating it as a bad habit rather than as a good one.

Further, encouraging creativity by making opportunities, encouraging students to be creative, and rewarding those who are creative does not necessarily mean the end of assessment or evaluation. Sternberg’s research, supported by others such as Teresa Amabile, demonstrates possibilities for assessing or evaluating creative work—originality, quality, and appropriateness are dimensions of a creative project that teachers can reliably assess.

Sternberg sees creativity as necessary for problem solving, but this raises an ethical question: Is the solution to the problem of flying an airplane into a building, for example, really creative? As we can form a concept of miseducation to describe, say, the influence of advertisements that “educate” us—transmitting knowledge and culture—can we form a concept of “mis-creativity” that acknowledges that the choice of problem to solve involves an ethical choice? Or do we need, as some researchers have done, to describe positive creativity with a medical qualifier like “moral”? Clearly, not every problem requires a creative solution. Not so clear, but open to question, does all creativity involve problem-solving?

Play is a key to the development of creativity in children. Sue Rogers at the University of Plymouth, UK, led research that shows that “[c]hildren are being denied the chance to develop at school through imaginative play because they spend so much time learning to read and write.” Ignoring the necessity for social, creative play leads to deficits in development of social skills and intellect.

Roger’s study confirms a sad fact about early childhood education in the UK—and we may believe the situation is similar in the US—but does

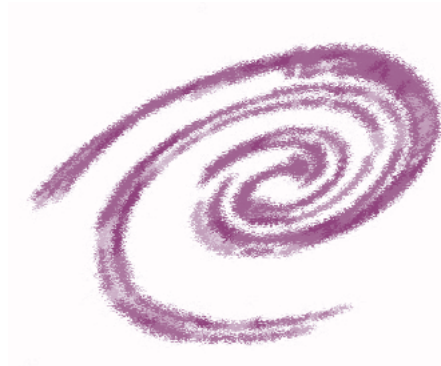
not delve into the reasons why imaginative, social play is healthful and even necessary. For research on this question, turn to Sara Smilansky,⁴ whose work in Israel has demonstrated powerfully the health-giving effects of what she calls “sociodramatic” play, play in which children pretend to be something that they are not—mother, pirate, or postal carrier, for example. Children allowed to play creatively gain in language acquisition and use, social skills, and mutual understanding. Learning these, we can see, guides children toward understanding and harmony; in the end, perhaps, alleviating suffering and even saving lives.

For Sternberg, creativity is important “because the world is changing at a far greater pace than it ever has before. . . . We need to think creatively to thrive, and, at times, even to survive.” For Rogers and Smilansky, children’s creative play opens the door to the development of skills that support thriving and surviving. From free play to development of the good habit and hard work of self-directed creativity, our children deserve better from us.

As Waldorf schools have demonstrated for decades, it is not necessary to compromise knowledge and achievement in order to sustain human development with creative learning. On the other hand, as Waldorf schools champion creative learning and creative experience, they, too, must beware the traps of routine and of dilettantism that lie on either side of the path they walk.

Endnotes

1. <http://www.edweek.org/tb/2006/02/21/426.html>
2. <http://www.esrc.ac.uk/ESRCInfoCentre/PO/releases/2005/september/curriculum.aspx>
3. Gruber, Howard. “The Evolving Systems Approach to Creative Work.” In Wallace and Gruber, *Creative People at Work: Twelve Case Studies*. New York: Oxford University Press, 1989.
4. Smilansky, Sara. “Sociodramatic Play.” In *Children’s Play and Learning*, Edgar Klugman and Sara Smilansky, eds., New York: Teachers College Press, 1990.



Allergic Disease and Sensitization in Waldorf/Steiner School Children

Philip Incao, M.D.

In January 2006, the results of a European medical research project were published in the *Journal of Allergy and Clinical Immunology*. The research was designed to look at the rates of hay fever, asthma, and eczema in 6,630 European children aged five to thirteen from Austria, Germany, Switzerland, Holland, and Sweden. Within this large group of children, the study compared Waldorf school students with non-Waldorf school students with respect to these three increasingly common allergic conditions and also with respect to blood levels of IgE, an antibody marker for allergy.

The article, “Allergic Disease and Sensitization in Steiner School Children,” has more than sixteen authors, including fifteen European physicians and scientists and one American from the Brigham and Women’s Hospital in Boston. Most of the authors are members of the PARSIFAL (Prevention of Allergy Risk factors for Sensitization related to Farming and Anthroposophic Lifestyle) Study Group. The article concluded that:

... certain factors in the anthroposophic lifestyle, such as restrictive use of antibiotics and antipyretics [fever-lowering drugs like Tylenol, Ibuprofen, Aspirin] are associated with the lower risk of allergic disease in children. However, the lifestyle factors investigated in our study represent only a selection of various characteristics of the anthroposophic lifestyle. Therefore, we cannot exclude that other factors need to be considered to understand completely the background for this lower risk.

This is the second medical research article (the first was published in *Lancet* in 1999) to be published in a leading, respected English-language academic journal that has found an “anthroposophic lifestyle” to confer protection from allergic illness.

There are at least two reasons why the publication of this research can be warmly welcomed by members of Waldorf school and anthroposoph-

ic communities. First, it validates and confirms what many practicing anthroposophists have long known from experience: that anthroposophy, a path to knowledge, is also a path to health. Second, the acceptance for publication of yet another article on the “anthroposophic lifestyle” in a prominent, peer-reviewed, mainstream medical journal signals that the research was conducted according to the highest scientific and biostatistical standards and that mainstream medical science is willing to acknowledge that such a thing as an “anthroposophic lifestyle” not only exists, but may even be good for you! These are small but significant steps on the road to a wider public recognition of anthroposophy’s contribution to individual and social health.

The problem of increasing allergic disease in today’s children, which this research article gently touches on, is unfortunately merely the tip of a large and threatening iceberg. The larger, more pervasive problem today is the accelerating pace and widening scope of materializing and hardening processes in the world and in human souls and bodies. In the grand scheme of things, the perennial yin-yang polarity, which Steiner portrayed as a balance in humans and in the world between the forces of sclerosis and the forces of inflammation (in Robert Frost’s poetry, between Fire and Ice), is today tipping dangerously toward the hard and cold. A body hard and cold is closer to death; it resists penetration by the Spirit that gives life and warmth.

The Spirit’s participation in our physical world is a flame slowly extinguishing. This manifests in myriad ways, one of them the increase of allergic conditions in today’s children. Despite global warming, human bodies are becoming cooler. How can this be understood? Throughout recorded history, the leading causes of illness and death have been fiery inflammations like pneumonia, tuberculosis, malaria, and childhood inflammations such as diphtheria, measles, and scarlet fever. This began to change in the U.S. and other

developed nations around 1900. Since then, the balance has gradually shifted to the cold, sclerotic illnesses of cancer, heart disease, and stroke, which now predominate, while the formerly common inflammatory killers of children and adults mentioned above have receded.

Allergic conditions were essentially unknown until the twentieth century. Now a large portion of the U.S. population suffers from them. This tremendous shift in our collective health has a spiritual cause: Prior to 1900, spirit and soul worked more strongly in human metabolism and will, but now they work more strongly in our nervous system and thinking.

When spirit and especially soul—ego and astral—work strongly in our metabolism and will, we are inwardly warmer and more prone to inflammatory illness. When spirit and especially soul work strongly in our nervous system and thinking we are inwardly cooler and more prone to sclerotic illness.

Allergic conditions, as chronic inflammations, are certainly warmer than cancer, stroke, and heart disease; but lacking the ego-directed power of fever and pus formation, allergies are far cooler than measles, pneumonia, or roseola. Allergies are on the sclerotic side of the balance.

Researchers find evidence that antibiotics and fever-suppressing drugs seem to promote the tendency to the allergic diseases of asthma, eczema, and hay fever. From an anthroposophic understanding of inflammation and allergy, one could fully expect that antibiotics and antipyretics would increase the tendency to allergies in children. This is due to the cooling and suppressing effect of these drugs on the immune system's production of inflammation and fever in the body. These drugs can often thwart or at least modify the acute inflammatory response that is caused by the intensive penetration of ego warmth into the body's life processes, in response to a need for housecleaning and renewal in the body's household. From the anthroposophic perspective, the immune system is the body's housecleaner, and is an instrument of the ego. Repeated inappropriate, needless use of antibiotics and antipyretics (as opposed to their wise, discriminating use) seems to significantly hinder the above-mentioned players, that is, the ego, the etheric, and the immune system, from fulfilling their appointed task of cleaning house. One could imagine the effect of

these drugs to be somewhat like spreading glue on the floor when the housekeeper is trying to clean. It must be emphasized, however, that on those rare occasions when the immune system-housekeeper is wildly out of control and the excessive inflammatory response is a threat to the integrity of our human household, then we can be grateful for the life-saving, suppressive effect of antibiotics. Health is always a matter of balance.

Thus the increase in allergic conditions in many countries is a symptom that the spiritual balance in human organisms and in cultural life is shifting from the primacy of warm metabolic-will forces to the leadership of cool head-thinking forces. This shift is part of a larger overall cooling and hardening trend in the forces of nature and in the human being at the present stage of our evolution. It carries with it the danger of our becoming isolated and cut off from the spiritual world. On the other hand, this trend toward sclerosis also makes us capable of greater objectivity and individual freedom in our soul life. I believe these changes are part of our Consciousness Soul development.

Steiner indicated that although the light-filled Consciousness Soul seems cold and anti-social as it begins to unfold in us, in its deeper nature it is warm and sun-like. The Consciousness Soul reveals its radiant warmth and loving interest in others and in all creation as it matures and takes hold of the human heart, the human *Gemüt*. We're not there yet, but this is the potential future blessing of the Consciousness Soul and of the present hardening and cooling trend, if we are awake and do our part not to indulge these tendencies without balance.

On the one hand, it would seem that the increasing food and respiratory allergies in our time are a sign that our human spirit is withdrawing from our physical metabolic processes. This tendency to sclerosis is our threatening illness. On the other hand, our increasingly liberated spirit is now available to our etheric processes and to our soul forces of thinking, feeling, and willing with a freedom and a power that are new in our time. This presents us with our possibility for self-healing, which depends on our own activity. In the midst of death, there is a seed of new life. It is up to us to care for it and make it grow. May we have the discernment, the courage, and the initiative to do so.

Left-handedness A Call for Research

Douglas Gerwin

Should left-handed children be trained to write with their right hand? An article in the most recent issue of *Erziehungskunst*,¹ the German-language journal on Waldorf education, again challenges the practice of some Waldorf elementary school teachers and therapists who encourage children to learn writing and form drawing solely with the right hand.

G. B., who graduated about five years ago from the original Waldorf school in Stuttgart, Germany, writes in the journal that according to neurological research, even a gentle approach to changing writing from one hand to the other can result in long-term neurological and psychological problems. “The retraining of writing by left-handed pupils is no longer responsible. It is to be rejected and discontinued,” he says.

G. B., a student of political science and economics at the University of Potsdam, is himself a lefty who was trained to become a right-handed writer. In his article, he cites the research of Barbara Sattler, who claims that the conversion of left-handed writers can lead to complex functional disturbances, blockages, and undue burden on the cerebral system. “This can in turn lead to disturbances in the powers of memory and concentration, spatial disorientation (left-right uncertainties), greater exhaustion, stuttering, psychological instability, and many other primary and secondary consequences,” G. B. writes.

In her collection of essays entitled *Education as Preventive Medicine: A Salutogenic Approach*, Michaela Glöckler, Head of the Medical Section at the Goetheanum, dismisses Sattler’s findings, saying, “it is not a question of reversing a child’s left-handedness. This is an ever-recurring misunderstanding. The concern is purely directed toward accustoming the child to the right hand in scholastic matters, meaning, to manage writing and form drawing with the right hand. Nothing whatsoever is changed in regard to the dominance of one side over the other in the child’s brain.”² G. B. insists, however, that even in cases

limited to the change-over of writing, lasting confusion can result.

Because this practice of retraining the hand touches on deep considerations of the child’s destiny and development, the Research Institute would like to initiate some field research into this question. We invite our readers to share with us their experience and findings. What effects can be observed in left-handed pupils who are retrained in their writing? What evidence is there to link the activity of writing to the development of the brain and nervous system? Which factors and special circumstances make this retraining problematic or inadvisable?

We would like to hear especially from teachers in the early grades or physicians and therapists who work with this age group. But we also welcome comments from those who are privy to the “long view” over many years’ retrospect—for instance, adults who as children were retrained in their writing hand. Our hope is to stimulate observations, insights, and new perspectives on this controversy. Please direct your comments to:

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Endnotes

1. G. B., “Zur Umschulung des Schreibens bei Linkshaendern,” in *Erziehungskunst*, Volume 70, # 2, February 2006, pp. 138–145.
2. Michaela Glöckler, *Education as Preventive Medicine: A Salutogenic Approach*, Fair Oaks, CA: Rudolf Steiner College Press, 2002, p. 88.

Assuming Nothing: Judith Rich Harris on Nature vs. Nurture

Eugene Schwartz

At Michaelmas time seven years ago Judith Rich Harris's book *The Nurture Assumption* appeared amid great publicity and controversy, and then all but disappeared. Neither the controversy nor the rapid fade into obscurity is surprising. Harris questions one of the basic premises of modern child psychology, the seemingly incontrovertible fact that parental influence is the most important element in the life of a child. To bolster her premise, Harris casts aspersions on the findings of hundreds of well-funded research studies undertaken throughout the late twentieth century. Her book appeared at a time when the mapping of the human genome and advances in bioengineering were making the science of genetics front-page news. Harris's arguments provided ammunition to the increasingly vocal ranks of geneticists who asserted that nature, not nurture, determines a child's character and capacities. Harris has, however, no university or research institute affiliation, so her work may be easily dismissed. She works from home, doing her research on the Internet, and her ideas are so original in many respects that they undermine almost all present-day theories about emotional growth and development.

Harris's hypothesis is simple: "Parents matter less than you think and peers matter more." Basing her theories both on the data (rather than the conclusions) of hundreds of child research studies and on her own experience as a parent, Harris points out that two, or three, or more siblings raised in virtually the same way by the same pair of parents may turn out to be profoundly different. Almost all depends on the peer group with which they bond as they grow up. Children, she argues, possess an innate capacity to separate their home life from the life of the street, the classroom, or the school cafeteria. Home influence remains just that—parental influence that stays at home:

Parents belong in the home; when they come out of the home it makes their children nervous. Aside from the embarrassment, it makes it harder for children to know which context they're in, which rules they're supposed to follow. They are not aware of this, of course; context almost always affects behavior at a level that is not normally accessible to the conscious mind. It isn't until adolescence or adulthood that people occasionally become aware of the way their behavior changes in various social contexts. . . .

The youth described by Henry James [earlier in the book] was "demure enough before his parents and teachers" but behaved differently when he was with his friends. He acted the way his parents and teachers had taught him to act, but only in social contexts that included his parents and teachers. It's difficult to teach your dog not to sleep on the sofa when you're not around, because what you are actually teaching him is to stay off the sofa when you are around. When you're not at home, he never gets whacked for jumping up on the sofa.

In Harris's eyes, the old warning that parents have given generations of young people—"You'll be judged by your friends"—takes on new significance. As a modern scientist, however, Harris has no difficulty equating human and animal behavior, and the response of a dog to a situation is assumed to be equivalent to a human response. It could be argued that an animal's behavior is always contextual because it lacks an inner life that could retain the conscious memory of previous responses to previous stimuli. That is to say, the dog lacks the kind of memory that slowly becomes an ingrained "habit of thought," reminding it never to sit on the couch, whether or not the master is home. We hope that a child has a conscience (or is at least developing one), an "inner voice" that acts in *loco parentis* in a host of different contexts.

Nonetheless, many of Harris's examples and arguments are compelling, and they help dispel some of the clouds of guilt that hang over many a modern multi-tasking parent. In one of her most intriguing analogies, she points to the story of Cinderella. In the context of her domestic life, Cinderella is homely and unhappy, her "self-image" having formed in accordance with the demands of her stepmother and wicked stepsisters. In the context of the ball, she takes on a completely different character and appearance—to such a degree that her sisters don't recognize her—and she acts in accordance with completely different expectations. Indeed, many fairy tales are about children who in their parents' eyes are good-for-nothings, yet manage to rise to heroic heights when the setting is right and the expectations are high.

Harris generally takes a passive stance toward what parents can do about the peer group—moving to a "better" neighborhood seems to be her most cogent advice. Further, Harris has almost nothing to say about a teacher's power to help form a peer group in the classroom. This may be because all of the schools studied by the psychologists whom Harris cites are conventional public schools in which teachers have little or no power over—or perhaps little interest in—the social lives of the students. As any contemporary movie about teenagers reveals—and as tragedies such as the Columbine massacre prove—peer groups that are left to form themselves may become, in the words of Hobbes, "nasty, brutish!" But what if a teacher is not only given the mandate to help form a peer group, but given the time, and given the means? In other words, what if the teacher is in a Waldorf school classroom?

I am not sure that many Waldorf school teachers make the most of the "context-creating capacity" with which they are endowed through Steiner's educational methods. Indeed, Waldorf practitioners are probably the teachers most likely to demand that parents do an ever-better job on the home front, even though those same teachers will attest that most children act very differently with their classmates than with their parents. My own experience leads me to believe that Judith Harris's thesis is worth pondering. I have been a Waldorf school teacher for thirty years and have known several "generations" of graduates, from a group of fifteen year olds to a group in their early

forties. As a Waldorf school consultant who has had long-term relationships with a number of schools throughout North America, I have come to know hundreds of other students and their families. The majority of these alumni were raised by caring, upper middle class parents. On one end of the bell-curve there are a number of families who applied "Waldorf methods" at home, and raised their children without any media influences, served them organic food, and made every effort to maintain healthy rhythms and strong family bonds throughout the grade school years. At the other end of the curve there are a few families who seemed to have no connection whatsoever to the school's philosophy, rarely took my earnest advice, had no household rhythms, abused drugs, or suffered from emotional disorders.

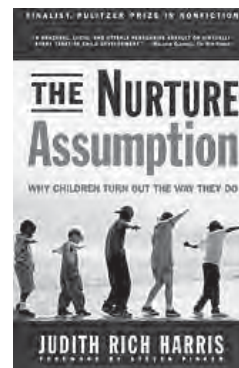
How have all of these students turned out, especially the interesting ones at the ends of the curve? Most of the students from the "dysfunctional" households have turned out very well indeed, finding their way to highly competitive colleges and then to careers in academia or business. On the other hand, a disproportionate number of those raised in the "right" way by families cleaving to Waldorf school methods are still struggling to find their way in life, and some have had severe problems with drugs and crime. Several are college dropouts, and many have wandered from one part of the country to another, still searching for their direction in life. Of course, there are those from druggy homes who are wanderers, and those from Waldorf homes who are successful artists, scientists, and entrepreneurs. If I blend the biographies of the extremes with the many students from middle-of-the-road homes, I have to admit that their parental upbringing and influence have not appeared to matter very much. When asked about what formed them most in their childhood, these alumni always say that it was their Waldorf classmates—their peer group—that made the biggest difference in their lives. Based on such admittedly limited, anecdotal evidence, I would say that Harris is on to something.

With this in mind, we must consider the possibility that we Waldorf school teachers may be overly critical of parents, asking them to perform makeovers of their homes and lives that will have only a negligible effect on their children. My

Waldorf school colleagues often complain, justifiably, about parents who are always on their case, unremittingly criticizing their abilities and classroom performance. Does it ever occur to us that, in much the same way, many parents feel persecuted by the relentless commentary of their child's teacher?

Waldorf educators gladly accept the brain-mind research reported by such Steiner-friendly authors as Jane Healy and Joseph Chilton Pearce, because it corroborates so many Waldorf school practices. Although Rudolf Steiner repeatedly cautions us not to assume the brain's centrality in the activity of thinking, no less than in a host of other organic functions, we are at times so desperate to find some kind of validation in the "real world," that we accept Healy, Pearce, and others without doing the requisite research ourselves. Harris presents Waldorf educators with a more subtle challenge. Are we willing to entertain ideas—based on research more solid and considerably more mainstream than the studies that the brain-mind writers cite—ideas that may support some Waldorf educational principles, but that severely question others? Can Waldorf teachers read a book while maintaining what Keats called "negative capability," or do we only want to study those writers who don't ask us to question any of our assumptions?

Rudolf Steiner tells us that the reign of the Age of the Archangel Gabriel, which extended from the Renaissance to about 1900, was characterized by an intense interest in issues concerning heredity and family life—areas in which Gabriel holds sway. The age of Michael, however, will gradually shift society's interest toward issues involving individuality and community life. For a good part of the twentieth century, mainstream child psychology continued along its Gabrielic trajectory, convinced that the key to human unfolding lay within the bonds of family. Harris's book represents a seismic shift in this regard. Flawed and glib as her book may be, it casts a Michaelic light into the murky obscurantism of child psychology, and may be the precursor of more profound studies to come.



*The Nurture Assumption:
Why Children Turn Out the Way They Do*

Judith Rich Harris
Touchstone
1998
ISBN # 0-684-85707-3

Against Anticulturalism: A Review of Two Books by Kay Hymowitz

Jon McAlice

There is a social critic who looks upon the modern world in an almost Goethean manner, describing social phenomena in a way that lays bare the essential forces at work behind them. This is the case, however, with Kay Hymowitz. Her books focus on the world in which American children grow up today, a world of empty myths, anti-role models, uncertain parents, and no-holds-barred, profit-seeking media and marketing concerns. Hymowitz's crisp, non-sentimental prose strips away layer after layer of the soft artificial packaging of American childhood, revealing a vacuum that is void of spiritual direction and social imagination within a society that "ignores that childhood is the time when individuals are given the specific materials with which to 'construct' their identity, including their identity as free individuals."

In the first chapter of *Ready or Not: What Happens When We Treat Children as Small Adults*, Hymowitz addresses the widespread fallacy "that children already own the materials out of which to build their individuality and that adults, or 'society,' must beware of disturbing them."

How did our society reach the point at which it can deny a child's need for guidance, a society in which adults now all too often turn to children for direction? Hymowitz's work takes her back to the early years of the American republic and the emergence of a "republican" approach to child-rearing. This is an approach that puts into action Bronson Alcott's view that each "child must be treated as a free, self-guiding, self-controlling being." Children were encouraged to explore, to question, and to play, and imagination and self-directed activity were viewed as practical preparation for life in a democratic society.

These early practitioners, however, understood well the need for adult guidance in the life of the growing child. Discipline and cultural expectations worked to counter the forces of egotism inherent in American individualism. Hymowitz describes how this shifts during the course of the

20th century, and she traces the emergence of an "anticultural" approach to childrearing:

Unlike republican philosophers who wanted parents to actively shape the raw human material which is a child into an individual, anticulturalists viewed the child as an already complete, finished individual lacking only some skills and information. Not only would these complete individuals require no shaping by parents and other representatives of the culture into which they were born, but they would develop best outside of, or even in opposition to, that culture. The republican child who was supposed to be reared in an atmosphere of bounded freedom evolved into the anticultural child who required no rearing at all.

Anticulturalism may be one of the most important sociological terms to emerge in the last decades. It identifies one of the fundamental hurdles that arise as the age of the Consciousness Soul progresses. As humanity evolves out of a formative relationship to the spiritual world, forces recede that have previously filled traditional cultural life with meaning. These empty forms no longer move an individual soul deeply, weaving it into a greater communal tapestry. Humanity enters an "acultural" state in which the challenge to create culture becomes predominant. Anticulturalism, as Hymowitz describes it, is society's denial of or refusal to take up this challenge:

While anticulturalism champions autonomous individuals, it also deprives them of the nourishment to stand alone. By reducing culture to indifferent, arbitrary information to which the individual may or may not feel committed, it depletes the sources of full-bodied individuality. Anticulturalism denies the next generation a rich language for building their inner lives and imagining their experience.

The remaining chapters of *Ready or Not* and the essays collected in *Liberation's Children* trace

the presence of anticultural thought in popular culture and its tragic effect on the growing child. There are few facets of the golden myth of American childhood that retain their luster under the author's discerning gaze. From the view of a child as a biologically gifted learning machine—one that must be properly stimulated—to the juvenile justice system, from kindergarten as a springboard to corporate success to Sesame Street, from Barbie to the sexually provocative clothing manufactured for 9 and 10 year olds, Hymowitz brings to light the forces that push children into a world defined by the values of their peers and brilliantly manipulated by the corporations that develop these values in their marketing campaigns.

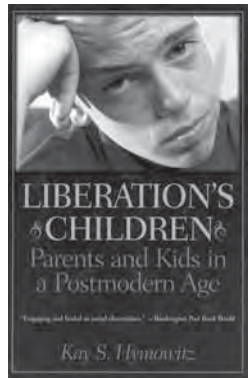
The chapter entitled "The Teening of Childhood" opens with a description of two television ads featuring youngsters between the ages of three and eight. The children are dressed in the uniforms of adolescence—baggy pants, T-shirts, and sweatshirts—and present the viewer with personas of hipness, edginess:

In the movies, in magazines, and most of all on television, children see image upon irresistible image of themselves as competent sophisticates wise to the ways of the world. And maybe that's a good thing too, since their parents and teachers appear as weaklings, narcissists and dolts. That winking eight-year-old in the Gap ad tells the story of his generation. A gesture once reserved for adults to signal to gullible children that a joke was on its way now belongs to the child. The child gets it; it's the adults who don't.

The author goes on to explore the effect of these images on children. In doing so, she uncovers perhaps the most devastating result of the anticultural approach. The media's image of children is one that has lost the ability to wonder, to need a helping hand, or to feel vulnerable. These have been replaced by skepticism and disbelief. Without wonder, children are locked into the narrow confines of the persona they share with their peers, a persona that is marketed unrelentingly to children. Unable to acknowledge vulnerability or the need for help, children become locked into an artificial sophistication, a veneer of toughness. These combine to deny children access to the two

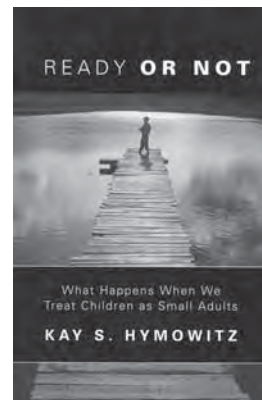
realms in which they may encounter the reality of a self: the surrounding world and the people in it.

Hymowitz does nothing to soften the edges of what she describes. The world she describes is in no way a pretty one. Yet in the crisp honesty of her approach is the seed of redemption.



*Liberation's Children:
Parents and Kids in
a Postmodern Age*

Kay S. Hymowitz
Ivan R. Dee, Chicago
2003
ISBN # 1-56663-495-4



*Ready or Not:
What Happens When We Treat
Children as Small Adults*

Kay S. Hymowitz
Encounter Books
2000
ISBN # 1-893554-20-1

Introducing “Network M” A New Website for Waldorf Graduates and Teachers

Douglas Gerwin

*A*ll too often, a student graduates from a Waldorf high school and heads off to college or some other walk of life filled with fresh ideas and boundless enthusiasm for changing the way we live, but with barely an idea of how to connect with others of like mind. Sometimes these graduates do indeed find each other—at a convention on alternative sources of fuel, perhaps, or at the checkout counter of an organic grocery store—but often they struggle to link up with those of similar vision and appetite for change.

Recently the Research Institute learned of a new venture intended to help facilitate these connections. Matthew Temple, a graduate of the Summerfield Waldorf School in Santa Rosa, California, has spent the last ten years forging informal connections with fellow Waldorf students and others interested in bringing about social change. Now he is creating a new initiative he has christened “Network M” to help Waldorf school alumni find each other and make common cause in fields of research and social reform. This initiative, he says, will serve three purposes:

- Build a network of Waldorf school graduates and teachers, including those studying to become Waldorf teachers.
- Link Waldorf alumni and teachers with others of similar interests and pursuits.
- Widen the base of support for Waldorf schools.

Eventually Temple hopes to expand Network M (the “M” stands for “Micha’el”) so that Waldorf graduates and others begin to share their thoughts, dreams, and common endeavors through forums, chat room exchanges, bulletins, and research papers. In this way, he hopes that a broader and more far-reaching community can be formed to support the work both of individual Waldorf school alumni and the schools from which they graduated.

Matthew compares this venture to the network “MoveOn.org” that was created after the 2000 presidential election to bring together activists across the country who otherwise would not have been able to find one another. “We need the same type of network,” he says. “There are many people doing work related to the anthroposophical movement who are looking for a community to support them in their social, political, economic, and artistic endeavors,” he says. “There are many more who would gladly take part, if only they knew, or if only they had access to one another.”

Those interested in this new venture, whether Waldorf school graduates and teachers or friends of Waldorf education, are invited to visit the new website for Network M—

www.thenetworkm.net

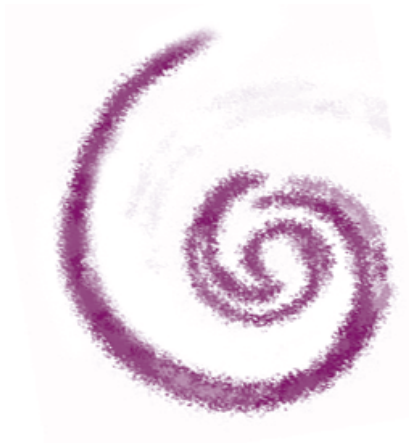
—or contact Matthew directly at
contact@thenetworkm.net.

Waldorf Graduate Research Phase II

Arthur M. Pittis

*T*he second phase of the Waldorf graduate study will have finished its collection of data by April 30, 2006, and will begin the analytic phase of the project this spring and summer. We aim to have a preliminary report by the end of this summer. The collection of accurate contact information has been a challenge for this project. While a handful of schools have maintained comprehensive databases on their graduates, the majority of schools have kept, at best, spotty records. This shortcoming has slowed the project considerably and necessitated expanding our contact base to all graduates between 1992 and 2002, in addition to as many contacts as we could find from

preceding years. As of this writing we have sent out more than a thousand requests to participate and received more than 500 responses, yielding sufficient data to enter the analytic phase. Many respondents have appreciated our contacting them and expressed eagerness to participate in the survey. It is too early to comment on the data itself. It is clear that better work needs to be done by most schools in maintaining contact with and nurturing their alumni base. One anecdotal trend we have noticed in this survey is that many Waldorf alumni—and their parents—feel ignored by their schools once they have graduated and moved on in their lives.



Reading, Writing, and Reading Comprehension

Paul Gierlach

In the last *Research Bulletin* (Autumn 2005), we saw how Waldorf education emphasizes nurturing and disciplining a student's emerging ego so as to allow it to become neither too firmly nor too loosely attached to the physical, ether, or astral bodies. Waldorf teachers must approach and teach students artistically.

Let us now consider the attitude of the teacher. Education is as effective as the teacher who enlivens and presents it. According to Ralph Waldo Emerson, there is no such thing as history, there are only biographies. Similarly, we could say that there is no such thing as education, there are only educators.

A significant part of a teacher's attitude regards the future. The future should be a principal concern and source of imagination for every class we teach. Every time we stand before students, we should have their futures, the futures of all others, and the future of the earth in our consciousness.

It is possible to teach in such a way that there is, actually, no future at all, only a series of consequences derived from and determined by the past. Textbooks often model this approach with great confidence. Every time we teach from the present to the future in some incremental manner, we mimic such books. Cause, then effect. In history classes, for example, we are often content to show that event A leads to event B and that, in turn, event B leads to event C, and so forth. We make lists, maybe even organize them into charts. We may include the biographical agents of change as important, even significant. Yet, if our view of history is causal, a sense for the potential novelty of the future is demeaned.

In English classes, we show how sentences are constructed of words with names such as adjectives and verbs, and so forth. Even more destructively, we demonstrate how in poetry and novels and plays and biographies the beginning leads inexorably to the end. We faithfully and professionally demonstrate step by step how and where meaning may be found. Before long, every leading

question has an answer, unexpressed, but sniffed out by any student alert enough to hear the query. We have trained many such brilliant students. Such an atomized view is a corollary to cause-and-effect teaching in history.

In math lessons, we take skill acquisition seriously, as we must, so we are tempted to teach students to calculate independently of the reasons for and the beauty of the relationship of the calculation and its goal. Conceptual understanding takes a back seat to expedience.

Time and again, when dealing with issues of pedagogy in the classroom, we are reminded of Rudolf Steiner's observations about the materialism of this age, specifically those comments which point out that we can not avoid it. Materialism regards more than our relationship to our physical surroundings; it regards our mental environment as well. We are trained to think in such a way that one thing leads to another, that we hunt out the meanings of life's failures and successes by finding their causes. These causes always lie in the past.

The future, then, is a reworked, refined, refashioned past that does not lose its power and authority for all that. After all, we need it, indeed, rely on it. As we reach the future by walking forward, looking backward, we can be excused a faint, common feeling of insecurity.

As teachers we need to make sense of this silliness and we need to find a way to work with it. We may not ignore these approaches to education, for we are of our own time. We fool ourselves if we believe that, as Waldorf school teachers or anthroposophists, we are immunized against the present. We do not, however, exist merely to mimic. We, rather, should give students the tools to redeem our insufficient views. We can only do this through our own struggles. Our task and our joy are to offer students suitable environments in which to conceive their thoughts, enlarge their feelings, engage their wills.

Steiner points out that purpose is an attribute of the actions of human beings and is not to be

mis-discovered in cause-and-effect relationships.¹ These are subject to the laws of the material world. The implications for our topic are clear: causality as a mode of instruction cannot succeed in creating purposeful individuals who can create a destiny and a society out of themselves. A causal way of thinking is inherently inadequate for human consumption. At best, it can explain the laws of nature. In effect, the pedagogy of our times reduces human beings to less than they are, reduces them to physical particles, even as it purports to do the opposite.

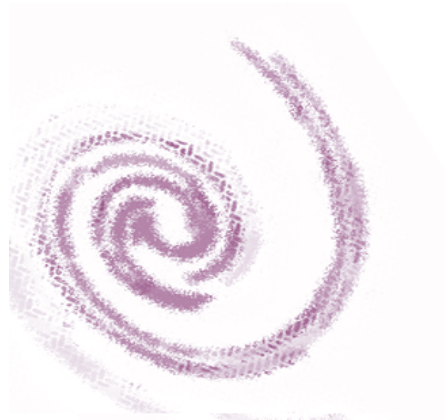
Steiner calls purposefulness “a special kind of sequence of phenomena. True purposefulness really exists only if, in contrast to the relationship of cause and effect where the earlier event determines the later, the reverse is the case and the later event influences the earlier one.”² He then shows how to bring this concept directly into our thinking:

To begin with, this happens only in the case of human actions. One performs an action of which one has previously made a mental picture, and one allows this mental picture to determine one’s actions. Thus the later (the deed) influences the earlier (the doer) with the help of the mental picture. For there to be a purposeful connection, this detour through the mental picture is absolutely necessary.³

Taking these steps, teachers can move ahead on their own journeys to each present moment wherein our futures, the futures of our students, and the future of our civilization unite.

Endnotes

1. Steiner, R. *The Philosophy of Freedom: The Basis for a Modern World Conception*, M. Wilson, trans., London: Rudolf Steiner Press, 2000, Chapter 11.
2. Ibid.
3. Ibid.



Rudolf Steiner Library Accommodates Sleuths from the Research Institute

David Mitchell

In autumn 2005, the Research Institute for Waldorf Education received a grant from the Waldorf Curriculum Fund. The grant funded a visit to the Rudolf Steiner Library in Ghent, New York, to research its archives in order to discover materials of interest to Waldorf teachers, materials that might exist in old periodicals, journals, and newsletters. In short, this was an invitation to participate in an intellectual treasure hunt.

The Research Institute Board of Trustees asked two stalwart buccaneers, Roberto Trostli and David Mitchell, to undertake the challenge of this treasure hunt. Two months later, with a gleam in their eyes, they arose at dawn and set out on a grey November New England morning. They soon became engaged in a conversation so deep that the two-hour drive seemed to last five minutes.

They entered the library and found that Judith Soleil and Judy Kiely were ready for them. Two chairs and a long oak table with a half dozen catalogs had been prepared for their research. Roberto and David joyfully divided the papers and wrote down the names of articles from sources they never knew existed. There were periodicals entitled *The Present Age*, *Forerunner*, *Free Deeds*, *Anthroposophical News Sheet*, *Anthroposophical Review*, and *Star and Furrow*, to name a few, with many articles from the original teachers of the first Waldorf school in Stuttgart. Caroline von Heydebrand, Herbert Hahn, Ernst Lehrs, Walter

Johannes Stein, Rudolf Treichler, and, of course, Rudolf Steiner himself, had written on a variety of topics.

There were exclamations of glee and uncontained excitement every time one of the pair found something new or unusual to share with the other. It was a rich time and altogether more than 60 articles were collected and passed on to the online Waldorf library (OWL), found at www.waldorflibrary.org, for posting and free downloading by English-speaking teachers worldwide. The surface has been scratched and the hope is that the team can return at a later date for the next phase of exploration.

An unexpected find was an educational book by Rudolf Steiner that has not been translated into English, *Erziehung zum Leben: Selbsterziehung und pädagogische Praxis* (Education for Life: Self-Education and Educational Practice), lectures given between February 24, 1921, and April 4, 1924; GA 297a. An anonymous donor has since stepped forward with a generous donation to see the translation completed and published. The Research Institute has received permission from the Nachlassverwaltung (the administrators of Steiner's publishable estate) in Switzerland to carry this forward. It is now being translated and will be available in book form this coming autumn. You will also see it serialized in future *Research Bulletins*.

Teaching Sensible Science

Co-Directors

The next cycle of “Teaching Sensible Science” will take place this summer and continue into the following school year. All three of the week-long sessions will take place at the Waldorf School of Saratoga Springs. Dates are:

Saturday, 24 June – Friday, 30 June 2006
Wednesday, 4 October – Monday, 9 October 2006
Saturday, 24 February – Friday, 2 March 2007

For details and registration, contact Michael D’Aleo at spalight@verizon.net. An account of this program can be found in the Autumn 2005 issue of the *Research Bulletin*, Vol. XI, No.1.

Report on the On-Line Waldorf Library

Marianne Alsop

The Online Waldorf Library (OWL) continues to facilitate research, post articles, add information on newly published books, and field many questions. We receive a great number of basic inquiries—for example, how to find a local Waldorf school. Interestingly, these queries frequently come from India, the Philippines, American Samoa, and Caribbean nations. If there are no schools nearby, and in these particular countries there are very few, the questions often evolve into those regarding how to begin a school or homeschool. Certainly, Waldorf education is becoming increasingly known around the world and parents are looking for ways to bring it to their respective communities.

Thanks to the efforts of David Mitchell and Roberto Trostli (see “Rudolf Steiner Library Accommodates Sleuths from the Research Institute” in this issue), OWL now has more than forty articles from the archives of the Rudolf Steiner Library in Ghent, New York, available online. Many of these articles are by some of the pioneers of the Waldorf school movement—Hermann von Baravalle, Hermann Poppelbaum,

Caroline von Heydebrand, Renwick Sheen, and Walter Johannes Stein, among them. Visitors to the site can find these articles by using the “Search” feature and typing in the name of the author or by simply clicking on “articles.”

OWL has received an average of 75 visitors per day over the past 5 months. Most of the interest is from North America, followed by the UK, Australia, and New Zealand. The most frequently accessed journal is *Gateways*, followed by the *Research Bulletin*. The Research on Waldorf High School Graduates survey received the greatest number of hits in December.

OWL continues to respond to all inquiries and invites visitors to email comments and questions. Highlights of recent website activity also include these:

In response to a number of questions regarding Christmas plays, OWL has posted several new articles from the *Rundbrief*, the journal of the Pedagogical Section at the Goetheanum. A number of other articles from past issues of the *Rundbrief* are also now available.

The Waldorf High School summer reading list is now easily accessible on the home page. This list is a compilation of North American Waldorf high school reading lists and will be updated as other schools add their suggested reading.

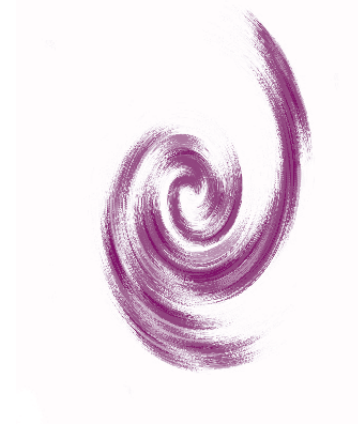
OWL receives frequent requests for more online articles from the *Waldorf Science Newsletter*, and we are building up our offerings of past editions. Meanwhile, all past editions are currently available for purchase from the Association of Waldorf Schools of North America (AWSNA) Publications.

Teachers have requested more plays for grades 2, 5, and 6. The online plays by Roberto Trostli continue to be greatly sought and appreciated.

Financial questions regarding pay scales for teachers, hiring criteria, and setting tuition are referred to AWSNA.

Other questions over the past months have included documentation to support setting an earlier start time for middle school students; creative approaches to paying tuition (also referred to as AWSNA); documentation that children who attend preschool do better in high school than children who remain at home; the potential benefits of a math specialist in the middle school; and resources for foreign language teachers. Other common topics of interest include creating care groups, articles for parents on child studies, and creating diversity study groups for parents and the requisite reading or study materials.

Homeschooling curriculum questions continue to arrive, and OWL serves the needs of many families, many of whom regularly correspond with me via email.





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- Waldorf Education in an Inner City Public School System
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- Encounters in Waldorf Education—A Tribute to Ernst Boyer
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Setting Priorities for Research: Attention-Related Disorders (ARD) Study
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Learning Expectations and Assessment Project (LEAP)
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Sexual Abuse in Children: Understanding, Prevention, and Treatment
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About the Research Institute for Waldorf Education

The Research Institute for Waldorf Education is an initiative working on behalf of the Waldorf school movement. It receives support and guidance from the Pedagogical Section of the School of Spiritual Science and financial support through the Association of Waldorf Schools of North America (AWSNA), the Midwest Shared Gifting Group, the Waldorf Schools Fund, the Waldorf Curriculum Fund, and private donors through the Rudolf Steiner Foundation.

The Research Institute was founded in 1996 in order to deepen and enhance the quality of Waldorf education, to engage in serious and sustained dialogue with the wider educational-cultural community, and to support research that would serve educators in all types of schools in their work with children and adolescents.

The Research Institute has responded to the call for research as a top priority of the Waldorf school movement by becoming a supporting organization of AWSNA and by co-sponsoring research projects with the Association and with the Pedagogical Section.

We support research projects that deal with essential contemporary educational issues such as the role of play in early childhood, attention-related disorders, trends in adolescent development and innovations in the high school curriculum, learning expectations and assessment, computers in education, the role of art in education, and new ways to identify and address different learning styles. The Research Institute has sponsored colloquia and conferences that have brought together educators, psychologists, doctors, and social scientists. We have published a *Research Bulletin* twice a year for the last decade, and we are developing and distributing educational resources to help teachers in all aspects of their work.

We sponsor the Online Waldorf Library: www.waldorflibrary.org, whose mission is to make available contemporary writings on Waldorf education, and we host our own site: www.waldorfresearchinstitute.org, where up-to-date research is posted.

The Research Institute is a 501(c) (3) tax-exempt organization and gratefully accepts donations.

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Art in Human Development
Attention-Related Disorders Research Project
Evaluation of the Urban Waldorf School in Milwaukee
Learning Expectations and Assessment Project
Mathematics – Phobias and Remediation
Reading, Writing, and Reading Comprehension
Survey of Waldorf Seniors
Teaching Sensible Science Workshops
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Waldorf Graduates Survey Phase II

Colloquia and Conferences

Towards Wholeness in Learning, 1996
Pathways of Healthy Child Development, 1998
Andover Proceedings: Tapping the Wellsprings of Health in Adolescence, 2001
Waldorf High School Research Project
Subject-Specific Colloquia, 2000-2004
Chemistry United States History
Mathematics
English
Computer and Information Technology
Life Science and Environmental Studies
World History – Symptomatology

Resource Development

Computers in Education, handbook for teachers
Being on Earth, a book for scientists and teachers
On-Line Waldorf Library, a website of resources for Waldorf education
Themes in Waldorf Education, compilation of Rudolf Steiner's indications on teaching language arts and mathematics

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