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From the Editor

Elan Leibner

Ideas have a mysterious way of occurring to different people in different places at the same time. The history of science, for example, is rife with discoveries and theories that appeared almost simultaneously to researchers working in different locations, even separated by continents. Words (e.g., "collaborative," "synergy, " "emergent"), phrases (e.g., "paradigm shift," "multiple intelligences," "contemplative inquiry"), and even conceptual frameworks (e.g., Transcendentalism, post-modernism, string theory) appear on the scene and take their place in the public discourse seemingly overnight when only a short time before they were merely the private musings of a few thinkers.

Surveying the articles gathered in this issue of the *Research Bulletin*, I am struck by the shared threads that run through the thoughts of writers on both sides of the Atlantic. Douglas Sloan describes the split in academia between science and the humanities and outlines the deleterious effects that this split has wrought. Jonathan Code, writing in the U.K., explores a similar theme from the perspectives of epistemology and history, focusing on the ethical consequences of ignoring the prevailing epistemological assumptions in one's thinking. Those two articles could easily have been presented at a single conference, and yet they were written three thousand miles apart by writers who had no occasion to collaborate.

Roberto Trostli has been leading an effort in the North American Pedagogical Section Council to publish a collection of essays dedicated to the theme of the College of Teachers as the body of leadership in Waldorf schools. His research article, the first part of which is published in this issue, characterizes the College as mediating the spiritual underpinnings of all Waldorf schools with a specific school's earthly circumstances. His description of the way in which the College of Teachers can discharge its duty will resonate strongly with David Mitchell's musings about the striving in what he calls a "striving- to-become" Waldorf school. The article by Johannes Kiersch and my own graduation address to the Sound Circle Center's teacher trainees also resonate "in the same key" as Trostli's and Mitchell's contributions. A common thread runs through all of these pieces in that they are searching for an authentic education at once universal and utterly local. Kiersch points towards a way of working with Steiner's foundational pedagogical texts, suggesting that they become truly effective only when taken as meditative, esoteric instructions.

In an article written originally for the Gesell Institute, Joan Almon reviews the practice—widely promoted in educational circles—of speeding up academic learning during the early years of childhood and, with a wealth of evidence, argues that a recommitment to play-based early education is urgently needed. Joan and her colleagues at the Alliance for Childhood, along with their European partners, are advocating for play-based learning as part of a grassroots movement dedicated to children's true wellbeing. The Research Institute supports this initiative whole-heartedly.

Dennis Klocek was kind enough to provide us with some meditative practices that can support the teacher's inner work. As I note in the introduction to his contribution, we hope to include some meditative exercises and guidance in future issues of the *Research Bulletin*.

Finally, Kelly Larson provides a glimpse into the work of the Teaching Sensible Science

course. This work, guided by Michael D'Aleo, is sponsored by the Research Institute with financial support from the Waldorf Educational Foundation through the Association of Waldorf Schools of North America (AWSNA).

I warmly invite readers to send feedback and requests/suggestions for topics. My email is: waldorfresearchbulletin@gmail.com.

Thank you for taking the time to deepen your exploration of Waldorf education!

Donations

The Research Institute for Waldorf Education is a tax-deductible non-profit organization. We appreciate and require your financial assistance. Large and small gifts are gratefully received at our Wilton, NH, office.

If you would like to discuss a bequest, initiate planned giving, or make a large donation, please contact either David Mitchell or Douglas Gerwin.

Report from the Co-Directors

David Mitchell and Douglas Gerwin

The election of Arthur Zajonc, professor of physics at Amherst College, as board president of the Research Institute for Waldorf Education opens a new chapter in the biography of the Institute.

A frequent contributor to the *Research Bulletin*, Arthur is well known as author, teacher, and researcher. As visiting professor and research scientist at the Ecole Normale Superieure in Paris, as well as the Max Planck Institute for Quantum Optics, his research has included studies in electron-atom physics, parity violation in atoms, quantum optics, and most recently the relationship between science, humanities and the contemplative traditions. Among his many publications is a history of optics, *Catching the Light*, several collections of essays on the scientific writings of Goethe, and a series of dialogues that he organized with the Dalai Lama.

More recently Arthur has been directing the academic program of the Center for Contemplative Mind in Society, which promotes contemplative practice in higher education. With Parker Palmer he co-authored *The Heart of Higher Education: A Call to Renewal*, a chapter of which was published in the last issue of the *Research Bulletin*. He has also been General Secretary of the Anthroposophical Society in America, a co-founder of the Kira Institute, president of the Lindisfarne Association, and a senior program director at the Fetzer Institute.

As board president of the Research Institute, Arthur replaces Douglas Sloan, who as co-director with Susan Howard, founded the Institute in 1996 and became the first editor of the *Research Bulletin*. Currently professor emeritus of education at Teachers College, Columbia, Douglas continues to bring a high level of discourse to bear on questions of Waldorf education. We are delighted that he will remain a trustee of the Institute, as we are grateful to Arthur for assuming his new role.

Under Arthur's and the two Directors' guidance, the Institute continues to broaden its reach to like-minded institutions. In this context, the board has invited two representatives from Germany to join as trustees. They are Jost Schieren, who heads the faculty of education at Alanus University in Alfter, just outside Bonn, and Hansjörg Hofrichter, president of the Waldorf Stiftung (Foundation) in Stuttgart. Both bring wide scope and long experience as leaders in the field of Waldorf educational research. Hansjörg also links us with the Pädagogische Forschungsstelle in Germany and will help the two institutions share the fruits of their research endeavors.

On the research front, a grant from the Waldorf Curriculum Fund has made the preparation of a further round of electronic books for OWL possible. The Research Institute has already published over 50 eBooks of valuable but often inaccessible essays and manuscripts. The latest grant will allow us to make additional texts—including several now out of print—widely available without cost to interested readers.

All eBooks already published by the Institute can also be found on the Institute's Online Waldorf Library (OWL). Under the direction of its librarian, Marianne Alsop, the site is undergoing a major upgrade to make it possible for readers to undertake more sophisticated searches of its contents. For details of this upgrade, see Marianne's report in this issue of the *Research Bulletin*.

Two further grants will make it possible for the Research Institute to broaden its project on sexual education to encompass the study of

various pilot programs underway in Waldorf schools across North America. The results of this research, spearheaded by Douglas Gerwin, will appear in a source book pulling together essays and materials from teachers, physicians, and counselors in Europe and the United States. The supplementary grants, awarded earlier this year, come from the Foundation for Rudolf Steiner Books in the U.S. and from the Waldorf Stiftung, the foundation of the German Association of Waldorf Schools (Bund der Freien Waldorfschulen).

We continue to work with Patrice Maynard, leader of AWSNA's office of Outreach and Development. Patrice keeps us informed about the needs of the schools from her perspective and apprises us of research projects which we might consider.

We are grateful to all individuals and representatives of businesses, foundations, and schools who have provided us with financial support. Without you our undertakings would not be feasible.

Science and the Humanities

The Great Rift in Modern Consciousness

Douglas Sloan

This may at first seem like a strange title. After all, the curricular division between science and the humanities has long been the basic organizing principle for the main subjects in the whole of modern education. It is an organizing principle that reaches from the university level all the way down. Even if, as we shall see, regard for the distinction has often become in modern education little more than lip service, has not the science/humanities division been, nevertheless, extremely useful, and does it not, in spite of problems, remain so? In fact, is it not a given task of thoughtful educators to wrestle perpetually with the relationship between science and the humanities, and are not the problems thrown up by this wrestling and the need to grapple with them a part of the essential service rendered by the distinction itself? Moreover, is not the suggestion in the title of this essay more than a little overblown; namely, that the science/humanities division is not only an issue for education, but is deeply implicated in a major crisis in the whole of modern culture and consciousness?

This essay will attempt in brief form two main things: first, to explore how the educational division between science and the humanities has helped produce a profound split in modern consciousness—a split with far-reaching deleterious consequences; and, second, to point to some actual directions for overcoming and healing the split.

The educational division between science and the humanities has helped produce a profound split in modern consciousness—a split with far-reaching deleterious consequences.

The development of the relationship between science and the humanities has a fascinating and venerable history. It lies far beyond the scope of this essay to trace this history here in any detail. Suffice it to say that perhaps the first firm outlines of the modern form of the science/humanities classification, though this was not its first appearance, can be discerned in the rise of the medieval university in the eleventh and twelfth centuries with its division of the seven liberal arts between the trivium (grammar, rhetoric, and logic) and the quadrivium (arithmetic, geometry, music, and astronomy). Even then, lines between the subject areas were not hard and fast. Mathematics, for one example, was still looked upon as "the Queen of the Arts." With the emergence of the scientific revolution at the end of the Middle Ages and the almost simultaneous development of Renaissance Humanism, boundaries began to grow sharper. Still, there was much overlap and movement back and forth.

The Renaissance Humanists inherited the seven liberal arts from the medieval university, and bringing these up to date, joined them with the newly recovered Greek and Latin authors, whose wisdom they regarded as essential to a fully developed human being. Central to the humanists' educational ideal, beyond providing entrance to career advancement, was the conviction that knowledge and the development of character should go hand in hand. The primary goal of education was, for them, to enable the forming of a strong sense of self, to equip that self with effective means of self-expression and communication, and to instill in the individual a solid ethic of service to church, state, and

community. Scientific knowledge was still seen by the humanists as an important part of the educational ideal. The humanists helped foster a climate of eager inquiry in which scientific questioning could flourish; they encouraged the inclusion of natural science in the curriculum; and they themselves often engaged in actual natural science inquiry. Indeed, a leading historian of the humanities has shown that the Renaissance Humanists played an important role, directly and indirectly, "in the birth of modern science."[1] He has pointed out, for instance, that Galileo credited his own humanistic studies, including Greek and Latin literature, with having given him the sense of self-confidence and effective modes of expression that enabled him to stand firm and independent in advancing his own scientific views against mainstream opposition. With Renaissance Humanism and the scientific revolution, a new consciousness began to emerge in the West, a consciousness full of promise for the human future and for the earth.

Nature, handed over to modern science, is seen in its totality as dead matter in motion.

This positive potential of modern consciousness, including especially its connection with the emerging natural sciences, needs to be acknowledged and stressed. And yet, it is precisely these positive potentials that have been endangered by central conceptual presuppositions of modern science itself. In criticizing, as we shall, certain of these presuppositions, it is not to reject or disparage the positive potentials of modern science, but to explore how these might be maintained and developed further. The positive potentials of modern consciousness, as they made their appearance with Renaissance Humanism and the scientific revolution, can be variously described. They include: a new sense of wonder and respect for the material world; a clear and precise thinking that made possible new powers of control over the material world, and, accordingly, new possibilities for human freedom, as well as new demands on human responsibility; and, a new sense of separation from nature that went together with a newly heightened experience of individual selfhood and self-identity. The realization and fulfillment of these positive potentials required, however, that the quantitative and qualitative realms, at first shared alike by both the scientists and the humanists (who often overlapped in the same person), be held together—the quantitative realm, exemplified especially by the new powers of mathematics and technology, and the qualitative realm of meaning, value, and purpose.

If these two become separated and fall apart, the genuinely new, positive potentials of modern consciousness begin to be undermined. Controlling reason and technology, cut off from a larger matrix of meaning and purpose, begin to run amok and out of control. Individuality, severed from a larger and more encompassing context of meaning and purpose, becomes either rugged and rapacious individualism or leads to the lonely and alienated modern self. And apart from a larger reality of meaning and responsibility, freedom disappears into deterministic mechanism or meaningless caprice.

It was the scientific revolution itself that very early served to fix an increasingly sharp boundary between the sciences and the humanities, between the quantitative and the qualitative (and Galileo himself played a key role in this). Since the beginning of the scientific revolution in the sixteenth and seventeenth centuries in the West, three main assumptions about what we can know and how we know emerged very early and have since come to dominate modern thinking and consciousness. These assumptions have had momentous consequences for all of modern life.

The first assumption is what can be called the quantitative-mechanistic assumption about the ultimate nature of reality. It received its modern stamp very early in the scientific revolution in the writings of such scientists as

Galileo, Descartes, Newton, and Boyle, and the philosopher John Locke. A fundamental distinction was made in the emerging new "mechanical philosophy" between what were designated at the time as "primary qualities" and "secondary qualities." The primary qualities included such phenomena as extension in space, mass, weight, motion, number, and so forth. In other words, the realm of the primary qualities was essentially that of the quantitative. The primary qualities—quantities—it was thought could be known with clarity and certainty through empirical observation and mathematics. The secondary qualities at first included such phenomena as color, taste, and sound, but were eventually extended to include what philosophers sometime designate as tertiary qualities—such qualitative domains as value, meaning, purpose, beauty, goodness, selves, and so forth. In this view, knowledge as such could be had only of the primary qualities, the quantitative. While the secondary and tertiary qualities might well be realities of experience, they could not, strictly speaking, be known in any proper sense of the term. The qualities—secondary and tertiary—could provide no real material for precise, objective knowledge as such because they depended on the observer and, therefore, were considered too tainted by subjective feelings, habits, predispositions, and so on. True knowledge was to be had only of the quantitative.

The quantities to be known were considered to be related to each other like the parts of a machine. Accordingly, the clock became famously the main metaphor for the universe and for all of nature within it. The world—the universe—was to be regarded as a "law-based system of matter in motion"—matter in motion, colliding and combining according to mechanical laws of physical cause and effect.

The second assumption is related and, in fact, really arises out of the first. This has been described as the "objectivistic assumption," which points to a fundamental separation between the knower and the object to be known. This assumption holds that, if we want to know something properly, we must detach ourselves from it as completely as possible and describe it from the perspective of a mere, uninvolved onlooker. Appropriately, the assumption is also sometimes referred to as the assumption of the "onlooker consciousness." The relation of this to the first assumption is seen in that it was thought important not to intrude personal qualities such as feelings and values into the knowing activity. To do so would distort and skew the pure knowledge of reality as objective and independent of the knower.

> This division at the heart of our education system has helped produce a profoundly split consciousness in Western civilization.

The third assumption that accompanied these first two has been called the "sensationist" or "sense-bound" assumption about knowable reality. This assumption, most forcibly expressed by the seventeenth-century philosopher John Locke, holds that we can know only that which is given through physical sense experience and abstractions from sense experience. This assumption further ensured the limitation of knowledge to the purely quantitative and mechanical. In this view, the non-sensory realms of value, meaning, purpose, qualities, spirit may exist, may even be experienced, but they cannot be known as such.

One result has been what can be described as a "two-realm theory of truth." During the eighteenth and nineteenth centuries the distinction made earlier between primary and secondary qualities was further refined and institutionalized in modern education as the dominant classification in all education between natural science and the humanities. So we have two realms of truth: the truths of science, which are knowable; and the truths of the humanities which, strictly speaking, are not. Science deals with nature, which of course is taken to include the human body.

The humanities, as the name suggests, deal with the human realms of values, meaning, and qualities. Only the "truths of science," dealing through empirical observation and mathematics, with nature conceived as matter in motion, are viewed as the results of objective knowledge.

The "truths of the humanities," at most, arise from sources now regarded as subjective, such as faith, feelings, traditions, ethical action, social custom, mystical experience of some sort, and so forth.

How successful has been the two-realm theory of truth in keeping alive essential human qualities and concerns that the dominant view of knowledge cannot encompass? At their best, the humanities have helped cultivate a humanely critical spirit that has often stood as a bulwark against doctrinaire and even political infringements upon human freedom and human rights. Without the humanities many realities and experiences utterly central to a truly human existence would have long ago faded entirely. The affirmation of the two-realm theory of truth has also been the main response of religious thinkers who have been eager to reconcile their faith commitments with the materialism of modern science. It seems also to have been the main response of those many scientists who are serious about both their science and their personal faith and ethical concerns. It would be difficult to overestimate the influence for good this two-realm theory has had for modern, Western society and culture. And yet, at bottom, the theory has extremely serious problems, including a number that have become increasingly acute.

A major problem, seldom recognized or acknowledged, is that the science/humanities division expresses, and institutionalizes, from the start, a deep alienation of the human being from nature. Nature, handed over to modern science, is seen in its totality as dead matter in motion. Completely separated from this nature, and essentially standing over against it, are the humanities. This division at the heart of our education system has, as expressed in our title, helped produce a profoundly split consciousness in Western civilization.

Some of the serious consequences of this split we will explore later, but first let us look at a second problem of the science/humanities dichotomy, namely, that, while in theory the relationship between the two sides is supposed to be symmetrical and balanced, in practice it turns out to be quite unequal. In this division, as in racial segregation, separate has not been equal. The quantitative side is nearly always regarded as the more important. It is often remarked that the arts and literature, not chemistry, physics, engineering, or computer science, are always the first to go in times of financial exigency. The desire to shape a self and a life, originally a central purpose of the humanities, has—in the last century especially—moved steadily down the list of priorities for higher education. The humanities continue to be placed on the defensive as business and political/social pressures step up their push for increased funding for technical and scientific subjects at the expense of the humanities. In the 1960s the Columbia University professor Lionel Trilling, one of the leading champions of the humanities and the liberal arts, expressed his concern that our society "will tend increasingly to alienate itself from the humanistic educational ideal."[2] Since then, nothing has occurred to lessen his cause for concern.

Let us, for a moment, take a look at an event in the twentieth century which gives a clear example of both of these problems—the handing over of nature entirely to a mechanistic science and the uneven balance between the two realms. This example is provided by the work of some of the most creative religious thinkers of the twentieth century. The first half of that century witnessed the beginnings of what promised to be a major theological renaissance—a renewal of theological insight and practice. This movement involved leading thinkers from all three of the major Western

religious groups—Jewish, Protestant, and Catholic. Jewish thinkers such as Martin Buber, Abraham Heschel, Will Herberg; Catholic theologians such as Jacques Maritain, Etienne Gilson, and Gabriel Marcel; and Protestant theologians such as Karl Barth, Rudolf Bultmann, the Niebuhr brothers Reinhold and H. Richard, and Paul Tillich are just some of the names of those who led this theological renaissance.

This look at how leading religious thinkers of the twentieth century came to see the relationship between science and the humanities is especially illuminating for at least two reasons. In the first place, religion, we might say, is the canary in the mineshaft of the science/humanities division. It is the first among the humanities to feel the effects of the cognitive disparity between the two views of truth, and so provides a vivid example of what is involved. In the second place, the theologians at the beginning, from the 1920s through the 1940s, actually turned their critical attention to developing some penetrating critiques of the influence of an exclusively quantitative-mechanistic science on the wider culture. However, in the end they were unable to extend their critiques to question the sense-bound methodological assumptions of modern science and, consequently, fell back into a total acceptance of the two-realm theory of truth.

The whole movement was exemplified in this in the work of the theologian Paul Tillich. Tillich himself responded to nature not as a mechanist but with a romantic, even mystical, sense of awe and wonder. And he criticized the widespread, modern scientific-technological abuse and rampant exploitation of nature. But ultimately, Tillich, like the other theologians (and nearly all other humanists), was unable to draw the implications of his wonder and awe for a possible transformation of our dominant way of knowing itself. Instead he left the wall between science and religion (and with it all the humanities) standing and fully intact. This, Tillich came to feel, was a good thing because he could then claim that there is no conflict between science and religion because they each deal with two completely different realities. "There is no religious statement," he said, "that can contradict a scientific statement if religion is understood in its fundamental sense as ultimate concern [i.e., as the ultimate commitment of subjective consciousness] and science is understood as the inquiry into the finite facts and their relations." Thus the dualism of the two-realm theory of truth remained for Tillich, and for the others finally, fully in place, as did the underlying alienation of the human from nature contained in that dualism.

By the early 1970s the short-lived twentieth-century theological renaissance had essentially collapsed in its entirety. This was in spite of its thorough humanistic grounding in critical thinking, ethical concern, and aesthetic sensitivity (the arts were of great importance for the theological reformers). Despite its influence for a time in all the major religious traditions in the West, its existence is today hardly remembered. In its place has arisen a noisy, crude, and dogmatic religious fundamentalism, the reasons for which we will consider later.

The failure of the humanistic religious reformers contains a lesson that ought not to be lost on the other humanities. Now, it is the case that representatives of the other humanities—art, history, philosophy, and so on—are often glad and quick to distance themselves from religion. This is probably owing to a number of reasons, some of them understandable, others not entirely lofty. Some humanists have distanced themselves from religion in an effort to attach to themselves a portion of the same prestige as that enjoyed by science in modern culture. Others deny any compatibility between their subjects and religion because they have rejected specific religious views—say, those of religious fundamentalism—and understandably do not want themselves or their subjects associated

with these. Others reject religion because they assume that it is based on irrational, blind faith, which is more and more the case in the modern world because religion has largely lost all grounding in genuine knowledge. But the other humanities ought not to count themselves immune from the same fate that befell these most humanistic and rational theological reformers. All of the humanities share fully, with the humanistic, theological reformers, a dependence on the same non-sensory realm of values, meaning, purpose, and quality. It is just these in all subjects that have been denied an ultimate cognitive foundation by the two-realm theory of truth.[3]

Many of the consequences of the quantitative-mechanistic view of the world have been very destructive, and have shown themselves to be increasingly so. One consequence has been a constant pendulum-swing between, on the one side, a spreading nihilism about the meaning of life, and, on the other side, a harsh and dogmatic—even violent—fundamentalist reaction.[4] A sense of deep meaninglessness and futility is entrenched even among some of our most renowned cultural leaders—the scientific elite. The great twentieth-century mathematician and philosopher, Alfred North Whitehead, did not share this nihilism, but he identified its origins in the picture of nature presented by the mechanistic-quantitative world view. In this view, Whitehead pointed out: "Nature is a dull affair, soundless, scentless, colorless; merely the hurrying of material, endlessly, meaninglessly."[5] Many prominent scientists today subscribe to this view. The eminent physicist, Steven Weinberg, has famously stated: "The more the universe seems comprehensible, the more it also seems pointless."[6] The biologist William Provine has written: "Our modern understanding of evolution implies that ultimate meaning in life is nonexistent."[7] The astronomer Sandra Faber has said: "The universe is completely pointless from a human perspective" (note here the first problem of the two-realm theory). And echoing the same thought, the Harvard astronomer Margaret Geller asks, "Why should the universe have a point? What point? It's just a physical system, what point is there?"[8] These scientists are among the most influential of public figures. Since science is the dominant modern faith and these scientists are its high priests, their view of a totally meaningless world seeps down into all strata of modern society, sometimes subtly, other times not so subtly.

In reaction to this [science-inspired] modern nihilism, we witness the spread worldwide of an ever more violent and dogmatic fundamentalism.

In reaction to this modern nihilism, we witness the spread worldwide of an ever more violent and dogmatic fundamentalism. This rise of fundamentalism is not surprising. It is not surprising because the non-sensory realities of value, meaning, purpose, and qualities are of the essence of human life, and they keep coming back. If they can find no grounding in genuine knowledge, they will, nevertheless, continue to reassert themselves, if necessary in ways that are irrational and arbitrary— that is, in ways that are dogmatic and fundamentalistic.

Religious fundamentalism is today widespread. Nearly every religion in the modern world has its fundamentalist wing—Judaism, Christianity, and Islam, but also Hinduism, Buddhism, Sikhism, and most others. And this has given added ammunition to those modern enemies of anything religious. The modern critics of all things religious are, however, missing a critical thing of importance in the upsurge of fundamentalism: namely, that they themselves are not immune. The pervasive and all-encompassing modern view that values have no knowledge-grounding affects the political, scientific, and economic realms as well. All those in the modern world who would affirm and advance value commitments

that have no qualitative knowledge base (as is the case by fiat in the two-realm theory of truth) have to do so in ways that are ultimately dogmatic, drawing upon the givens, among other things, of tradition, ideological commitments, emotions, convention, and power interests. And so an alert observer will note that, alongside religious fundamentalism, we have the full complement today of political, scientific, and economic fundamentalisms on all sides. It would seem that no group in the modern world is spared the fundamentalist temptation.

Of course, between the poles of nihilism and fundamentalism lies a middle ground in which thinkers of various stripes have attempted to avoid either extreme. But this middle ground is unstable, constantly shifting and fading away, as one attempt after another is made to hold the middle. Some of the efforts to maintain this middle ground achieve a degree of success and the effort itself warrants being encouraged, if for no other reason than that it helps keep alive the issues. So far, however, none of these middle ground efforts—philosophical, artistic, or spiritual—has been able to overcome the two-realm split, nor to do more than slow the pendulum swing.

Especially serious is the tendency for the mechanistic side to encroach constantly upon the humanities, such that all semblance of a symmetrical, equal relationship disappears. The claim is increasingly made that human beings and all that makes them uniquely human—values, meaning, ideals, love, selfhood—can be understood like everything else in terms of matter in motion. The mechanistic view not only attempts to explain nature, but also to explain away the human. This tendency has become especially strong in contemporary Western culture, with profoundly negative consequences.

> If these two become separated, controlling reason and technology, cut off from a larger matrix of meaning and purpose, begin to run amok and out of control.

Consider two of these consequences: the degradation of the human being and the actual and unremitting exploitation and destruction of the earth. Truncated and mechanistic models and images of the human being and of nature alike predominate in our thinking, guiding our research and practice and our education at every turn. Some of the models are reductionist in the extreme. Even those scientists who, in their own thinking, would not subscribe to full-scale reductionism—on the order of, e.g., that expressed by Francis Crick: All human joys and sorrows, memories, ambitions, and personal identity itself are, as he puts it, "no more than the behavior of a vast assembly of nerve cells and their associated molecules"[9]—are almost all bound in their actual research entirely to mechanist models of reality. In medicine, agriculture, biology, cognitive science—in nearly every field—mechanistic models of inquiry and application prevail and guide research, teaching, and technological development. Among the results are wrenching ethical, medical, ecological, and cultural dilemmas, as the fullness of the human being is forced to conform to the less-than-human "realities" that are generated in the laboratory and then released upon a hapless public. All the while, qualitative nature—the nature around and in us, the nature of beauty and life—continues, relentlessly, to be taken apart. As long as nature is regarded as having no qualities—no inner life, no meaning, no living wholeness—dismantling it for our own pleasure and economic advantage is obviously that much easier to justify.

A major example, often disregarded, but a blot on the human heart, is the treatment of animals in modern factory farming. Daily our culture inflicts intense and unrelieved suffering on millions of animals—particularly pigs, cows, and poultry—all feeling, sentient

creatures. The animals, defined as "units of production," are treated like the rest of nature as useful pieces of machinery without feelings—things to be exploited and tortured without compunction in order to satisfy our gastronomic cravings.

The costs of this mechanistic justification for the exploitation of the earth are evident on all sides. *The Living Planet Report* for the World Wildlife Fund has recently concluded: "People are plundering the world's resources at a pace that outstrips the planet's capacity to sustain life."[10]

All of this is not to say that each of the three assumptions of the mechanical philosophy with which we began have not been subjected to penetrating criticisms. The criticisms have come from many quarters. The first assumption, that of the onlooker stance of the detached knower, has, perhaps, been the most thoroughly undercut by critics. Serious challenges to the notion of the objectivistic, detached knower come from ecological studies, from literary interpretation, from women's studies, and especially from quantum physics—all of which stress the centrality of an interactive, participatory, and mutually transformative relationship between the knower and the known. An important challenge to the second, exclusively quantitative, mechanistic assumption has come from some philosophers and ecologists who maintain that the most adequate metaphor to guide our thinking about the earth is not the machine but the living organism. And this challenge to mechanistic exclusivity has even come from some quantum physicists—not yet all by any means—such as David Bohm, who has argued that the living whole, not the separate parts, must be the ultimate basis for understanding nature, as well as the human being. The third assumption, the sense-bound or sensationist assumption about all knowing, has been challenged by some philosophers who point out that we must presuppose a certain intuitive apprehension of non-sensory realities, such as ideas, moral norms, meaning, cognitive rules of logic, and others, even for the possibility of all our ordinary sense-based knowing, including our practice of science.[11]

> The basic essential for qualitative knowledge is not merely to establish the need for it, but to develop capacities for it.

All of these criticisms suggest the need for the development of new ways of qualitative knowing on both sides of the science/humanities divide: ways of knowing that would ground in knowable reality the values, meaning, and qualities central to the humanities, ways of knowing that would enable us to deal not only with the material and mechanical dimensions of nature but also with the qualities in nature of life, beauty, and organic growth and development.

Why have the criticisms, and they are many, of the inadequacies of an exclusively mechanistic science not led to actual qualitative ways of knowing? The reason seems to be that recognition of the inadequacies and destructive consequences of the two-realm theory of truth is not enough. The basic essential for qualitative knowledge is not merely to establish the need for it, but to develop capacities for it. What might this entail?

> One essential aspect of the qualitative way of knowing that Steiner was able to demonstrate is the realization that a qualitative transformation of knowing requires a qualitative transformation of the self, the knower.

Showing that such a transformation of knowing is both necessary and possible was a guiding concern of Rudolf Steiner's throughout his life's work. Connecting with the qualitative science of Goethe,

especially, as an actual example in Western culture of the beginning possibility of such qualitative ways of knowing, Steiner provided insights, examples, and exercises whereby the beginnings of the Goethean impulse could be carried further—and in all fields, in both science and the humanities. Without in any way attempting here an account of the riches Steiner has to offer, let us conclude by focusing briefly on one essential aspect of the qualitative way of knowing that he was able to demonstrate in his own person, and that he was concerned to show is a possibility for all. This is the realization that a qualitative transformation of knowing requires a qualitative transformation of the self, the knower.

This means that, in the work of knowing, the whole person is involved—the thinking, feeling, willing, and moral character of the knower. A starting point can be the realization that, as we have already pointed out, even in our sense-based knowing a certain minimum grasp of non-sensory realities is necessary. As the historian and philosopher John Lukacs has said: "[A]ll of our perceptions are, at least to some extent, extrasensory."[12] And the philosopher and theologian David Ray Griffin has written: "Sensory perception is a very high-level, specialized type of perception which may or may not occur and which presupposes the existence of non-sensory perception."[13] A beginning task, then, becomes one of developing these incipient, and usually unconscious, non-sensory capacities into full-fledged, conscious capacities for qualitative perception and understanding. Steiner, for example, provides many meditative and observational exercises and considerations to enable us in this task. And the education of the whole person in Waldorf education, when rightly grasped and practiced, can provide in the earliest years a firm foundation for these capacities.

Also essential to the qualitative transformation of knowing is that knowledge of qualities must be participatory. This is to say, I can only come to know qualities in the world—the world of nature, the world of others, the world of the spiritual—to the extent that I can bring those qualities to birth in myself. For example, the non-sensory qualities of love, joy, peace, patience, and many others, can be truly known by me as realities in the world only if I can come to experience them as realities in myself. And, it also works in the other direction: Opening myself to the qualities in the world can nurture and enable them to take root within myself.

What is possible to us, and much needed in our time, is a deep healing of the split between "the two realms of truth" such that we can speak equally of genuine knowledge in both realms, qualitative knowledge that can enliven both science and the humanities. And in this, there would always be an honored place for quantity, for, to the extent that it has meaning, quantity is a subset of quality.

Endnotes

1 John Paul Russo, *The Future without a Past: The Humanities in a Technological Society* (University of Missouri Press, Columbia, MO, 2005), pp.86–87.

2 Quoted in Ibid., p. 115.

3 Paul Tillich, *The Spiritual Situation in Our Technical Society* (Mercer University Press, 1988), p.165.

4 The late Stephen Jay Gould, the renowned Yale biologist, wrote an entire book not long before his death setting forth a view of the two realms of truth that is almost exactly the same as that presented by Tillich and the theological reformers. Like the theologians, Gould's concern is to argue that science and religion represent two entirely different domains of experience. Borrowing a rather clumsy term from Roman Catholic theology—*magisteria*, referring to the sphere of authority in teaching—Gould argues that science and religion represent two "Non-Overlapping Magisteria." "The net, or magisterium, of science covers the empirical realm: what is the universe made of (fact) and why does it work this way (theory). The magisterium of religion extends

over questions of meaning and moral values." (He does make room for a separate domain for art and beauty, but this simply reflects the predominately modern view that art has little to do with either knowledge—fact—or value—ethics.) Gould's concern in keeping the two realms strictly separate is, like that of Tillich's, to prevent any occasion or reason for conflict between them. He wants to protect science from religion, and religion from science; each can go its own way with nothing to fear from the other. While he states his desire to respect each equally, his solution contains both of the problems we have seen with the theologians: the handing over of all knowledge as such to a quantitative-mechanistic science and the resulting lack of balance between the two realms of truth. This is clear in his affirmation that only science deals with "facts," that is, with genuine knowledge. "Science," he says, "tries to document the factual character of the natural world, and to develop theories that coordinate and explain these facts. Religion, on the other hand, operates with the equally important, but utterly different realm of human purpose, meanings, and values. …" While he states that both sides are "equally important," the attribution of true knowledge (facts) only to the one side ensures the tipping of the scales of influence toward that side and away from the other. Although Gould's main focus here is on religion, his including in the domain of religion all "human purposes, meanings, and values" encompasses per force the larger domain of the other humanities as such. See Stephen Jay Gould, *Rocks of Ages: Science and Religion in the Fullness of Life* (New York: The Ballentine Publishing Group, 1999), especially pp. 4–6.

5 Alfred North Whitehead, *Science and the Modern World* (New York: The Macmillan Company, 1950), p. 80.

6 Steven Weinberg, *The First Three Minutes* (New York: Basic Books, 1977), p. 80.

7 Quoted in Huston Smith, *Why Religion Matters* (San Francisco: Harper's, 2001), p. 37.

8 Faber and Geller quoted in John F. Haught, *God after Darwin: A Theology of Evolution* (Boulder, Colorado, Westview Press, 2000), p. 105.

9 Francis Crick, *That Astonishing Hypothesis: The Scientific Search for the Soul* (New York: Scribners, 1944).

10 http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/.

11 See, for example, David Ray Griffin, R*eligion and Scientific Naturalism: Overcoming the Conflicts.* (Albany: State University Press, 2000), p. 139.

12 John Lukacs, *At the End of an Age* .(Yale University Press, 2002), p.36. I have used the term "non-sensory" to distinguish clearly immaterial, qualitative realities from the material and sense-bound, but perhaps in the end his use of "extrasensory" is better.

13 David Ray Griffin, *God and Religion in the Postmodern World.* (Albany, NY: State University of New York Press, 1989), p. 90.

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What Stands Behind a Waldorf School?

David S. Mitchell

If we were to ask, "What is this school that we call a Waldorf school," how would we answer? As is the case with all cultural institutions, the answer lies not with the buildings; schools have many types of buildings, from the gray, sturdy stone building of the Rudolf Steiner School in Manhattan to the breezy grass huts which serve as a school for the children at one of the Waldorf schools in South Africa. It does not lie with the teachers; over the course of time teachers leave an individual school and new ones will replace them. It does not even lie with the children; they too come and go, staying for up to 12 years and then leaving as others take their place. So, what do we mean when we speak about the Waldorf school? If it's not the building, the teachers, the parents, the children, then what is it? Does it have any reality at all? Is the "Waldorf school" merely the conjunction of two abstract nouns such as we use daily when we speak of "the U.S. Government" or "the World Environment," or the most unreal of all nouns, "money"? Do the words "Waldorf school" actually label something?

If they do, how has it come to be that teachers and administrators dedicate their life's work to one particular "Waldorf school," often subsidizing it at great personal sacrifice? Or why is it that parents extend themselves to the end of their economic limits to support it, and then volunteer when asked? Why is it that many students feel such a great connection to "their" school and their teachers even after they have left it? Could teachers, administrators, parents, and students feel the devotion, the loyalty, the love simply to a word that has no reality connected to it?

First of all, I contend there is no such thing as a Waldorf school—there are only schools striving to become Waldorf schools. A true Waldorf school is always in the state of becoming. This involves human striving and self-development during which teachers remain open, constantly observing, and focused on Waldorf ideals while being centered in the world.

There may never be a school that can meet the high ideals initially set by Rudolf Steiner and carried in some degree by every one of the more than 12,000 Waldorf teachers in the more than 1,000 schools around the world. To understand what these ideals are, we have to look at what is behind each effort that is striving to become a Waldorf school.

The school can be a force of destiny in our lives. Many teachers and parents have claimed that their life direction changed after they encountered Waldorf education. Why might this be? Behind the school there is a reality, there is something that we have to regard as a "being." We might call this the "genius" of the school in the original sense of the word—a "guiding spirit."

> [T]here is no such thing as a Waldorf school—there are only schools striving to become Waldorf schools.

If we look for a more specific example of how we can better understand this "genius" of the school, we can begin with the observation that each Waldorf school has its own unique character, its own biography, which aligns itself with the community around the school and its particular geography. For instance, Pine Hill Waldorf School in New Hampshire and Shining Mountain Waldorf School in Colorado—two schools where I have taught—are different not only because of geography nor because they have different histories, but because each has, quite literally, a different "spirit."

This is the reason why, if two Waldorf schools are faced with similar problems, a solution that suits one school may not be satisfactory for another school. It can also happen that a teacher who has been doing very well at one school does not have it so easy when he/she moves to another or vice versa. There is such a thing as being "in tune" with the "genius" of a school.

One way to get in tune with the "spirit" of a school is to do a collaborative study of your locality. Divide your group so that a few research the history of your immediate locality; others take on the geology, the meteorology, the topography, the botany, and so forth. Then share your findings with one another. This creates a sense of place and provides a picture for the astral, etheric, and ego background of the interpersonal interactions.[1] Another way is to seek the "genius" inwardly through meditative work. One person I know came in touch with the inner "being" of the school by donating practical services, working two days a week on the school grounds and beautifying the building. There are many ways, but the key is to be active.

All Waldorf schools evolve from the same philosophical consciousness, all adhere to the same developmental stages through the curriculum, all share certain methods and have to deal with the same kinds of problems, and yet despite these common features every school is an "individuality" with its own special destiny.

The "beings" who guide the destiny of each school are not single human personalities; they are concerned with groups of people—with teachers, administrators, parents, and children. They become interested only when their "activity" is part of an evolutionary process, when adults join forces, for example, and work towards a higher goal that does not serve any particular individuality.

Within the school it is a task of the College of Teachers to act as an instrument through which the guiding spirit of the school can work. It is within this College meeting that, in spite of the participants' personal shortcomings and inadequacies, school issues are debated and studied and the school evolves and grows.

If the life and growth of Waldorf schools were dependent on the wisdom, foresight, and knowledge present amongst the teachers, no school would last much longer than a couple of years. But, there is a wisdom which stands above our individual efforts—whether successful or unsuccessful—and somehow manages to keep these schools, and the entire Waldorf educational movement, growing in exponential leaps.

We could never abandon our College meetings and just trust that this "higher wisdom" would run the school. It is only because we are striving towards that wisdom—sacrificing time and energy to these endless discussions, giving something of ourselves to the school in these meetings—that a wisdom can flow down and work the miracle which is the existence of every school.

Today, giving up time and energy is akin to the ancients' offering up sacrifices to the gods; it opens the gates through which insights can flow. It is impossible to be a Waldorf teacher without a certain "enthusiasm" for the work we do with the children. It is the teacher's enthusiasm (the warmth we feel for our task), the cultivated devotion toward the children, and the sheer perseverance that makes teaching different from any regular 9-to-5 job. The ancients felt enthusiasm was the gift of Lucifer, the fallen, once-too proud angel. We could not exist as teachers, we simply would not be teachers without this element of enthusiasm within us.[2] In this, we balance upon a tightrope and our appearance in the world must be focused, healthy, and erect—like the knight with his lance riding in a gorge between Lucifer and Ahriman, who wish to pounce but are kept at bay by the centered knight.[3]

Without this gift of enthusiasm it would be difficult indeed to put up with all the daily problems and irritations—the misbehaving

child, the fractious colleague, the uncooperative parent, the load of work, and the inadequate pay. It needs a lot of enthusiasm to bear all this and to love one's work.

However, these Luciferic tendencies, which we all have, bring another and less beneficial gift: the tendency to "split up," to divide, and to create antipathies. So, on the one hand we have the guiding spirit of the school which unites us all—parents, administrators, and teachers—in service of the children; on the other, we have the force which would divide this unity and break it up.

We are faced with a universal social problem of our time: how to reconcile the claims of the individual with the demands of the community. The teacher may be in a situation that makes the problem more acute than it is anywhere else. It is easy to have reverence for the dignity of the individual child—it is far more difficult when it comes to the adults in our community. Karmic antipathy says hello to us in many strained moments.

When people work in an office, a store, or a factory, they are literally "working together" —they have to stand or sit beside their working companions. This special togetherness helps to create a feeling of fellowship, a common bond.

It is not so for the teacher whose work places him or her in a classroom where s/he is the only adult. S/he is with the children but, in the task, totally alone with no one else to help. Coupled with this is the tremendous responsibility that all teachers feel when they are shepherding their special group of children and helping them to unfold their knowledge. Every nuance, every gesture and tone can be significant to any particular child.

This level of responsibility requires a certain amount of inner strength and a strong personality. Children know instinctively whether the teacher has this strength—and they can be ruthless in making life a misery for the teacher who is not strong enough. The children are quite correct in their severity, for only this strength of personality gives the teacher the authority which the children need in the second seven-year period of their lives.

This inner strength, this strong personality, is a matter of personal destiny. Either one has it, or one hasn't. It can't be faked. While this strength of personality makes the teacher adequate for the classroom, it can make him or her less inclined to fit comfortably into a community.

One might think that the recipe for this situation would be a special effort on everyone's part to be social, to be nice to one another, to suppress one's own force field of individuality. This way, however, is hypocritical, a false front, and ultimately leads to defeat. The real remedy lies elsewhere.

In his book *Philosophy of Freedom*,[4] Rudolf Steiner points out that we all draw our moral intuitions from the same world of ideas. Therefore, truly free individuals acting out of moral intuitions could not possibly ever clash. We do not become teachers by reducing or suppressing the strength of ego forces, but by raising these forces to the heights of moral intuitions—the same intuitions on which we depend every day to deal with this or that problem in the class. It is only by making such moral intuitions the one and only guide for our working together with our colleagues that we can hope to become a community—a community of free individuals. Within our greater community—between parent/teacher, parent/parent, teacher/administrator/parent—one can awaken moral intuition by looking for "that which is striving" in the other, rather than at his/her sack of faults. Steiner recommended that we enter a meeting with the inner belief, "Everyone else has the most important thing to say!" This can be a mighty task, indeed. But, would it not be a wonderful inspiration for the children we teach and parent if we were to act as dignified, contained, role models in our social interchanges?

It is not by avoiding confrontations, for sometimes they are absolutely necessary; nor is it by tolerating those things which are

intolerable, but by summoning up within ourselves the "courage for the truth" that we bring uniqueness to our various Waldorf communities.

This "courage for the truth" requires from all of us a good measure of self knowledge, a knowledge of one's biases and prejudices, of one's purely personal motives and ambitions. It is this personal element which forms the dark clouds that obscure the clear light of our inspired intuitions. Unless we can disperse these clouds the light cannot shine.[5]

Light shines upon a group deliberation when one surrenders one's "selfness" while looking for a common answer. An experienced teacher told me that before every meeting he would randomly take a volume of Steiner's works and read a few paragraphs in order to create the mindset to leave everything personal outside of the meeting, focusing instead upon the greater perspective. He was honored as a colleague for his insightfulness, wisdom, and impartiality in debates.

It is not important how much we actually achieve by striving in this direction. Our achievements will always be inadequate to some degree, but it is the effort we make, the will we put into it, the sincerity of our intentions which will bring the help we need to create a Waldorf school. Our efforts to create and strengthen our community will be reaped tenfold by our children, for it is a secret in moral education that "what is transformed in the adult" will benefit the young in more mysterious ways than can be imagined.

Endnotes

1. For detailed directions, see "Geographical Exercises" at the end of the chapter entitled "Etheric Geography" in *The Riddles of America,* edited by John Wulsin from a lecture given at the AWSNA summer conference in Wilton, NH, during June of 1997.
2. Because class teachers work so intensively in the artistic realm, transforming the mundane into the extraordinary, infusing the material with the spiritual, they are subject to the influence of Luciferic beings who work through the imagination, inspiring flights of creativity and fantasy, bringing warmth and light to the art of teaching. Although some of our work draws on Lucifer's domain, we must be careful not to succumb to his temptations, and we must take active steps to combat his influence. – Roberto Trostli
3. See the etching of Albrecht Dürer, "Knight, Death, and the Devil" displayed New York's Metropolitan Museum of Art.

Riding steadfastly through a dark Nordic gorge, Dürer's knight rides upright past Death on a Pale Horse, who holds out an hourglass as a reminder of life's brevity, and is followed closely behind by a pig-snouted Devil. As the embodiment of moral virtue, the rider—modeled on the tradition of heroic equestrian portraits from Italy with which Dürer was familiar—is undistracted and true to his mission.

4. Rudolf Steiner, *Philosophy of Freedom*, Anthroposophic Press, 1996.
5. See AWSNA's *Young Schools' Guide*, chapters entitled "Foundations of the Waldorf Educator" and "What Is It That Makes a Waldorf Teacher Come Alive?" www.whywaldorfworks.org.

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On Earth as It Is in Heaven

The Tasks of the College of Teachers in Light of the Founding Impulse of Waldorf Education

Roberto Trostli

Introduction

At the center of the Waldorf school stands the College of Teachers.[1] What is the College? What are its tasks? Who serves on the College? Why is it important for a Waldorf school to have a College? The answers to these questions will help us understand the mission and tasks of the Waldorf school.

In this work, I will address these fundamental questions about the College in light of the founding of the first Waldorf school in 1919. I will also share some ideas about the College that I have developed in nearly three decades of working with Colleges. I hope that my work will inspire others to delve deeply into these questions and to develop their own perspectives.

What is the College of Teachers and what are its tasks?

A Waldorf school is more than just another independent school that provides a developmental education. It is an organization that seeks to allow the spiritual impulses of our time to manifest on earth in order to transform society. The group that is primarily responsible for recognizing and realizing this mission is the College of Teachers. The College does so by working in two realms: the material and the spiritual. This essential feature was revealed during the preparatory course for the founding of the first Waldorf school in Stuttgart, Germany. By examining what Rudolf Steiner presented in The Opening Address and The College Founding, we will begin to sense how the College can bridge and balance the worlds of matter and spirit. (These texts are included in the Appendix.)

A Waldorf school is an organization that seeks to allow the spiritual impulses of our time to manifest on earth in order to transform society.

The Opening Address and The College Founding

The Opening Address was given by Rudolf Steiner on the evening of August 20, 1919, prior to the preparatory course for the teachers of the first Waldorf school. In The Opening Address, Rudolf Steiner identified two major goals for the school:

(1) to achieve a renewal of modern spiritual life by reforming and revolutionizing the educational system, and

(2) to demonstrate the effectiveness of anthroposophy through a new art of education.

The Opening Address also described how teachers could work towards these goals individually and collectively in a "teachers' republic."

The College Founding was given the following morning as the opening to the first lecture in the series now known as the *Study of Man*.[2] There Rudolf Steiner spoke again about the goals of the Waldorf school and the tasks of the teachers, highlighting the cosmic importance of the school's founding. At the center of The College Founding, Rudolf Steiner presented The College Imagination, which shows the teachers how to work with the beings of the Third Hierarchy: the Angels, the Archangels, and the Archai.

With these two addresses Rudolf Steiner established the College as the place in the school where teachers work on earthly and spiritual tasks. The Opening Address deals with the earthly aspects. These include the

societal context, the need to make anthroposophy practical, the compromises that will be needed, and the school's administration. The College Founding deals with the spiritual aspects. These include the cosmic context, our relationship to one another, and how we can work with spiritual beings.

In these addresses Rudolf Steiner presented the teachers with two sides of their work together. The Opening Address poses a set of earthly questions and challenges and The College Founding provides a way of looking at these from a spiritual perspective. Here are some examples:

The Opening Address: How will we renew spiritual life by reforming and revolutionizing the educational system?

The College Founding: We will see our work not as simply a matter of intellect or feeling, but, in the highest sense, as a moral, spiritual task.

The Opening Address: How will The Waldorf School serve as living proof of the effectiveness of the anthroposophical orientation toward life?

The College Founding: We will create, from the very beginning, a connection between our activity and the spiritual worlds.

The Opening Address: How will we deal with the state's goals and standards and make the necessary compromises?

The College Founding: We will not view the founding of this school as an everyday occurrence, but as a ceremony held within the Cosmic Order.

Both of these addresses have a similar structure; each is like a triptych. The beginning and ending sections of each address mirror each other, describing the context, the tasks, and the qualities that will be needed to perform these tasks. These outer sections frame the most important question for the College: How can these important tasks be performed? Like a triptych, whose middle section carries the central image, the middle sections of the two addresses show how teachers can work together on the earthly and spiritual planes. From the chart below we can see that The College Founding considers the points in The Opening Address from a spiritual perspective.

At the center of The College Founding, Steiner presented The College Imagination, which shows the teachers how to work with the beings of the Third Hierarchy.

From The Opening Address:

1. Each teacher needs to work in full responsibility.
2. We will work together in a "teachers' republic."
3. We will develop a spirit of unity by our work with the preparatory course.

From The College Founding:

1. Our Angel gives us strength for our individual work.
2. The Archangels give us courage for our collective work.
3. The Archai give us light; we work with the Spirit of the Times.

At the very beginning of the founding of The Waldorf School, Rudolf Steiner already established the task of the College: to bridge and balance the earthly and spiritual realities in the service of the school and the education of the students.

Finding the Balance

A College of Teachers has earthly tasks and spiritual tasks, and the College in each school must find the proper balance between them. This balance will change as the school's circumstances change. It may even change during the course of the school year. At every meeting, the College must find the balance

between its earthly focus—administration, personnel, facilities, finances, and so forth—and its spiritual focus—anthroposophy, child development, the curriculum, methodology, and so forth. Whether a College focuses more on earthly matters or spiritual matters depends on the needs of the school. What is most important is that earthly matters be informed from the point of view of the spirit and that spiritual matters be informed by down-to-earth practicality.

What is most important is that earthly matters be informed from the point of view of the spirit and that spiritual matters be informed by down-to-earth practicality.

The word "balance" comes from the Latin name for scale. It is derived from the words *bi* and *lanx*, which mean "two dishes" or "trays." The trays of a scale hold what is to be weighed. Unequal weights cause the dishes to move vertically, with the heavier dish ending up lower than the lighter. Equal weights result in the trays' reaching the horizontal, the balance point.

The scale also has a bar that links the trays. This connecting bar pivots around a central fulcrum, mediating the polarity of the trays. When the trays are "in balance," the opposites are held in dynamic equilibrium, and activity ceases. To achieve balance we need polarity but we also need something that mediates the polarity.

We have seen that The Opening Address and The College Founding have similar structures. We can imagine this structure as a scale with two trays containing the tasks of the individual teachers and of the school. Between them is the connecting bar—the collective work that we must do. We can also imagine those two addresses together on a scale, with The Opening Address on one side and The College Founding on the other. This scale balances the earthly tasks of the College with its spiritual tasks. The connecting bar is the collegial work of the teachers and their work with the spiritual worlds.

The image of the balance finds its correspondence in the structure of the first Goetheanum with its great hall composed of two intersecting domes. As Henry Barnes pointed out in *The Third Space*, the structure of the first Goetheanum expressed the polarity between the earthly and the cosmic, the sensible and the supersensible, the exoteric and the esoteric. Between the spaces of the hall and the stage was a "Third Space" created by the intersection of the two domes. In that space the earthly and the spiritual found their balance. Beyond that space, at the back of the stage, was to stand the statue of the Christ, the Representative of Humanity, who helps us achieve cosmic and earthly balance.

In the constellation Libra, Astraea, the goddess of earthly justice, holds the scales. So too the College of Teachers holds the scales by which the earthly and spiritual tasks of the school are balanced. As members of the College we need to be the balance in the school, but even more than that, we need to transform the word balance from noun into verb and thereby find the dynamic equilibrium between our tasks.

Our tasks in light of the tasks of the original College of Teachers

I think that the original group of teachers serves as the prototype for any College of Teachers. Their tasks are our tasks, and we can view our work in light of what Rudolf Steiner presented in The Opening Address and in The College Founding.

Goals: In The Opening Address Rudolf Steiner presented the original College of Teachers with three goals: to achieve a renewal of modern spiritual life; to reform and revolutionize the educational system; and to accomplish a great cultural deed. In The College Founding he also presented the teachers with three goals: to view their task as a moral

spiritual task; to recognize the importance of their work; and to be conscious that this school fulfills something special.

These goals are just as apt today as they were in 1919. We are still trying to renew education. In order to do that we still need to recognize how special a Waldorf school is and to recognize the importance of our work. The College in every school needs to hold such goals in order to help its school and the Waldorf movement as a whole accomplish a great cultural deed: the renewal of modern spiritual life. How we go about this depends on the time and place in which we live and work. It is up to each College to try to read the signs of the times and the needs of its community and the wider culture to determine how the school can serve its lofty goals.

The College must serve as the font of inspiration for the processes by which teachers can learn how to transform what is gained through anthroposophy into truly practical instruction.

Anthroposophy: In The Opening Address Rudolf Steiner spoke about the relationship of anthroposophy to The Waldorf School. He told the teachers that The Waldorf School would be living proof of the effectiveness of the anthroposophical orientation toward life. It would accomplish this by being a unified school[3] that considered how to teach only in the way required by the human being.

In The College Founding Steiner revealed how anthroposophy can be brought to earth: by creating a connection between our activity and the activity of spiritual beings. He encouraged teachers to be conscious that they do not work only in the physical plane of living human beings, and he characterized the founding of The Waldorf School as a ceremony held within the Cosmic Order.

Strengthening the anthroposophical foundations of Waldorf education remains as important today as it was when the first Waldorf school was founded. The College must serve as the font of inspiration for the processes by which teachers can learn how to "transform what is gained through anthroposophy into truly practical instruction." It must support these processes through study, through artistic activity, and through the opportunities and means for anthroposophical professional development.

Steiner described the founding of The Waldorf School as a ceremony within the Cosmic Order. I think that the founding of every subsequent Waldorf school also has cosmic significance. Just as we celebrate the birth of a child because a soul-spiritual being has chosen to enter the earthly realm, we may celebrate the founding of a Waldorf school because it strives to bring the soul-spiritual into the realm of human life. This feeling of celebration should also permeate the founding of the College, and it can extend to each College meeting because during our meetings we can experience ourselves as working within the Cosmic Order to midwife the birth of spirit into matter.

Context: In The Opening Address Steiner described the difficult social and educational context in which The Waldorf School was being founded:

> The state imposes terrible learning goals and terrible standards, the worst imaginable, but people will imagine them to be the best. Today's policies and political activity treat people like pawns. More than ever before, attempts will be made to use people like cogs in a wheel. People will be handled like puppets on a string, and everyone will think that this reflects the greatest progress imaginable. Things like institutions of learning will be created incompetently and with the greatest arrogance.

Much of this description still holds true today. Although most Waldorf schools are ostensibly free from "terrible learning goals and terrible standards," these goals and standards permeate our culture. They establish expectations among the parents and the community and often become the standard against which Waldorf teachers are measured and against which they judge themselves. Standardized educational materials and the behavioral methods that are almost universally applied in other schools find their ways into our schools too.

As Waldorf teachers, we need to be informed about and to understand the prevailing view of the human being. We must be careful, however, not to allow that view to erode our recognition that the child is a spiritual being who has come to earth to do what it was not possible to do in the spiritual world. The College is the place where this view of the human being is broadened and deepened. The College strives to serve as the source of the strength and inspiration for teachers who are trying to "teach in the way required by the human being." By keeping the school's focus on the becoming human being, the College remains true to its intention.

Compromises: Steiner told the original teachers that they would have to make compromises. They would have to know their ideals and have the flexibility to conform to what lies far from those ideals. This remains true for us today as well. Every Waldorf school exists in a context—a community, a state, a country, a contemporary society—and it must adapt to that context through positive, creative, realistic means. It behooves us to emulate Steiner's calm, objective attitude towards this challenge. Rather than bemoan our situation, Waldorf teachers and Waldorf schools must embrace the opportunities and challenges of our time. We must love the age in which we and our students have incarnated because it presents us with exactly what we came to meet on earth.

The College should be the place in the school where a sense of contemporaneity is cultivated, where teachers are helped to become true citizens of the time and place into which they have incarnated. The challenges posed to us by the parents, our communities, and our culture provide us with the opportunities to develop the flexibility and strength that we need to create a truly modern art of education. If the College can stay true to its vision while adapting to its challenges, it will serve as a model that students will emulate in their adult lives.

> At the very founding of The Waldorf School, Rudolf Steiner already established the task of the College: to bridge and balance the earthly and spiritual realities.

Qualities: In The Opening Address and at the end of the preparatory course, Rudolf Steiner described the qualities and attitudes that Waldorf teachers should cultivate. Imagination, courage for the truth, responsibility of soul, initiative, interest in the world, integrity, and freshness of soul—these are the seven "virtues" that the Waldorf teacher strives to practice.[4]

Waldorf teachers practice these virtues in and out of the classroom in the service of their students. They practice these virtues in the College in service to each other and to the school. They are helped to do so by the Angels, Archangels, and Archai, who grant them the strength, courage, and light to do their work. By creating a true "Philadelphia," a city of brotherly love, in their meetings, members of the College further the work of the Good Spirit of the Time and of the Spirit of the Waldorf School.

The tasks of the original College of The Waldorf School of 1919 remain relevant for every College in every school today and

into the future. During the two weeks of the preparatory course, Rudolf Steiner helped the teachers recognize and embrace these tasks. In our Colleges throughout the years, we have the honor of continuing to work on these tasks.

The Teachers' Republic

In the middle section of The Opening Address, Rudolf Steiner spoke about how The Waldorf School would be organized and administered, and what the teachers could do to develop a spirit of unity:

> Therefore, we will organize the school not bureaucratically, but collegially, and will administer it in a republican way. In a true teachers' republic we will not have the comfort of receiving directions from the Board of Education. Rather, we must bring to our work what gives each of us the possibility and the full responsibility for what we have to do. Each one of us must be completely responsible.
>
> We can create a replacement for the supervision of the School Board as we form this preparatory course, and, through the work, receive what unifies the school. We can achieve that sense of unity through this course if we work with all diligence.[5]

These important passages have been repeatedly analyzed over the years, and the many forms of administration and governance in Waldorf schools show that there are many ways to interpret them. I will examine these passages in terms of the work of the College of Teachers, but I believe that it is the responsibility of each College to understand and apply Rudolf Steiner's ideas as they pertain to its school. To me, the four essential ideas contained in these passages are:

1. The teachers are integral to the organization and administration of the school.
2. Each person needs to act with full responsibility.
3. We can create a replacement for direction or supervision from educational authorities.
4. We can work together in a way that unifies the school.

Let us examine each of these ideas.

1. The teachers are integral to the organization and administration of the school. Rudolf Steiner saw schools as organizations in the cultural sphere, which should be as free as possible from political control and economic constraints. Schools' top priority should be the educational process, and they should be organized and governed accordingly. In 1919 Steiner developed these ideas in *Basic Issues of the Social Question.* In the Preface he summarized the role of the teachers in administration:

> The administration of education, from which all culture develops, must be turned over to the educators. Economic and political considerations should be entirely excluded from this administration. Teachers should arrange their time so that they can also be administrators in their field. They should be just as much at home attending to administrative matters as they are in the classroom. No one should make decisions that is not directly engaged in the educational process. No parliament or congress, nor any individual who was perhaps once an educator, is to have anything to say. What is experienced in the teaching process would then flow naturally into the administration. By its very nature such a system would engender competence and objectivity.[6]

According to Steiner, schools must not lose sight of their most important function: education. To serve that function, a school's organization and administration need to be informed by those closest to the educational

process. This will allow what is experienced in teaching to flow into administration. In my opinion, whether or not teachers should participate directly in administration needs to be determined by each school according to its circumstances. But having teachers who are as much at home tending to administrative matters as to teaching in the classroom helps keep a school focused on its mission of educating children. The College in every school needs to find the proper balance between the educational and administrative realms. If the College views these as two faces of the same coin, then the school's operations will be illuminated by pedagogical insight and the work of the teachers will be enhanced by practical, effective administration and management.

2. Each person needs to act in full responsibility. In order to act with full responsibility, we need to identify to whom we are responsible. I think that those of us who work in a Waldorf school are responsible to many: to ourselves, to the students and their families, to our colleagues, to the school and its community, and to the spiritual beings who are involved in our school. In a larger sense, I think we are also responsible to the nation in which we live, to the needs of our times, and to the earth and the spiritual worlds. If everyone who works in a Waldorf school recognizes and accepts this, then working in full responsibility means being aware of our own place in the cosmos as agents for the course of earth evolution.

The College needs to support this view of concentric circles of responsibility and help its members shoulder those responsibilities according to their abilities. This means that the College has to determine how much its members can or should do and how much needs to be delegated. Delegation does not mean, however, that we are no longer fully responsible; rather, it means that we are not necessarily responsible for the execution of a task. When individuals or groups act on behalf of the College or the school, they need to know that the College bears the ultimate responsibility for what they do. Because so much of what happens in a Waldorf school is done on behalf of the College, the processes of delegating and sharing responsibility are among the College's most important tasks.

3. We can create a replacement for direction or supervision from educational authorities. In educational systems that have a School Board or Board of Education, the Board establishes the school's educational goals and determines the staffing, facilities, and programs by which these goals can be achieved. In The Waldorf School, these responsibilities were put into the hands of the individual teachers and the "teachers' republic." Through the preparatory course Rudolf Steiner planned to lay the foundation for the teachers' understanding of the nature of the human being and the needs of the developing child, and he intended to outline the curriculum and the methods that would best serve the educational process. He did this not only to prepare the teachers for their pedagogical tasks but also to help them to become co-creative and co-responsible for the education and for the school.

> We must love the age in which we and our students have incarnated because it presents us with exactly what we came to meet on earth.

I believe that Rudolf Steiner intended for teachers—as individuals and as a group—to replace the educational authorities by becoming their own authority. This authority would be born out of proper preparation, continual review and reflection, and a willingness to develop and change in order to meet the needs of the students. If teachers are to be their own authority, they have to demonstrate their competence and be accountable. The College needs to cultivate a school culture that inspires and encourages the teachers' striving. The

College also needs to support this striving by providing the circumstances and means for teacher preparation, effective procedures for review and evaluation, and mentoring or peer supervision at all levels.

Rudolf Steiner said, "We can create a replacement for the supervision of the School Board *as we form this preparatory course*" (emphasis added). I believe the forming of the preparatory course referred to what he would be presenting in The College Founding. In that presentation, Rudolf Steiner urged teachers to form a connection with the spiritual powers. If we form this connection, we allow the beings of the Third Hierarchy to "direct" and "supervise" us. These beings show us what is needed and they give us what we need to do our work. If we work with our Angel, we are given the strength to perform our tasks and to work on ourselves in service to our students. In our work together with the Archangels, we are given the courage to receive and to give to one another what we have developed in our individual work in service to our school. In our work with the Archai, we are given the light to perceive the needs of our time in service to the world.

4. We can work together in a way that unifies the school. Rudolf Steiner told the participants in the preparatory course that they would receive what would unify the school if they worked with due diligence. What was presented in this course and how does that allow a sense of unity to be achieved?

In the opening morning lectures Rudolf Steiner presented a description of the human being from the psychological, spiritual, and physical perspectives (*Study of Man*). Later in the morning he gave an overview of the curriculum in the light of child development and described teaching methods for each stage of development (*Practical Advice to Teachers*). In the afternoon seminar Rudolf Steiner gave further curricular indications, describing and demonstrating how some of the subjects might be taught (*Discussions with Teachers*).

The preparatory course was intended to prepare the founding teachers for their pedagogical tasks. Their work with it was intended to engender a sense of unity which would allow the teachers to govern themselves and to guide the school. Here is how I think a spirit of unity can be achieved by the work with the preparatory course: When teachers work individually with the preparatory course, they unite themselves with other teachers who are also working on the course. This creates a community of ideas, of Imaginations. When teachers work as a group with the preparatory course, they unite themselves with all other groups who are working with the course. This creates a community of ideals, of Inspirations. When teachers work with the spiritual beings on the intentions of the preparatory course, they unite themselves with the Good Spirit of the Time to bring Waldorf education into earthly form. This creates a community of moral deeds, of Intuitions. These forms of working together are strengthened by working with The College Imagination, which will be described in a later section. [This section will be published in a future issue of the *Research Bulletin*— Ed.]

I think that Rudolf Steiner did not elaborate further on the work of the teachers with each other because that kind of work would need to be determined together. It was up to the College to realize (i.e., make real) the ideas and ideals that Rudolf Steiner had shared. Every College has this charge: to figure out how teachers can work in full responsibility and in a way that unifies the school. Like any art, the art of self-governance needs to be practiced to achieve its goal: the administration, management, and leadership of a school that truly serves the education of the child.

Appendix

The Opening Address, given on the eve of the Teachers' Seminar, Stuttgart, August 20, 1919:

This evening I wish to make some preliminary remarks. To achieve a renewal of modern spiritual life, the Waldorf School must be a true cultural deed. We must reckon with change in everything; the ultimate foundation of the whole social movement is in the spiritual realm and the question of education is one of the burning spiritual questions of modern times. We must take advantage of the possibilities presented by the Waldorf School to reform and revolutionize the educational system. The success of this cultural deed is in your hands. Thus, you have much responsibility in working to create an example. So much depends upon the success of this deed. The Waldorf School will be living proof of the effectiveness of the anthroposophical orientation toward life. It will be a unified school in the sense that it only considers how to teach in the way demanded by the human being, by the totality of the human essence. We must put everything at the service of achieving this goal.

However, it is necessary that we make compromises, because we are not yet so far developed that we can accomplish a truly free deed. The state imposes terrible learning goals and terrible standards, the worst imaginable, but people will imagine them to be the best. Today's policies and political activity treat people like pawns. More than ever before, attempts will be made to use people like cogs in a wheel. People will be handled like puppets on a string, and everyone will think that this reflects the greatest progress imaginable. Things like institutions of learning will be created incompetently and with the greatest arrogance. We have a foretaste of this in the design of the Russian Bolshevik schools, which are graves for everything that represents true teaching. We have a difficult struggle ahead of us, but, nevertheless, we must do this cultural deed. We must bring two contradictory forces into harmony. On the one hand, we must know what our ideals are, and, on the other hand, we must have the flexibility to conform to what lies far from our ideals. It will be difficult for each of you to find how to bring these two forces into harmony. This will be possible to achieve only when each of you enters into this work with your full strength. Everyone must use his or her full strength from the very beginning.

Therefore, we will organize the school not bureaucratically, but collegially, and will administer it in a republican way. In a true teachers' republic we will not have the comfort of receiving directions from the Board of Education. Rather, we must bring to our work what gives each of us the possibility and the full responsibility for what we have to do. Each one of us must be completely responsible.

We can create a replacement for the supervision of the School Board as we form this preparatory course, and, through the work, receive what unifies the school. We can achieve that sense of unity through this course if we work with all diligence. The course will be held as a continuing discussion of general pedagogical questions, as a discussion of the special methods concerning the most important areas of instruction, and as a seminar to practice teaching. We will practice teaching and critique it through discourse.

We will take up the more theoretical aspects in the morning and the seminar in the afternoon on each day. We will begin at 9:00am with general pedagogy, then undertake instruction concerning special methods at 11:30, and in the afternoon do seminar exercises from 3:00 until 6:00.

We must be completely conscious that we have to accomplish a great cultural deed in every sense of the word. Here in the Waldorf School we do not wish to create a parochial school. The Waldorf School will not propagate a particular point of view by filling the children with anthroposophical dogma. We do not wish to teach anthroposophical

dogma; anthroposophy is not the content of the instruction. What we want is a practical utilization of anthroposophy. We want to transform what we can gain through anthroposophy into truly practical instruction.

The anthroposophical content of instruction is much less important than the practical utilization of what we can create out of anthroposophy, generally in pedagogy and particularly in the special methods; in other words, how we can bring anthroposophy into teaching practice.

Representatives of the confessions will give religious instruction. We will use anthroposophy only in the method of instruction. Therefore, we will divide the children among the religion teachers according to their confession. This is another part of the compromise. Through justifiable compromises we can accelerate our cultural deed.

We must be conscious of the great tasks before us. We dare not be simply educators; we must be people of culture in the highest sense of the word. We must have a living interest in everything happening today; otherwise we will be bad teachers for this school. We dare not have enthusiasm only for our special tasks. We can be good teachers only when we have a living interest in everything happening in the world. Through that interest in the world we must obtain the enthusiasm that we need for the school and for our tasks. Flexibility of spirit and devotion to our tasks are necessary. Only from that can we draw out what can be achieved today when we devote our interest to the great needs and tasks of the times, both of which are unimaginably large.

The College Founding, given at the beginning of the Preparatory Course Stuttgart, August 21, 1919:

We can accomplish our work only if we do not see it as simply a matter of intellect or feeling, but, in the highest sense, as a moral spiritual task. Therefore, you will understand why, as we begin this work today, we first reflect on the connection we wish to create from the very beginning between our activity and the spiritual worlds. With such a task, we must be conscious that we do not work only in the physical plane of living human beings. In the last centuries, this way of viewing work has increasingly gained such acceptance that it is virtually the only way people see it. This understanding of tasks has made teaching what it is now and what the work before us should improve. Thus, we wish to begin our preparation by first reflecting upon how we connect with the spiritual powers in whose service and in whose name each one of us must work. I ask you to understand these introductory words as a kind of prayer to those powers who stand behind us with Imagination, Inspiration and Intuition as we take up this task.

[The words that follow were not recorded by the stenographer—see Herbert Hahn's notes below.]

It is our duty to see the importance of our work. We will do this if we know that this school is charged with a particular task. We need to make our thoughts very concrete; we need to form our thoughts so that we can be conscious that this school fulfills something special. We can do this only when we do not view the founding of this school as an everyday occurrence, but instead regard it as a ceremony held within Cosmic Order. In this sense, I wish, in the name of the good spirit whose task it is to lead humanity out of suffering and misery, in the name of this good spirit whose task it is to lead humanity to a higher level of development in education, I wish to give the most heartfelt

thanks to this good spirit who has given our dear friend Mr. Molt the good thoughts to do what he has done for the further development of humanity at this time and in this place, and what he has done for the Waldorf School. I know that he is aware that what can be done in this work now can only be done with weakened strength. He sees things in this way. However, because we are united with him in feeling the greatness of the task and of the moment in which it is begun, and in feeling that this is a festive moment in Cosmic Order, he will be able to work in our midst with the necessary strength. We wish to begin our work with this in mind. We wish to see each other as human beings brought together by karma, who will bring about, not something common, but something that, for those doing this work, will include the feeling of a festive Cosmic moment. At the end of our course I will say what I would like to say following today's festive commencement of our preparation. Then much will have been clarified, and we will be able to stand before our task much more concretely than we can today.

Notes from Herbert Hahn:

In that we actively turn to the pedagogy of this fifth cultural epoch, and in that we wish to be active as teachers, we may carry in consciousness the fact that the Beings of the Third Hierarchy are now moving to connect themselves with our work.

Behind each individual member of the now-forming faculty, we see an Angel standing. He lays both hands upon the head of the earthly being entrusted to him, and in this position and with this gesture allows strength to flow over to the human. It is the strength that provides the Imaginations necessary for the deed to be completed. Creatively Imagining, wakening powerful Imaginations, the Angel thus stands behind each individual. Raising our view higher, we see hovering above the heads of this forming faculty a host of Archangels. Circling again and again, they carry from each of us to the other what results from our spiritual encounter with our own Angel. And they carry it, enriched by the strength of all the others, back to us. In this circle, which acts like an activity of spiritual formation, a vessel is formed above the heads of those united in this common striving. This vessel is formed from a specific substance—Courage. At the same time, these circling, connecting Archangels allow creatively Inspirational forces to enter into their movements. The Archangels open the source for those Inspirations necessary for our work. Raising our view still higher, it rises up to the realm of the Archai. They are not represented in their entirety. However, from their realm, the Realm of Light, they let a drop descend into the vessel of Courage. We feel that this drop of Light is given to us from the good Spirit of our Time, who stands behind the Founder and the Founding of this new school. It is the creative forces of Intuition at work in this drop of Light. The Archai want to awaken the necessary Intuition in those now entering this new pedagogical work. Giving Strength, Courage and Light, beings of the Third Hierarchy take part in what is now being founded. Imaginatively, Inspiringly, Intuitively, they wish to connect with our earthly deeds.

Endnotes

1. The "College of Teachers" is the English phrase for the German term *Lehrerkollegium.* I have preserved the capitalization as a way of honoring this group's identity. Throughout this article I will use the terms "College" and "College of Teachers" interchangeably in recognition of the fact that many Colleges include non-teaching members. In the coming years I hope another name will be found that more accurately expresses the unique nature and work of this group.
2. The German title *Allgemeine Menschenkunde* has been translated and published as *Study of Man* and more recently as *Foundations of Human Experience* (Great Barrington, MA: SteinerBooks, 1996).
3. The German term *Einheitschule* that Rudolf Steiner used in this context had a very specific meaning during

the late 19th and early 20th centuries. In *Education and Society in Modern Germany* (Routledge, 2003) R.H. Samuel characterized the *Einheitschule*: "This term denoted coordination of all aspects of education into a unified whole, in such a way that elementary, intermediate and secondary schools would cease to be separate categories, diversely administered and with unrelated curricula, and become integral elements in a harmonious whole." The Waldorf School was non-traditional in many other respects; it was non-denominational, coeducational, and had a curriculum that combined elements of the classical and technical schools.

4. Christof Wiechert, "The Seven Virtues of the Art of Teaching," in *Education—Health for Life*, published by the Medical Section at the Goetheanum, Switzerland, 2006.
5. Rudolf Steiner, *Foundations of Human Experience*, p. 30.
6. Rudolf Steiner, *Towards Social Renewal* (London: Rudolf Steiner Press, 1977).

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The Plight of Early Childhood Education in the U.S.

Joan Almon

In the U.S. there is a huge discrepancy between what we know about how young children learn and what we actually do in preschools and kindergartens. Numerous studies—some extending over decades—show the effectiveness of play-based education that combines hands-on experiential learning with child-initiated play. But that research is largely ignored. Instead, short-term studies that show gains in narrow, discrete skills, such as letter and number recognition, are increasingly used to justify didactic instruction for young children.

The desire for high-speed achievement is not new. The Swiss psychologist Piaget worked for decades until his death in 1980, mapping the stages of cognitive development in childhood. He frequently ran into what he called "the American question" or even "the American disease." It was always the same: How can we get children to do things faster?[1]

For many children the outcomes of the hurried curriculum are unhealthy. Educators and physicians report growing numbers of incidents of extreme behavioral problems in preschools and kindergartens and link these to the stress children experience in school.

When Walter Gilliam, head of the Child Study Center at Yale, surveyed almost 4,000 teachers from state-financed pre-kindergartens, he learned that three- and four-year-old children were being expelled at three times the national rate for K–12 children. And 4.5 times more boys were being expelled from preschool than girls.[2]

Educators and physicians report growing numbers of incidents of extreme behavioral problems in preschools and kindergartens.

Gilliam did not research the causes of the expulsions, but experts in the field are increasingly examining rising rates of aggressive behavior in preK and kindergarten classrooms. The Alliance for Childhood's Crisis in the Kindergarten includes several examples[3] of the problem as reported in the media:

The *Hartford Courant* reported that Connecticut students in the earliest grades, including kindergarten, are increasingly behaving in ways that pose physical threats to themselves and others.[4] Connecticut schools suspended or expelled 901 kindergartners for fighting, defiance, or temper tantrums in 2002; this was almost twice as many as in 2000.[5]

One New Haven school official attributed the spike in violence among young children to the increasing emphasis on standardized testing and the elimination of time for recess, gym, and other chances to play. "It's not like it was when we were kids, when you could expect to have an hour or so every day to play and explore," she said. "That kind of time just isn't there anymore."[6]

A *Time* magazine article in 2003 linked aggressive behaviors with rising academic pressure in kindergarten and first grade in anticipation of the yearly tests demanded by the No Child Left Behind Act. Stephen Hinshaw, a professor of psychology at the University of California, Berkeley, and an expert in hyperactive disorders, spoke of the need for a broad-based kindergarten approach: "Even more vital than early reading is the learning of play skills, which form the foundation of

cognitive skills," he said. He pointed out that in Europe children are often not taught to read until age seven. "Insisting that they read at 5," he said, "puts undue pressure on a child."[7]

Slowing Down

The U.S. is not the only country that has invested in a fast start toward mastering reading, writing, and arithmetic in the belief that it would ensure greater success in school. In the 1970s Germany began to "reform" its kindergartens into centers for cognitive achievement. A study was done comparing 50 play-based classes with 50 early-learning centers and found that "by age ten the children who had played excelled over the others in a host of ways. They were more advanced in reading and mathematics and they were better adjusted socially and emotionally in school. They excelled in creativity and intelligence, oral expression, and 'industry.' As a result of this study German kindergartens returned to being play-based again."[8]

By age ten the children who had played excelled over the others in a host of ways [including] reading, mathematics, creativity, intelligence, oral expression, and 'industry'.

In today's educational world, Finland stands out. Its high school students have ranked at the top or near the top in the well-regarded PISA exam (Programme for International Student Assessments). The test has been given every three years since its inception in 2000. In 2009 it was given to a sample of 400,000 15-year-olds in 57 of the wealthiest countries whose economies comprise 90% of the world's GDP. Initially given only in literacy, the tests now include mathematics and science.[9]

The Finnish education system has received much scrutiny, and its approach to early education can serve as an example. Good quality child care is guaranteed for all children with significant subsidies from the government. Most children do not enter child care until age three as mothers are given financial support if they choose to stay at home for that period. Such financial support is especially strong for the first year so that almost no children enter child care under one year of age.

Children remain in child care, generally called kindergarten in Finland, until age seven when they enter first grade. The programs are play-based with well-trained teachers and aides and low child-adult ratios. For 6-year-olds, half-day programs are also available, usually within the child care centers, which "place a slightly greater emphasis on academic preparation and language development than typical child care."[10] This slow but well-developed approach lays a strong foundation for school success.

Another international example comes from New Zealand where recent doctoral research by Sebastian Suggate at the University of Otago is described in a press release by the University. Suggate found no long term gains from teaching children to read at five compared to teaching them beginning at seven. He decided to study reading in this way because "he could not find any quantitative controlled study within the English-speaking world to ascertain whether later starting readers were at an advantage or disadvantage. He found only one methodologically weak study conducted in 1974, but nothing since that time. Yet people regularly insist that early reading is integral to a child's later achievement and success. He admits to being surprised, therefore, by his own findings that this is not the case."[11]

Suggate conducted three quite different studies, the results of which complemented one another. In the first he re-analysed data collected as part of the 2006 PISA exam "and found that by the age of 15, there was no advantage in learning to read early from age 5."[12]

He then conducted two studies based on research in New Zealand. In the first, he compared the reading ability of 54 children who had attended Steiner/Waldorf schools, where reading was taught beginning at age seven, with 50 children who had attended public schools where reading instruction began at age five. All the children took the same test at age 12 and the two groups scored equally well. The study controlled for variables such as home literacy environments, the economic situation of the parents, parental education, ethnicity, and gender. When the students' reading fluency and comprehension were measured he found "no difference" by age 12 in the reading ability of the two groups.

Dr. Suggate's third study was longitudinal and looked at reading from day one to the end of primary school to see whether differences in school experiences and the primary curriculum at the two different types of schools would have accounted for the ability of Waldorf children to reach the same reading level as their state counterparts by age 12.

Among Suggate's conclusions: One theory for the finding that an earlier beginning does not lead to a later advantage is that the most important early factors for later reading achievement, for most children, are language and learning experiences that are gained without formal reading instruction. Because later starters at reading are still learning through play, language, and interactions with adults, their long-term learning is not disadvantaged. Instead, these activities prepare the soil well for later development of reading. This research then raises the question: If there aren't advantages to learning to read from the age of five, could there be disadvantages to starting teaching children to read earlier (at age 5)? In other words, we could be putting them off.[13]

Suggate's research has been published in several journals and a book is in press at this time.[14]

The Down Side of Speeding Up

The desire for a faster path to education has combined with the call for clearly defined standards, coupled with narrow forms of assessment, and has led to a new super highway without speed limits or guardrails—a dangerous place for children. When the common core standards[15] were being developed in 2010 by the National Governors Association and others, I looked up "core standards" to better understand what was meant. The term is primarily used in the manufacturing world where it is vital that materials like nuts, bolts, and cement are made in strictly uniform ways.

Applying the concept of core standards to children, with all the uniformity and mechanistic perfection implied in the term, is completely inappropriate.

Applying the concept of core standards to children, with all the uniformity and mechanistic perfection implied in the term, is completely inappropriate. To further strengthen the approach through the use of high-stakes testing of narrow skills dehumanizes education. It is not surprising that there is widespread disappointment in the results of No Child Left Behind. An education based on such a mechanical view of the human being cannot succeed. We learned this lesson decades ago when Skinner's behaviorism dominated education. Discrete skills were learned, but there was deep concern that creativity was being lost.

A more effective and appropriate approach than standards and high-stakes testing is the use of appropriate guidelines which can be approached with flexibility by well-prepared educators. Rather than testing narrow, discrete skills, we should be using broad-based assessments of growth in cognitive, social-emotional, and physical areas, as well

as assessing creativity and other essential qualities of human life.

What are the long-term consequences of inappropriate early education? Some studies indicate that great harm can be done. A good example is the HighScope Preschool Curriculum Comparison Study (PCCS). This study is not as well known as HighScope's Perry Preschool Study. The latter showed significant benefits to children from low-income homes who attended preschool, and the benefits extended well into adulthood.

Rather than testing narrow, discrete skills, we should be using broad-based assessments of growth.

What is missing from the Perry Preschool picture is that not all preschools yield equally good results. In the late 1960s HighScope began the Preschool Curriculum Comparison Study. In it, 68 at-risk children from low-income families were randomly assigned to one of three preschool classes: (1) a direct instruction program (DI) where teachers used a script and expected correct answers from the children; (2) a traditional nursery school (NS) where children learned through play and whole group activities; and (3) the HighScope program (HS) where children learned through group time and play that contained a cognitive process of "plan, do, and review." The latter two emphasized child-initiated activities. With support from the staff, the three- and four-year-old children in the study pursued their own interests. All the children were followed until age 23, and the outcomes shed much light on the effects of different preschools on children's well-being.

It is important to note that at first the outcomes seemed to be the same for children in all three groups. All experienced a similar large increase in IQ scores from an average of 78 to 105. HighScope comments at the time it concluded that "well-implemented preschool curriculum models, regardless of their theoretical orientation, had similar effects on children's intellectual and academic performance. Time has proved otherwise."[16]

By age 23, when the study concluded, the DI students showed serious problems in their overall development:

– 47% of the DI students needed special education compared to only 6% of the other students.

– 34% of the DI students had been arrested for a felony offense, compared with 9% of the others.

– 27% of the DI group had been suspended from work, while none of the others had been.

– None of the DI students had married and were living with their spouses, as compared with 31% of the others.

– Only 11% of the DI student had ever done volunteer work, compared to about 43% of the others.

The results paint a clear picture: When children from low-income backgrounds are given an inappropriate early education, it has a lasting negative effect. Yet thousands of children today—millions over a period of time—are subjected to inappropriate preschool and kindergarten education that demand too many gains at too young an age. We are not helping them overcome the learning gap with such methods; we are intensifying their problems. It is time for educators and policy makers to take seriously the rule that guides the medical community: First, do no harm.

What Have We Lost?

While the U.S. focuses on drilling literacy and math into young children, little attention is being paid to what is being lost. In the summer of 2010 *Newsweek*'s cover story "The Crisis in Creativity" discussed the Torrance creativity test, which has been given millions of times over five decades in over 50 languages. Its creativity scores have been shown to be a better indicator than IQ for predicting which students are most likely to later become successful innovators in a host of professions. Yet when Kyung Hee Kim at the College of William &

Mary analyzed almost "300,000 Torrance scores of children and adults, she found creativity scores had been steadily rising, just like IQ scores, until 1990. Since then, creativity scores have consistently inched downward. 'It's very clear, and the decrease is very significant,' Kim says. It is the scores of younger children in America—from kindergarten through sixth grade—for whom the decline is 'most serious.'"[17]

Susan Engel, senior lecturer in psychology and director of the Program in Teaching at Williams College, designed research to study curiosity in classrooms. During a number of classroom visits, she saw so few examples of children asking questions and expressing curiosity that she could not continue the study.[18]

The loss of curiosity has profound implications for education. Science and math educators increasingly speak of the need for inquiry-based learning, described as a "focus on student-constructed learning as opposed to teacher-transmitted information." Ironically, student-initiated learning is exactly the way young children learn when allowed to play and engage in hands-on discovery. Many current approaches to kindergarten education inadvertently stifle experiential learning and curiosity in young children, which makes teaching advanced math and science in later grades much more difficult. It is no wonder we are lagging seriously behind other countries in the STEM disciplines—science, technology, engineering, and math. One thinks of Einstein's famous quote: "It is a miracle that curiosity survives formal education." It seems that it no longer does.

What Can We Do?

When the Alliance for Childhood began its work to restore play in early education and in out-of-school settings, we met with other organizations deeply committed to play. Each was doing important work, but each seemed to be working in its own silo. It was a perfect picture of parallel play that had not yet advanced to rich, social play. Once we began working (and playing) together, a movement was born and play gained momentum.

> It is time for educators and policy makers to take seriously the rule that guides the medical community: First, do no harm.

Now it is time to create a similar movement to support a healthy and creative childhood for all children. We are working on a campaign called a Decade for Childhood that can bring together individuals and organizations from many fields here and abroad. Goals include restoring play-based education and other healthy essentials of a good childhood. "A Summit on Childhood" in Washington, DC, in spring 2012 will be hosted by the Association for Childhood Education International and will help launch the Decade.

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The Art of Knowing

Epistemological Implications for a Schooling of the Imagination

Jonathan Code

Introduction

The field of epistemology is not solely of significance in the wider field of philosophy and social science. Knowing the world, as well as our knowledge of the world, arises through epistemological processes that are often hidden to our everyday cognition. This paper engages, firstly, three contributions from thinkers who have reflected deeply on our contemporary ways of knowing. This investigation is followed by a historical study of a way of knowing exemplified in the hermetic "philosophers of nature" who, working before the Enlightenment, saw the path of knowledge as rooted in a dynamic interweaving of artistic, scientific, and contemplative disciplines in their "Art." The study as a whole aims at identifying and articulating capacities that can be developed—in the sciences, arts, and education, for example—which would complement the one-sidedness of much of modern thought, one-sidedness which arises from a dominance of intellectual, abstract, and analytical ways of knowing.

Epistemology, also known as "theory of knowledge," is generally regarded as the branch of philosophy concerned with understanding the act of knowing and the limitations inherent in the act of knowing. Through posing questions such as "How do we know what we know?" "How is knowledge acquired?" "What is knowledge?" the epistemological enquiry turns attention to the very activity which lies at the root of all sciences, arts, and—in actual fact—at the very foundation of our everyday cognitive activity. Addressing as it does the very nature of how we know the world and ourselves, the question arises as to whether we are in fact dealing with merely a "branch" of the discipline of philosophy or with something of much more far-reaching importance.

> Epistemology and the epistemological foundation for our way of living requires a much deeper engagement and examination than it is commonly given.

The Context for Epistemological Enquiry

In my personal experience of formal education—representing sixteen years of my life—epistemology played only a peripheral role, its formal engagement featuring only in my mid-twenties. Furthermore it was generally the case that all of the literacy, mathematics, history, science, language, arts—all of these were taught in such a way as to seem "free" of epistemological considerations. For much of our early educational career (i.e., throughout childhood and young adulthood), this is clearly essential, as an engagement with epistemology requires a certain maturity of cognitive development and reflective capacity. It is quite remarkable, however, that once the self-reflective learner emerges, the study of epistemology is not required to accompany studies in the sciences, medicine, politics, economics, and so forth, all of which are formative influences on our lives. The apparently optional stance taken towards epistemological inquiry continues beyond the bounds of formal education to be prevalent in much of mainstream cultural life. What is the significance of this stance?

Consider the following statement by the author and educator Parker Palmer (1993): "Every way of knowing becomes a way of living, every epistemology becomes an ethic."[1] This far-reaching statement strikes me as being poignantly relevant for several reasons. Firstly, we have on any given day access to a number of accounts of events in both the human and natural worlds which reveal threats to the integrity of social and ecological systems.[2] In many instances, concerted efforts are extended to ameliorate, mitigate, and diffuse these potential threats. However, the question arises as to how often, in seeking the source or solution to the evident dissonances experienced in our everyday lives, an investigation of our "conventional epistemology" is undertaken. How often do we find a call to investigate and re-evaluate the very epistemological roots that inform our individual and cultural actions?

These questions bring me to the second significant aspect of Palmer's statement, one that I have already alluded to above. In contemporary Western cultural life, the disciplined engagement with philosophy and epistemology has largely become sequestered in university departments, often as specialized branches of the social sciences inhabited by professional academics. This is to say that only very rarely do we find explicit mention of the "cutting edge" discoveries in the realms of epistemology, or politicians making reference to important philosophical points of view that are being considered in the shaping of policy—and, by extension, of people's lives.[3] Furthermore, when weight of opinion is given to science, for instance, or medical opinion, these disciplines are themselves rooted in epistemological frameworks that are very rarely made explicit and are often unexamined.

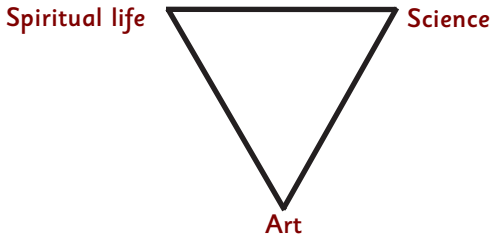
This has radical implications and raises the third key element in Palmer's statement, namely that ways of knowing are fundamentally ethical, even when they claim to be "objective," i.e., free of moral or ethical considerations. The implication lying at the heart of Palmer's statement about epistemology is that, far from it being an activity best left to academic specialties or even (and this perhaps is more challenging) remaining an optional undertaking, epistemology is everybody's business because it is essentially ethical.[4]

If there is truth in Palmer's statement, epistemology and the epistemological foundation for our way of living—both public and private—require a much deeper engagement and examination than they are commonly given. In what follows I will describe three perspectives from contemporary thinkers which contribute to a penetrating study of epistemology and how ways of knowing arise along with the development of consciousness. The study of the three perspectives articulated below will in turn reveal implications for the development of consciousness and "ways of knowing" in the fields of art, science, and the contemplative life. I will conclude with a further look at education, since it is in the realm of education that many challenges are arising due to a one-sided engagement and emphasis on a contemporary "epistemology of separation." Along with these challenges, opportunities to redefine the way we learn, the way we know, and the way we live arise as well.

Ways of Knowing: Three Perspectives

The Demotion of Direct Experience: Ronald Brady

Through a personal journey that engaged the natural sciences and encountered problems in the way scientific knowledge is defined, philosopher Ronald Brady proposed a thorough investigation of the basis to our cognitive life. In his book *Being on Earth*, written together with Georg Maier and Stephen Edelglass (2006), he traces the historically significant developments



in the Western mind that have given rise to a "one-eyed color blind onlooker"[5] approach to science and a concurrent positivist and empiricist mindset. It was this mindset that Brady met in several professors when he sought to engage in an experiential (sense-based) and qualitative study of natural phenomena. Brady encountered what still lives in much popular reporting and teaching of science, as well as through education generally, in much of our Western culture: namely, an inherent distrust of our un-mediated sense life as a door to knowledge about "the world." Brady writes in the chapter titled "Direct Experience":

> One of the difficulties with scientific accounts of the world is their apparent insistence on an "objective" reality that cannot be directly experienced, with the resulting demotion of experience—what our senses make out of the world—to a mere show that differs substantially from "what is really there." This is something we all know and do not think about very much. (2006, p. 12)

Brady traces a particularly poignant contribution to this development of consciousness and its view of the role of the senses in cognitive life to the work of Galileo.[6] Galileo's distinction between primary and secondary qualities of observed phenomena is often referred to as an essential contribution to the development of modern science and the modern scientific method. Brady calls this moment the demotion of direct experience, with the result that from the time of Galileo the human being "begins to appear for the first time in the history of thought as an irrelevant spectator and insignificant effect of the great mathematical system which is the substance of reality." (Burt, 2003, p. 90) It is this relegation of the subject and his or her unmediated sense experience to a secondary (and either insignificant or potentially inappropriate) role in the acquisition of knowledge and truth that Brady wrestles with in *Being on Earth*.

To a large extent the experience of being a subject separate from a world of objects—many of which appear not to present their essential being to our senses—seems self-evident. It is, as it were, the nature of reality out of which we emerge or mature as a given. This naïve realistic stance to the perceived world lies at the basis of much of modern cultural experience. It is the experience that I have of being a distinct subject who perceives a world of objects separate from me and external to each other. Furthermore, this world seems self-evidently to exist—to be there—without my contributing to its manifestation in any way. On the contrary I experience it as manifest and myself (on the whole) as a passive receiver of impressions that arise from my encounter with it. There is, however, more to this experience than meets the eye.

Cognitive Amnesia: Henri Bortoft

The problems—of knowledge, of philosophy, of science, of living—that derive from the subject/object divide, upon which both our everyday cognition as well as our disciplined scientific research are founded, have been articulated at length by a wide range of authors. They have occupied the human mind from the time when the medieval view of Man as Microcosm of the great Macrocosm began to wane. The earlier unified worldview essentially gave way to the subsequent—and still dominant—dualistic worldview. Obviously it does a disservice to this vast chapter of human thought and expertise to go no deeper

into the various voices who have engaged the significant issues raised regarding the nature of knowing, of consciousness, and of conscience. Suffice it to say that since the time of Galileo,[7] we have struggled with the problem of whether it is our thinking or our sense activity that can be relied upon to give us "true" knowledge of our own unique self as well as knowledge of the universe in which we find ourselves.

Coupled with this deep-seated problem is the question of subjective versus objective knowledge, articulated by Brady so clearly in his work (Maier, Brady, & Edelglass, 2006). In the twentieth century, work undertaken in the history and philosophy of science contributed new light to these intractable issues. Henri Bortoft is one author who has made significant contributions to the problems of knowledge. Setting out to look, from a philosophical point of view, at the way in which J.W. Goethe approached his studies in natural science, Bortoft has illumined significant aspects of our cognitive life.

Using an ambiguous drawing of what appears to be a "random patchwork of black and white areas" in a circular frame, Bortoft (1996, p. 50) presents a very striking experience of the relationship between our sensory activity and our thinking activity. After a time, and with some intentional activity directed toward the image, a figure emerges from the previously chaotic collection of black and white patches. A giraffe's head is "seen." There is much to be gleaned from this experience. In time, the initial effort expended on the attempt to see some recognizable form within the seeming chaos of black and white shapes—which gave rise to "seeing the giraffe"—is reversed in that considerable effort of attention is now required not to see the giraffe. This becomes a bridge to the realization that, whereas much—in fact the majority—of our everyday cognitive life is rooted in the experience that we encounter the world and its objects as if they were just "there," in actual fact we are largely unaware of the organizing activity through which these objects become apparent. The difficulty is that we are no longer aware of that side of the cognitive act which contributes to the "seeing," as this is no longer reliant on an activity of will. Bortoft refers to this conundrum as "cognitive amnesia" (1996, p. 139)—amnesia because, in our cognitive perception as we naïvely experience it, we are no longer conscious of the fact that we see or experience something only by means of an organizing idea that imbues with meaning an otherwise chaotic life of pure sense perception. As Bortoft puts it:

> All scientific knowledge, then, is a correlation of what is seen with the way it is seen. When the "way of seeing" is invisible …, then we live on the empirical level where it seems to be self-evident that discoveries are made directly through the senses. In this "natural attitude" we have no sense of our own participation, and hence we seem to ourselves to be onlookers to a world which is fixed and finished. Forgetfulness of the way of seeing is the origin of empiricism, which is still by far the most popular philosophy of science, in spite of all the discoveries in the history and philosophy of science which show that it is a philosophy of cognitive amnesia. (1996, pp. 138–139)

Bortoft's description of the nature of cognition has broad implications for consciousness. Though barely adumbrated, the role of the organizing idea in cognitive perception brings him to the realization that "we live within a dimension of mind which is

We live within a dimension of mind which is as invisible to us as the air we breathe.

as invisible to us as the air we breathe." (1996, p. 141)[8] This realization could profoundly influence the way in which we practice science, the way we teach science (and the way we educate in the broadest sense), and indeed the way in which we engage in everyday life. It allows us to posit the idea that in order to address the issues we encounter in the realms of nature and society that are inimical to health and wellbeing, we would be wise to undertake a concerted investigation into the aforementioned "dimension of mind." As with Palmer's statement above, Bortoft's realization implies that working to make our epistemology explicit is a crucial step in becoming ethically responsible.

A Collective Disease: Georg Kühlewind

Whereas Brady highlights the origins of the "split"[9] and Bortoft traces out the epistemological intricacies of the contemporary mind, Georg Kühlewind examines the process by which this state of affairs has developed.[10] He does so through a study of both the biographical and historical development of consciousness, as revealed through such diverse phenomena as the development of language and speech, the phenomenology of the processes of thinking and perceiving, and the nature of art. Kühlewind concludes—in a way reminiscent of Bortoft's cognitive amnesia—that modern consciousness is diseased. In his book *From Normal to Healthy* (1983), Kühlewind describes the diseased consciousness as being a collective disease, and because collective, generally unrecognized. He attributes the causes of this disease to mistaken experience or mis-identification. His argument is rooted in both historical (cultural) and individual (developmental) observations that differentiate between two levels of consciousness.

Kühlewind describes the diseased consciousness as being a collective disease, and because collective, generally unrecognized.

The superconscious, Kühlewind proposes, is the realm from which all other elements of consciousness are derived. The superconscious is the realm of the living activity of the "I." As the living, dynamic source and seat of consciousness, the superconscious is not generally witnessed or included in our account of our experience because of its primacy and the fact that it is the very wellspring of consciousness itself. Trying to bring this aspect of consciousness to experience is like "looking for the ox you're riding on." (Kühlewind, 1988, p. 53) In Zen Buddhism koans were used to pose illogical questions or stories in order to bring about in the mind a type of metanoia in which normally overlooked aspects of daily experience were revealed. Kühlewind offers something of a koan for our modern mind with the phrase: "The past is, the present becomes" (1988), a phrase which seeks to point consciousness toward its source as well as highlight the challenge of experiencing superconscious becoming in our everyday awareness. The question then arises: How can we say that the superconscious exists if it cannot be experienced directly?

Let us look at how the superconscious may indirectly be revealed. Kühlewind (1988, p. 25) points toward such a possibility with the question: "How can a being who neither speaks nor thinks learn words, language, and thinking?" The first words that a child speaks must be learned without words or explanations! This remains for linguistic science quite a conundrum.

Children understand their first words directly, without words, intuitively. Or, to put it another way, they understand through such

a deep internal imitation of the speaker that they "imitate" not only the words but the meaning of the intended speech. They identify themselves with the source of speaking, which is the "I" of the speaker. They have no other way of understanding anything: No explanations are possible. (Kühlewind, 1988, p. 25) Kühlewind goes on to conclude:

> By observing the child's acquisition of speech and thought, we can see that this process requires the faculties of thinking, feeling, and willing in order for the child to develop into a speaking adult. Yet these faculties function quite differently in the child and adult. We might say that they are not yet separated from one another for the child, but form a single faculty. …[I]t might be called a superconscious ability. (1988, p. 28)

From this example of early speech acquisition, Kühlewind follows the development of consciousness in which these initially superconscious faculties and capacities give rise to formations and habits of thinking, feeling, and willing that are no longer form-free but instead increasingly individualized and often quite fixed or formed. (Bortoft's ambiguous image of the giraffe was designed to capture this experience of moving from form-free to form-fixed perceptions.) This realm of soul is designated by Kühlewind as the subconscious. Everyday consciousness, for the adult at least, is positioned between the two realms of consciousness and—as in the example of cognitive perception given above—everyday experience is generally oriented toward the finished forms of thought and feeling and does not experience that activity by which these contents of experience arise. It is the superconscious from which the everyday contents of consciousness are surveyed and witnessed, but as consciousness is conscious of these contents and not of its own present awareness, the former has the characteristic of appearing much more "real." Kühlewind's far-reaching study can be encapsulated in the sentence: "Our consciousness is a past consciousness, conscious of its own past." (Kühlewind, 1988, p. 15)

Summary

Having enquired into the potentially far-reaching implications of epistemological reflection, and having offered three contributions toward an understanding of contemporary ways of knowing, we find the following situation. In the realm of science (and for our everyday cognition), the "objects" of our awareness are experienced as "given"; the processes of consciousness that "objectify" them in the first place are not experienced (Bortoft's cognitive amnesia); the self or subject lacks true self-experience due to the "disease of consciousness" (Kühlewind) and comes to doubt its own existence;[11] the superconscious capacities out of which self and object arise are no longer experienced, and "reality" becomes ever more displaced into an abstract, quality-less realm accessible only to the dis-embodied mind (Brady). This state of affairs is further complicated by the fact that questions of ethics with regards to our knowing activity, and the manifestations of our knowing in our actions, have also been subject to the great separation—left to the discretion of the individual thinker or relegated to a specialist realm of philosophical enquiry. The implications are striking, for the way we experience the world, the way we do science, the way we educate—in short, the way we live—is informed by this epistemology of separation. Kühlewind sums up the quandry:

> Science has been established on a level of consciousness where it cannot be adequate to the reality of Nature and the Human Being. (1993, p. 5)

In view of the path outlined above we could expand on Kühlewind's statement and ask whether, in more general terms, our way of learning, knowing, and living is adequate to the reality of Nature and the Human Being. In order to ground this question and the themes I am pursuing further, I would like to place them in the context of my own experience of education, of seeking to know Nature and of encounters in the social realm.

Imaginative cognition can bring into a meaningful relationship the insights gained from the disciplines of science, art, and the contemplative life.

Pathways

Epistemology is not an option. Science, at least as it is encountered in its popular sense, is inadequate to the task of revealing the reality of Nature and the Human Being. The kind of thinking underlying contemporary science evidently results all too often in fragmentation and the degradation of life. I experienced this at first hand during many years of travel through Asia, Australia, North America, and Europe. By the age of eighteen I had developed something of a distrust of thinking, which I experienced as the "pale cast of thought."[12] This type of thinking seemed to be at the root of the many social and environmental ills that came ever more to my attention. As a result, there followed a period in my life when I dove deeply into an experiential exploration of the world, a time rooted largely in the life of the senses, in which I traveled and lived in a number of countries very different from my place of origin.

After some years of travel there arose in me a new tension, which now I can say was rooted in what Rudolf Steiner describes in this way: "A thoughtless traveler and a scholar living in abstract conceptual systems are equally unable to have rich experience." (Steiner, 1995, p. 101) What I needed was a way to orient myself to my own experiences—still largely fragmented and disjointed—and to a culture deeply rooted in an epistemology of separation. The questions that grew to be very strong in my mind were akin to Kühlewind's line of enquiry: What way of knowing is adequate to understanding the reality of the Human Being and Nature? Has such a way of knowing existed and been lost, or has such a way of knowing yet to emerge? How can such a way of knowing be cultivated? What would the implications of such a way of knowing be for the various realms in which human consciousness is engaged? The pursuit of these questions led me to a significant encounter, an encounter with a way of knowing articulated in the form of an image.

Ways of Knowing: Science, Art, and the Spiritual

Reproduced at the end of this article (see p. 49) is an image from the work of Heinrich Khunrath, a physician, hermetic philosopher, and alchemist from the 16th century. The image (from Alexander Roob's book on *Alchemy and Mysticism*) encapsulates within the circular frame those elements deemed necessary by Khunrath and alchemists of the time for progress on the path of knowledge. These are depicted in the three primary sections of the emblem. In brief we find in this emblem a depiction of the tri-unity of spiritual practice, the study of natural phenomena, and art. To see this visually, in a condensed form, we see in the emblem the following:

Natural philosophers of the time understood that our insights come via "grace." We may work, strive, question, and pursue knowledge of the world, but we must at all times be aware that our knowledge arises by grace. Thus a conscious, contemplative attitude is essential, and is in fact the first

step in the alchemical process of enquiry.[13] We find this emphasis in contemporary language in Kühlewind's articulation of the superconscious and its role in the formation of both everyday consciousness and scientific consciousness (both of which function on the same "plane," though differ in intensity). Insight, from this perspective, arises from the superconscious as grace—a received gift. Working in the laboratory, between the pillars of experience and reason, we investigate the mysteries of nature. Referred to as "the Art," the hermetic methodology included the instruments of expression (depicted as musical instruments), expression both of insights derived from the Work and of the divine harmonies informing Nature's creative unfolding, the Harmony of the Spheres. This then is an epistemological process comprised of three mutually interpenetrating activities each with its own "laws," methods, and materials.

In Khunrath's emblem a way of knowing is articulated which embodies an integrity that was subsequently fragmented and lost due to changes in human consciousness (see note 7). This change represents a key chapter in the history of ideas and has been referred to in several passages above. The approach to science articulated by Brady in *Being on Earth* has, in this light, grown out of the fragmentation of the relationships depicted by Khunrath. The disciplines of the artist and the scientist are still largely viewed as being separate and incongruent in method and intent.[14] To depict the relation of these disciplines in modern times, we would need to isolate the three elements in quite separate compartments. Fragmented and compartmentalized, science, the spiritual life (including religion), and the arts have been relegated to different quarters, and science has claimed for itself the authoritative voice in matters of truth and certainty. This science, severed from contemplative practice and prayer, has become inimical to these realms.

> The kind of thinking underlying contemporary science evidently results all too often in fragmentation and the degradation of life.

When I first encountered this image and the methodology it articulated, I felt that here was an epistemology and a method that held within it certain key points of reference. It asked of the individual student of Nature and of the Human Being three very important questions:

1) What is your study/research?

2) What is your art?

3) Do you cultivate a conscious connection to the spiritual (or superconscious) source of both of these?

Through study, by which I mean science in its commonly understood practice as well as the study of the insights of other researchers, we can develop our thinking and cognitive capacities. I would also emphasize the crucial activity of epistemological self-reflection in this realm, since any act of consciousness is subject to the dynamics that have been explored above through the work of Brady, Bortoft, and Kühlewind. Through the arts, we bring to expression something of our own personal experience and strive to lift it to speak of/to that which is universally human. Through the spiritual life, we cultivate a contemplative method with regards to our subject matter as well as a conscious attitude of mind and heart that is nurtured when we apply ourselves in either of the aforementioned ways. As Arthur Zajonc has described so clearly in his article "Love and Knowledge" (2006), a contemplative methodology includes and seeks to cultivate an ethical stance to both one's science and one's art. It is the contemplative method and practice which places our work on an ethical ground

and ensures that it doesn't get caught in the traps of either an objective, impersonal, and "value-free" science which becomes antithetical to life,[15] or an artistic practice which merely embellishes the subjective, personal, and egoistic life of the individual.

In Heinrich Khunrath's depiction of the hermetic path of knowledge lies an indication for a way of knowing which may be adequate to understanding Nature and the Human Being. This way of knowing engages and honors the disciplines of science, art, and contemplative practice in their own right while also recognizing the value of finding a synthesis of insight arising from that prior engagement. From the perspective of the 16th century alchemists, this way of knowing mirrored processes in the laboratory, in living organisms, and in the natural world as a whole. They would probably have used the term *solve et coagula*, where we would now use the words *analysis* and *synthesis*.

I am not suggesting, however, by introducing Khunrath's emblem to the question of what may be an epistemology adequate to the reality of the Human Being and Nature, that some kind of re-invigoration of medieval thought is in order. Nor, however, do I suggest that the alchemical world view is merely of historical interest. Rather, I have found that the theory of knowledge being made explicit in the amphitheatrum emblem offers a rich reference and provides valuable insight for someone seeking, in a very different period of history, to overcome the fragmentation so prevalent in much of modern thought and life. From the hermetic point of view, the methods for realizing the complementary processes of *solve* (analysis, separation) and *coagula* (synthesis) were not the same. Overlooking this distinction would be an example of the "collective disease" of consciousness diagnosed by Kühlewind and Bortoft.

For Khunrath and his contemporaries the path of knowledge referred to as "the Art" encompassed the study of natural phenomena—what we might now refer to as "science"—as well as contemplative practice in the pursuit of knowledge. Significantly, the Art also referred to the development, practice, and refinement not only of techniques in the laboratory, but of the inner life of the individual on the path of knowledge. The art of human development was inseparable from the acquisition of knowledge and experience. I will return to this theme later.

Implications

Modes of consciousness and implications for education

It is widely recognized that the separation or distinction between science, art, and religion (the spiritual life) is a recent event in the history of culture and consciousness. This separation accompanied the development of rational thinking. It is not at all insignificant that this rise of rationalism brought about a concurrent demise of the hermetic Art, although individuals at the time of transition were often engaged with both ways of knowing (Newton, for instance).[16] That the rational, analytical way of knowing has become ever more prevalent as the shaper of both individual and society is not a result of any inherent superiority to other ways of knowing, but is due more to the pride of place it is given in our social institutions and activities. (Bortoft, 1996, p. 31) It is also, as described by Kühlewind, a product of developments in consciousness that have occurred over time, shaping both individual and collective ways of knowing. Bortoft writes:

> It is the contemplative method and practice which places our work on an ethical ground.

> There is now a growing body of evidence to support the view that there are two major modes of human consciousness which are complementary. In our technical-scientific culture we have specialized in the development of only one of these modes, to which our educational system is geared almost exclusively. This is the analytical mode of consciousness, which develops in conjunction with our experience of perceiving and manipulating solid bodies. (1996, p. 61)

Bortoft calls this mode of consciousness "the verbal-intellectual mode," given its predilection for reading, writing, and the spoken word. There is, however, a growing concern amongst some scientists, teachers, parents, and policy makers about the primacy given to the analytical mode of consciousness. Speaking from an acute awareness of the current issues faced by business, leadership, and social innovators globally, Sir Kenneth Robinson, author of *All Our Futures: Creativity, Culture, and Education* (The Robinson Report, 1999) perceives the root of this crisis as arising in the realm of education. He perceives the crisis as originating in a one-sided attention to the cultivation of the intellect. In his hugely popular and widely viewed TED talks, Robinson makes the following statement regarding education:

> We have what is essentially an industrial model of education, a manufacturing model, which is based on linearity, and conformity, and batching people. This falls in with a general tendency to focus on critical thinking and outcomes-based learning and to impose standardized testing at an increasingly young age. The computational theory of mind finds no room for the intelligences of the imagination, community, and spirituality. (Robinson, 2006)

Now, I am not proposing an outright critique of the verbal-intellectual mind and method, neither in science, education, nor in other arenas of social activity. This way of knowing and the methods that derive from its development have inarguably contributed to aspects of our knowledge and understanding. What I wish to emphasize is that a critical review of this mode of consciousness—as undertaken by Robinson in the context of education, by Bortoft in the context of science, and by Kühlewind in the context of general psychological health and well being—serves to highlight the imbalances that arise if this mode of consciousness does not also find its complement. That such a complementary mode exists in the domain of science, for instance, is explored in some detail in *The Wholeness of Nature*. In this very accessible study, Bortoft presents clear descriptions and arguments for a deeper understanding and engagement with the method of "exact sensorial imagination" that informed so much of Goethe's research. In the realm of education, as a consequence of the issues articulated by Robinson in his talks and publications, new educational initiatives and research groups are taking on the challenge to rethink overall approaches to teaching and learning. For several of these, it is also the imagination that is gaining focus and attention.

> Knowledge or knowing cannot, without serious implications, be a purely intellectual or analytical activity.

Ways of Knowing: Towards Imagination

An example of such an initiative is the Imaginative Education Research Group, based in British Columbia, which has held several

annual conferences with an international group of contributors and a focus on the role of the imagination in education. Groups such as the Imaginative Education Research Group (IERG)[17] take references to imagination as a form of intelligence (Robinson, 2006) very seriously. For the contributors to this research group, "engaging students' imaginations in learning and teachers' imaginations in teaching seems to us crucial to making knowledge in the curriculum vivid and meaningful to students." (IERG, 2009) Numerous papers given at IERG conferences on the theme of imagination and education are available on their website. The significance of initiatives such as the IERG and the work of Sir Ken Robinson for this present discussion is that by focusing their attention on the role of the imagination in education, a direct engagement with a mode of consciousness complementary to the verbal-intellectual mode is cultivated. It is a mode that can allow meaningful synthesis to emerge out of the products of the analytical mind. This new synthesis is different from the verbal-intellectual approach in that it arises from a fundamentally different mode of consciousness. It is, as Goethe demonstrated in his work, suited to gaining insight into the realms of life and dynamic relatedness, whereas the intellect has excelled in revealing the laws of the inorganic. Bortoft, referring to it as the "holistic mode," describes it as follows:

> This mode is nonlinear, simultaneous, intuitive instead of verbal-intellectual, and concerned more with relationships than with the discrete elements that are related. It is important to realize that this mode of consciousness is a way of seeing, and as such it can only be experienced in its own terms. In particular, it cannot be understood by the verbal-intellectual mind because this functions in the analytical mode of consciousness, for which it is not possible to appreciate adequately what

Plate from Heinrich Khunrath's Ampitheatrum *sapientiae aeternae*

We can awake … through constant prayer in the oratorium (left),and through the laboratorium (right) which rests on the two pillars of experience and reason. The oven in the foreground admonishes us to patience, and the gifts on the table remind us that sacred music and harmony are supposed to accompanty and define the Work. – Roob, 2001, p. 331

> it means to say that a relationship can be experienced as something real in itself. In the analytical mode of consciousness it is the elements which are related that stand out in experience, compared with which the relationship is but a shadowy abstraction. The experience of relationship as such is only possible through a transformation from a piecemeal way of thought to a simultaneous perception of the whole. Such a transformation amounts to a restructuring of consciousness itself. (1996, p. 63)

Whereas, as previously stated, the separation of science, art, and religion (the spiritual life) arose along with the development of rational thinking, the cultivation and education of the imagination provide a way of knowing whose core mode is synthesis and not analysis. Whereas the verbal-intellectual mind is suited to perceiving and manipulating solid bodies, the holistic mind, through the cultivation of the imagination, can begin to engage the dynamic, meaningful relationships inherent in the realms of life.

The Art of Knowing

I entitled this paper "The Art of Knowing" precisely to support the view that knowledge or knowing cannot, without serious implications, be a purely intellectual or analytical activity. When the medieval alchemists referred to their science/art/contemplative work under the one term The Art, they were alluding to this fact. Imagination was central to the hermetic way of knowing, and the tendency to depict both method and findings in often complex and ambiguous images attests to the imaginative nature of their way of knowing. In time, through the development of rational, analytical thinking and the separation of science, art, and the spiritual life, the term "Art" no longer applied to a way of knowing which encompassed all three disciplines. Imagination gradually became associated with "fantastical" or "made-up" and personal interpretations of the external world, or was seen as being a product of the strictly subjective consciousness. Because of these connotations, the imagination was not seen as being suited to obtaining true and factual knowledge. That this restricted view of imagination is changing is evident in recent dialogues opening up between disciplines that from the early years of the Scientific Revolution refused to have anything to do with one another.[18]

Once imagination begins to be acknowledged as a way of knowing, it can offer an alternative approach to many of the challenges outlined in the first section of this article. Imaginative cognition can bring into a meaningful relationship the insights gained from the disciplines of science, art, and the contemplative life. This synthetic potential is exemplified by the Romantic poets—Goethe, Novalis, and Coleridge are but a few examples—who saw a "spontaneous, sober observation of the world" (Allison, 2003, p. 14) as essential to their work. These poets were often very deeply engaged in the study of natural phenomena—Novalis in mineralogy, for instance, and Goethe in botany and color phenomena. Their deep investment in the sense life and in phenomena as revealed to the unmediated senses is a very opposite gesture to the demotion of direct experience articulated by Brady in his encounter with the science of his time.

The development of imaginative cognition requires a heightening of perceptual capacity, "plunging into perception." (Bortoft, 1996, p. 64) Along with intensified perception through an investment of attention in our sense life, the development of imagination also re-orients awareness toward the superconscious pole of consciousness. (Kühlewind, 1988) This

for Kühlewind is the basis for the pathway from normal consciousness (which he also classes as subject to the collective disease of consciousness, or cognitive amnesia) to healthy consciousness. It places the awareness back in touch with the living, dynamic source and seat of consciousness and loosens the rigidity of the subject-object separation, which arises due to the gradual orientation to and identification of consciousness with the products of its activity.

For educators, granting the intelligence of the imagination equal consideration ensures that teachers and learners become skilled in both analytical and holistic ways of knowing. Knowing, in this sense, becomes an Art that honors the rigor and accuracy demanded by science, in the modern sense of this term, while preserving the integrity of individual aesthetic expression championed by the arts. A way of knowing that embraces both the analytical prowess of the intellectual mind and the dynamic vitality of the imaginative intelligence ensures that our way of knowing stays in touch with the realms of life, and in so doing informs a way of living adequate to Nature and the Human Being.

Endnotes

1. Quoted by Zajonc (2006, p. 3).
2. It is not the intention to go into these in detail in the body of this paper. We need only consider the many themes that dominate the headlines in our current culture of reporting: pollution, political turmoil, climate change, peak oil and its implications, genetic modification of living beings, hunger, and so forth.
3. It is the authority of science that is called upon in contemporary political discourse or decision making, no longer the authority of the church and certainly not the authority born of self or collective epistemological reflection.
4. The distinction made here refers to Palmer. It contrasts the treatment of ethics as an autonomous, specialist discipline or consideration that is optionally brought to bear on our knowing activity with the realization that the activity of knowing—and what results from that activity as action or insight—is essentially ethical in its implications.
5. See Lehrs (1985) for a further elaboration of this term. It refers to the resulting mind-set that the scientist adopts if rigidly following the tenets of a science based on the removal of the subject (the subjective) in the attempt to obtain objective, universally applicable knowledge of the world.
6. Galileo's thinking, and its subsequent influence on modern science, is complex. E.A. Burt gives a thorough description of Galileo's view that "nature is the domain of mathematics" (Burt, 2003), which is an essentially epistemological statement. Galileo, in this light, is one of several influential thinkers whose science derives from a philosophical stance we could call mathematism.
7. I think it important to reference Galileo in this manner. Rather than to say "since Galileo" I have chosen "since the time of Galileo" to indicate the possibility that Galileo was one proponent of a shift in consciousness that was, on all levels—physiologically, psychologically, and spiritually—giving human subjects greater awareness of themselves as separate cognizing beings, centered within their own individual points of view. This idea references the research of Rudolf Steiner and the substantial evidence for the evolution of consciousness articulated in his own work as well as in the work of Ernst Lehrs, Owen Barfield, and others. The choice of wording indicates that although the shift in consciousness is a supra-personal event, Galileo is one of the earliest and clearest proponents of modes of thinking arising from this new experience of self and world — with profound implications. Burt writes: "The form of the primary-secondary doctrine in Galileo is worth a moment's pause, for its effects in modern thought have been of incalculable importance. It is a fundamental step toward that banishing of man from the great world of nature and his treatment as an effect of what happens in the latter!" (2003, p. 89)
8. The role of what Bortoft refers to as the organizing idea in cognitive perception has also been revealed through the work of Von Senden, Oliver Sacks, and others. These studies, which focused on the experience of individuals who were blinded from birth but whose sight was eventually restored through medical science, are relevant to mention. Annie Dillard makes reference to Von Senden's research *Space and Sight* when she writes that for the newly sighted vision is "pure sensation unencumbered by meaning." (Dillard, 1974)
9. The term "split" is used here to refer to the separation of perception into primary and secondary qualities, the separation of thinking and perceiving and the development of the subject/object consciousness.

"The world is … a non-dual world that we split—or is split by our "ego" or "me" consciousness—into subject-object, self-other, friend-enemy, humanity-nature, and so on." (Kühlewind, 2008, p.11)

10. Kühlewind's statement—"People live in the same way they cognize [!] consciously or unconsciously, they always shape their world according to how they know it. Cognition creates reality in this way and, as far as it is creative cognition, it makes morality possible" (1988, p.152)—resounds strongly with the conclusions of both Palmer and Bortoft.
11. We refer to the Human Being, and in earlier times Nature itself was perceived as being populated by beings, whose works were the phenomena of nature perceived by our senses. As a result of the quantitative way of seeing (Bortoft), nature is no longer understood to be peopled by beings but is the manifestation of forces and physical processes lying beneath their manifestation to our senses. The Human Being has also largely disappeared from view and is at best an epiphenomenon of genetics and complex biological processes.
12. Reference to Shakespeare's *Hamlet* Act 3, sc. 1: "And thus the native hue of resolution/Is sicklied o'er with the pale cast of thought,/And enterprises of great pith and moment/With this regard their currents turn awry,/And lose the name of action."
13. The alchemical mantra *ora, lege, lege, lege, relege, et labora* is often quoted, notably with *ora* preceding either of the other two endeavors.
14. Goethe is a clear example of a scientist/artist who made significant contributions to both fields of human endeavor but who is generally credited and respected either for his artistic works or his scientific method, but rarely for both.
15. "Surely, science has brought enormous advances, but we cannot turn away from the central fact that the modern emphasis on objectification predisposes us to an instrumental and manipulative way of being in the world." (Zajonc, 2008, p. 3)
16. "It used to be an embarrassment that this person (Newton), who above all others set the seal on the future development of science in the West, in fact spent more of his time on occult researches and alchemy than he ever did on experimental and mathematical physics." (Bortoft, 1996, p. 30)
17. See http://www.ierg.net/about.
18. A conference held in Herefordshire in the UK in 2010 titled "Ways of Knowing: Art and Sciences Shared Imagination. Perspectives from the Sciences, Humanities and Creative Arts" attests to this emerging dialogue in the halls of higher education and research.

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Painting from a Palette Entirely Different

A New Hermeneutic Approach to Steiner's Esoteric Courses for Teachers

Johannes Kiersch

Introduction: A Central Dilemma of Research on Steiner Education

Within the context of Waldorf education, Rudolf Steiner's Stuttgart lectures for teachers have traditionally been regarded as centrally important contributions to a pedagogical understanding of the human being. As such they provide the scientific basis and theoretical principles for a whole variety of innovative approaches to the business of teaching. It is often assumed that Steiner hereby brought to light a solidly reliable body of knowledge concerning the nature of the human being and the laws of human development. This knowledge was partly the fruit of his extensive studies of Goethe and early epistemological works, but was mostly based upon his "anthroposophical" research. The Waldorf schools and their related organizations represent, it is felt, the precise, practical application of this knowledge.

Equally traditional is the summary rejection of this view by mainstream educational theorists. Either doubt is expressed as to the extent to which Steiner's utterances can be accessible to inter-subjective validation and critical analysis, or they are simply assumed to be fantastical nonsense. Anthroposophy and, with it, the principles of Waldorf education, are—according to their most prominent pedagogical critic—"built on sand." (Prange 1986, p. 551)

The contradiction between these two views becomes even sharper when the historical context of these lectures is taken into consideration. In 1919 Steiner, fresh from the failure of his strenuously pursued campaign for a Threefold Social Order in Württemberg, was faced with the necessity of rescuing his school project, so that at least a pointer towards a "free cultural-spiritual social sphere," independent of the power of the state and the economy, could be realized. All those involved in the project felt they were party to a unique moment in history. It was entirely fitting, therefore, that the preparatory course took place in the rooms of the local branch of the Anthroposophical Society. (Hahn, 1969, pp. 656 and 686) It had been hastily convened by Steiner in the late summer of 1919, just before the opening of the first Waldorf school. Apart from a few guests, the participants—the future teachers—were all more or less convinced anthroposophists. Some of them were personal pupils of Steiner's, undergoing esoteric training with him. All were familiar with the basic concepts of anthroposophy and with Steiner's meditation exercises. They were twelve in number. Steiner began his first lecture in a tone of ceremonial solemnity that can only be described as religious. After a few introductory sentences he asked the stenographer to stop writing. Then, as is known from notes made later by some of the participants, he spoke of how the work of the future college of teachers would be directly affected by the spiritual beings of the third hierarchy: the angels, archangels, and archai. In this he was using the terminology of Dionysius the Areopagite's teaching on angels, in other words, a motif taken from the canon of medieval mysticism, upon which he had expounded in detail some years previously in his *Occult Science* (Steiner, 1989a) and in lectures for members of what was then still the Theosophical Society.

> Contextual interpretations are essential for a proper understanding of controversial historical phenomena.

For many years afterwards access to the textual versions of this utterance was stringently restricted, while the first edition of the lectures to openly publish it chose not to reveal the circumstances in which the utterance was made. Not until the new, carefully annotated edition of 1992 did it become clear that Steiner's first lecture course for teachers had not been academic, but esoteric in character. The same goes for the subsequent courses held between 1920 and 1923. (Steiner, 1986 and 1993c)

As a Waldorf practitioner you accept the fact that you are working with artistic imaginations.

The initial effect of this is to place Waldorf education's claim that its theoretical underpinnings are "scientific" in a still more questionable light and to add weight to the misgivings of its critics and opponents. It is clear that the founding of the Waldorf school was intended as a universal cultural impulse, and that it was primarily inspired by anthroposophical esotericism. Historians of education regard this state of affairs with suspicion, whether they are inclined to write Waldorf education off as a sect, or to grant its significance as a broad-based, socio-cultural movement. The obvious conclusion, which recently figured large in some European media, would be that it is high time the Waldorf schools parted company with their "guru" and carried on with their proven methodology without the trappings of the outdated anthroposophical worldview. Strangely enough, among academics such a view is met with skepticism. Würzburg professor of education, Walter Müller, puts the case as follows:

> If it is true that anthroposophy is to be regarded—not in terms of content, but in a functional sense—as the guarantor for the widely acknowledged high quality of teaching in Waldorf schools, then its absence in the future would seem to be unthinkable. The fact is that, upon closer scrutiny, it clearly constitutes the gravitational center of the whole enterprise. It is a reservoir from which teachers and many parents draw their motivation and strength of purpose, while at the same time being the main (and often overlooked) source of the spirit of community for which Waldorf schools are renowned. Without this body of ideas acting as a central focus of meaning, the Waldorf school's days would, in all likelihood, be numbered. (Müller, 1999, p. 124f)

To what extent, however, this "central focus of meaning"—assuming that it still plays a central role at all—determines the details of pedagogical practice, remains unclear.

First attempts at a solution—in relation to Steiner's long-neglected approach

A thorough discussion of Helmut Zander's monumental work on the genesis and practical consequences of Steiner's anthroposophy in Germany has shown just how essential contextual interpretations are for a proper understanding of controversial historical phenomena. (On this see also Rittelmeyer & Parmentier, 2001). Zander has chiefly been criticized for excluding the worldview of Steiner and his pupils from serious consideration by treating it a priori as nothing more than an ideological "super-structure." Thus the material he presents consists largely of contrived caricatures, isolated from their true context, that correspond more to his own hasty assumptions than anything else. (Ravagli 2009) Anyone wishing to avoid such a state of affairs would do well to take account of a simple fact: namely, that the body of Steiner's basic epistemological thinking—which pre-dates, and is implicit in, the esoteric courses for teachers —has been seriously neglected by proponents and critics of Waldorf education alike. Two texts in particular are being referred to here: Steiner's lecture of 1911 to the international Philosophical Congress in Bologna on "the

psychological foundations and epistemological framework of theosophy" (currently in Steiner, 1984, and Steiner, 2007), and his book *Riddles of the Soul* of 1917. (Steiner, 1983) In the "Bologna lecture," Steiner gives an introduction —in abstract, but clearer terms than on any previous occasion—to the psychological theory behind the anthroposophical path of meditation. Six years later, in *Riddles of the Soul*, he addresses this topic in more depth, taking as his starting point the question of the relationship between his own anthroposophical research ("anthroposophy") and ordinary empirical research (which he here designates as "anthropology"). While he emphatically affirms the compatibility of these two lines of research, he also rigidly distinguishes between them as fields of discourse. "Anthropology" is based upon sense data, "anthroposophy" upon "super-sensible" experience. The one cannot take the place of the other, but if approached in a spirit of impartiality there would be no contradiction between them, and within the context of an integrated and comprehensive "philosophy of human nature," they could mutually enhance each other.

The philosophy of the human being derived from anthroposophy presents a picture painted from a palette entirely different to that derived from anthropology; but the cognitive experience of viewers of the two pictures will be found to correspond rather in the way that the photographer's negative plate corresponds to the eventual processed photograph. (Steiner, 1983, p. 32)

Through the special mental climate surrounding the initial reception of Steiner's works, the lines of demarcation, so clearly stressed here, were erased from the scene. In Steiner's integrated "philosophy of the human being"—according to his own stated understanding—images of human nature derived from different methods of research impinge upon each other. They emanate, on the one hand, from ordinary empirical research, and, on the other, from anthroposophically based "spiritual research." In other words, each one is "painted from a palette entirely different." This being the case, there has not been sufficient awareness of the fact that applying elements of one image to those of the other is a matter of considerable delicacy.

Anthroposophy employs heuristic concepts

The first person to draw attention to this problem, albeit without reference to *Riddles of the Soul*, was probably Christian Rittelmeyer, when he wrote: "Could it not be that the recurrent confusions and anachronisms within the anthroposophical movement and—more particularly—in Waldorf education rest upon the fact that things articulated by Steiner are construed in terms of empirical fact rather than in terms of heuristic principles?" (Rittelmeyer, 1990, p. 64) This question draws attention to a crucial demarcation criterion. "Anthropology" in the sense in which the word is used in *Riddles of the Soul* is grounded upon sense data and seeks, by defining them according to inter-subjective consensus, to consolidate the data as scientific fact. "Anthroposophy" does not deal in such fixed and clearly defined "facts." It restricts itself to descriptions of methods, suggesting ways of approaching your own observations, to evidence which is (at least initially) thoroughly subjective, to the weighing up of possibilities. As a Waldorf practitioner, therefore, you accept the fact that you are working with artistic imagination, with rituals, images and myths, with devotion and reverence, with hopes and inklings, intuition and presence of mind. These are an array of motifs, habits, attitudes by which action might be guided. And while even the empiricist who sees objectivity, clear planning and proof of efficacy as the main aims of teaching would not be able to dismiss their pedagogical value out of hand, it would

'Living' concepts have much of the unregulated mobility of the thought-life of young children.

scarcely be possible for him to account for them in rational terms using current research methods.

Anyone trying to get to the bottom of such diffuse and conceptually difficult sources of motivation, which play a decisive role in Waldorf education, will sooner or later come up against Steiner's repeated reference to the pedagogical value of "living concepts." This term already finds clearly emphatic expression in his book on *Goethe's Conception of the World* of 1897. (Steiner, 1990, p. 66) Scattered through the recorded texts of his subsequent lectures, it regularly recurs in polemical contexts where he takes issue with the fixed definitions of modern scientific language. Speaking in October 1905 about the "flexibility of concepts," for instance, Steiner said (it is here already evident that this theme has pedagogical implications):

> The concepts absorbed at university produce rigidly fixed mental structures, which are not easy to loosen up. Brimful of such structures, the academic comes to a theosophical lecture and is thus incapable of coming to terms with the living concreteness of the theosophical thought world. How different it would have been if he had been brought up to treat any given concept as if it could turn out to be otherwise; for we have, after all, only a slender amount of experience and much that we now consider accurate will have to be corrected in future. (Steiner, 1991, p. 247f)

The 1919 courses for teachers revolve around this motif with particular thoroughness. In the lecture on logic in *Study of Man*, which deals with the relationship between concept, judgment and conclusion in connection with teaching method, the abstract concept appears in the picture of a lion in a cage: the free-roaming king of the savannah in miserable captivity and separated from life. (Steiner, 1992, p. 135 f.) "Living" concepts have much of the unregulated mobility of the thought-life of young children. From the psychological perspective developed in *Riddles of the Soul* two years before the opening of the Waldorf School, they are not yet "lamed." They are closely akin to the plasticity and vibrancy of the "imagination," the first level of super-sensible perception. (Steiner, 1983, p. 26 ff.; for what is meant here by "imagination" see Steiner, 1993b.)

The meditation motifs in Steiner's esoteric courses for teachers encourage us to make our own observations in concrete teaching situations.

Upon closer scrutiny, these concepts reveal three main characteristics: the unfinished nature of the process of knowledge acquisition concerned, its undisguised subjectivity, and immediacy—the direct relation to experience unencumbered by abstractions. (Kiersch, 1990, p. 80) A kinship to Goethe's insights on the nature of the symbol, with which Steiner was intimately acquainted (ibid. p. 80 ff.), is also evident. In terms of the well-known aphorism from "Maxims and Reflections," in which Goethe—deviating from former usage—employs the word "allegory" in a special sense, setting his own concept of the symbol in direct polarity to it: According to Goethe, "Symbolism transforms phenomenon into idea, idea into image, in such a way that the idea in the image retains an ever-renewable aptness and infinite scope of meaning, and even if it were uttered in every possible language would still remain ineffable. Allegory transforms the phenomenon into a concept, the concept into an image, in such a way that the concept is demarcated clearly within the confines of the image, is always available in this fixed form, and always carries the same meaning. (1981, pp. 470–471). Steiner's "living concepts" can be seen in the same light as thought forms designated by Goethe as "symbolic," while the rigid concepts

"Symbolic" forms	"Allegorical" forms
Favor descriptive characterization and variable perspectives	Favor definition and unified perspective
Are multi-referential and provisional "approximations"	Are monoreferential and final "eqivalents"
Are capable of "growth"	Stay as they are
Are "subjectively" valid, i.e., are conscious of a participatory relationship between knower and known	Are "objectively" valid; i.e., their relationship to the perceiving subject is not taken into account
Relate to all the sensory modalities as a whole ("concrete" concepts)	Relate primarily to a limited field of sensory modality—that of the senses of touch, movement and balance (mere "labels")
Imply thinking in terms of whole forms as expressions of polarity and intensification, arrange phenomena in systematically related series, as "illustrative concepts"	Imply thinking in the abstract conceptual forms of mathematical logic
Favor metaphors of harmony, of balance, of "health"	Favor metaphors of cause and effect, purpose and utility

of the exact sciences correspond to "allegorical" forms. The characteristics are summarized in the table above. (after Kiersch, 1990, p. 83)

In what way and to what degree Steiner made conscious use of this Goethean mode of expression—which from his youth onwards had been very familiar to him—as an aid to presenting the special content of anthroposophy can be left open here. What is certain is that, through his constant and ever-deepening preoccupation with Goethe's language and world of ideas, he had become very well versed in the use of a highly productive and original heuristic principle. This becomes even clearer when the work of the German scholar Uwe Poerksen on Goethe's scientific language is taken into account. The particular qualities of Goethe's use of language, as described by Poerksen, recur in the most extensive way in Steiner's coining of "anthroposophical" concepts. Here we find him working with polarities and paradoxes, phenomenological series, with "semantic fields," conceptual formulations, the meaning of which discloses itself within the dynamic interaction of the parts with the whole (Poerksen, 1994 and 2008). (The two "conceptual systems" contained in the second lecture of *Study of Man* are a case in point. Cf. Steiner, 1992, p.30 ff.). Recent anthroposophical investigations of Steiner's style of language are also illuminating in this connection (Lissau, 2001; Sam, 2004; Zimmermann, 2000). The dynamic changes of perspective, the struggle to find appropriate expressions for that which is hard to define, are demonstrated in an abundance of examples from the texts that have come down to us.

The process of clarification attempted here was greatly enhanced by the unexpected discovery of a large collection of virtually forgotten blackboard drawings with which

Steiner illustrated his lectures. These improvised sketches show how Steiner—especially in his "anthroposophical" lectures—in addition to verbal language, "discursive" symbolism, as it is called in Ernst Cassirer's and Susanne Langer's theory of symbols (Langer, 1965), constantly used "presentational" symbolism: graphic gestures which express more, in terms of both form and content, than can the one-dimensional word. (Bockemühl/Kugler, 1993; Sam, 2000) To elucidate the contribution such means of expression would make to unraveling the full meaning of the esoteric courses for teachers would be a tremendous challenge.

Such an undertaking would in all likelihood uncover much common ground with Ernst Cassirer's *Philosophy of Symbolic Forms*. The spark of inspiration for this fundamental, epoch-making work (epoch-making also in a pedagogical sense, cf. Niesseler, 2003) came to Cassirer just at the time when Steiner was working on his book *Riddles of the Soul* (1917), and at the same place—Berlin. Subsequently this took shape as the key sentence: "'Understanding expression' significantly predates 'knowledge of objects.'" (Cassirer, 1982, p. 74) With this Cassirer comes into territory very close to Steiner's psychology, and to the latter's conception of the history of human consciousness and its relationship to child development. In both cases the idea is that an archaic stage of direct apprehension of form (expression) precedes the development of the theoretically oriented object-consciousness of the modern adult. (Kiersch, 2004) Cassirer's concept of the "symbolic form" could well serve, upon closer scrutiny, as a hermeneutic key to the whole of Steiner's works—especially those of an esoteric nature.

> The mind imbued with living knowledge of the human being apprehends the child's being as the eye does color.

Esoteric exercise and pedagogical practice

These assembled observations also throw light upon the core material of the esoteric courses for teachers: the guidance they provide for the practice of meditation. In *Riddles of the Soul* Steiner describes the central characteristic of the "anthroposophical" approach to knowledge as proceeding from "experience the soul has with the ideas it forms at the boundaries of cognition." These are images or ideas that arise wherever sensory observation and the logical conclusions derived from them reach their limits. This is a reference, in very generalized form, to exercises presented years before in his basic anthroposophical works (Steiner, 1989a, 1993a, 1993b, 2003) and summarized in the "Bologna lecture" of 1911. Anthroposophy does not back away from the cul-de-sacs of the knowledge process, as do other methods of research, either resignedly accepting the inexplicable or devising hypotheses to get round it. The idea is that, out of the impotence experienced by sense-bound perception at the boundaries of cognition, the meditation practitioner gains new inner experiences, which, initially a sort of "groping forwards," develop in time into "super-sensible" perceptions. Out of such "experience the soul has with the ideas it forms at the boundaries of cognition" there grows the ability to distinguish the features of what anthroposophy refers to as a "spiritual world." (Steiner, 1983. p. 20 ff.) As a follow-up to what has been presented here, the next step would be a close look at what Steiner has to say elsewhere about the specific uses of particular exercises: their pictorial or verbal character, their practical sequence, the inner states and outward conditions that make for success. (A striking example here is Steiner's introduction of the rose-cross meditation in his 1910 book *Occult Science*, cf. Steiner, 1989a. Zajonc, 2009, gives a more recent summary based on his own meditative practice.) On such a basis the meditation motifs of the esoteric courses for teachers could be

more clearly identified, seen in relationship to each other, and understood in their own terms. This would, for instance, make clear the connection between the second and tenth lectures of *Study of Man*. In the former an initial orientation is given, through the introduction of two "conceptual systems," which are in effect two series of concepts. In keeping with the Goethean method described by Poerksen, they are set in polarity to each other and each shows a process of "intensification." The culmination of this process then comes in the tenth lecture in the form of the centrally important "sphere meditation." (Steiner, 1992, pp. 30 ff. and 146 ff.) One year later, this then becomes what Steiner called the "panacea" motif. This was a sequence of three gestures, which he said could be realized as a sculpture, consisting of three figures representing movements expressive of essential pedagogical attitudes.

Reverence, enthusiasm and protective care—these three are the panacea for the teacher's inner health. And if we wished to create an artwork, a group sculpture, say, representing the embodiment of art and education, we would have to fashion the following:

> Reverence for that which precedes the child's existence. Enthusiastic gesture towards that which will succeed the child. Protective movement around that which the child experiences. (Steiner, 1993, p. 39)

Here again it is clear how Steiner endeavors to enhance the brittle medium of word and text by means of presentational symbolism in the form of art. His later discovery of three "pedagogical arts" [sculpture, music and creative speech, ed.] by means of which an intuitive understanding of the various levels of the child's being could be acquired, must also be seen in this light (indications on this in Husemann, 2007).

The meditation motifs in Steiner's esoteric courses for teachers do not primarily deliver knowledge in terms of "anthropological" research. They encourage us to make our own observations in concrete teaching situations. As provisionally formulated conceptual structures, they dissolve, as it were, into intuitive courses of action. Steiner describes their function in one of the most beautiful formulations we have from him: "The mind imbued with living knowledge of the human being apprehends the child's being as the eye does color." (Steiner, 1961, p. 289) The "esoterically" formulated content of the courses for teachers does not determine, but facilitates pedagogical action. At the first further training course for the teaching body of the new school in autumn 1920, Steiner uses a very matter-of-fact comparison to clarify the relationship between the theoretical formulation of concepts and meditative practice according to his pedagogical esotericism. He compares it to the difference between the eating and subsequent digesting of, say, a sandwich. (Steiner, 1993c, p. 51) This is an implicit reference to the anthroposophical idea of intuition, which he described three years before in *Riddles of the Soul*, and dealt with in further detail, just before the inauguration of the school, in the sixth lecture of *Study of Man*. (Steiner, 1992, p. 91ff) This idea already appears in Steiner's early philosophical works and gradually takes on more concrete contours through being considered from many different perspectives during the subsequent unfolding of anthroposophy. A closer investigation of it could greatly enhance our understanding of the Stuttgart courses for teachers. (This has been done to some extent by Gut, 1990, and Schieren, 2008. On the hitherto unappreciated significance of the idea of intuition in education

According to Steiner, the process of meditative digestion also has beneficial effects upon the teachers' ability to work together productively.

see Noddings & Shore, 1984; and Eggenberger, 1998.)

According to Steiner, the process of meditative digestion, through which working with the "living concepts" of anthroposophy is transformed into pedagogical practice, also has beneficial effects upon the teachers' ability to work together productively. In this connection, Kevin Avison, the founder of the Steiner Waldorf Advisory Service in Great Britain, writes: "Steiner frequently gives detailed exposition at higher or contextual levels of a question and sample propositions for practical application. Indications remain fragmentary until united with relevant concepts through meditation. (Avison, 2009, p. 23) Such a "process of contemplatively informed action research" (ibid., p. 25) is a decisive factor in promoting cohesion in a college of teachers and in maintaining its power of renewal.

The tendency in the initial phase in the reception of Steiner's works to misinterpret the anthroposophical courses for teachers as containing 'anthropological' knowledge has not been entirely without consequence. In the style of instruction carried on within some Waldorf training centers—and from there permeating the day-to-day practice in schools —a false picture of Steiner's educational teachings took shape. They came to be viewed as an eternally valid corpus of scientifically anchored truths, which have increasingly, and quite rightly, been felt to be dogmatic. That this picture, roughly since the 1980s, has provoked strong criticism from the educational academia, is understandable. Moreover, into this picture certain ideas of order were incorporated, especially in Germany, adopted from the "values of duty and conformity" which held unquestioned sway over public life in Germany right into the 1950s. With the—extraordinarily quick—establishment of the new "self-realization values" (from the 1960s onwards) (Klages, 1985; Bohnsack, 1996), which are generally congenial to the forms of thinking in Steiner's esoteric courses for teachers, Waldorf education's adopted "picture of man" found itself sidelined—a tragedy of the first order. An interested public, for whom independence, spontaneity, self-realization, freedom from convention and personal creativity have become natural ideals, has no time for dogmas when it comes to education. With this in mind, an attempt to re-interpret the fundamental texts of Waldorf education in heuristic terms could greatly assist its further development.

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Authenticity in Education

Elan Leibner

The following essay is adapted from an address delivered at the graduation of Sound Circle Center's Class of 2011 in Seattle, WA.

Dear graduating class, colleagues, families, and friends,

We are gathered here on the eve of Pentecost, and though what I want to bring today is not overtly related to this festival, I would say at the outset that the image of people gathered in a circle, inspired by a spiritual fire, turning outwards and devoting their lives to the spreading of an inwardly experienced truth is very much what stands at the core of Waldorf education as we should strive to practice it.

The path you have chosen is as noble and worthy an undertaking as there is. Of course, you know that nobility and good intentions carry you only so far. Effort, perseverance, patience, talent will all play a major role in what lies ahead. Your destiny will bring you to certain situations, and we all pray that you will rise to meet them in the right way. The specifics we do not know in advance. But here is what we do know:

The crises of our time are primarily crises of authenticity.

The crises of our time are primarily crises of authenticity. In the food we eat, in the thoughts we articulate, in the societal structures we have erected, in the manner we produce, consume, and discard goods, most surely in the education that most children receive today, we have divorced ourselves from both the reality of nature and the nature of reality. Authenticity means that the spiritual and the material, the ideal and the manifest, are in harmony. We call people authentic when their actions and words convey the indelible thrust of their individualities, norms and traditions (while respected) notwithstanding. We are often willing to forgive them social transgressions of tactlessness or absentmindedness precisely because we sense an authenticity that is precious for being so rare. In their words, as Emerson noted, we hear our own rejected thoughts.[1]

The appearance of a person or thing will only then be deemed authentic when we behold in it the underlying spirit. From authentic art, conveying experiences at once intimately personal and vastly universal, to authentic reproductions of ancient crafts, employing the original methods and materials, to such mundane examples as authentic cuisine, meaning utilizing the ingredients and methods of its nominal region, we demand an honest connection between that which is perceived and that which can only be thought.

Authenticity, while often proclaimed, has seen its star decline. The reality that was once evident, then remembered and finally only understood, seems a quaint relic. The conception of nature as whole has been replaced by a conception of nature as a collection of things. The conception of the human being as an embodiment of a divine spark has been replaced by a host of "nothing but"s. The heart is nothing but a pump; the self is nothing but an epiphenomenon of matter, and so on.[2]

Indeed, with reality as it was once understood in decline, we pride ourselves on the incredible sophistication of the new, virtual reality. Virtual means "almost," so we have almost reality, and it increasingly seems preferable to actual reality. Children have virtual pets and virtual farms and virtual friends, and parents like them because a virtual

pet does not soil the rug and virtual friends can be monitored with filters and web cams. A child who plays, if we can call it that, in the virtual playground will not get run over by a car or fall and break a leg. I don't want to go on, but my intention is clear, I think. When I say that the crisis of our times is a crisis of authenticity, I mean that the underpinnings of reality have lost connection with their manifestations, and we look at these manifestations as accidental arrangements, then fancy we can do better. We can rearrange the manifestations for greater convenience and profit.

The sad thing is that we are actually meant to do better, just not in the way we have been understanding that possibility. Doing better means doing authentically, doing in accord with the spiritual essence of the human being and of nature. What is urgently needed is the understanding that nature can no longer heal us on her own, and in fact needs us in order to be healed herself. In the words of Dennis Klocek, Mother Nature is now old. She needs her children to care for her.[3] Rather than rearranging the manifestations of reality for convenience and profit, we need to rearrange convenience and profit to accord with reality.

Authenticity means that the spiritual and the material, the ideal and the manifest, are in harmony.

We will have to learn, but also help create, the virtue of reality—a newly emergent, humanized reality—so that virtual reality will not be the final word. We will have to develop heart intelligence so that artificial intelligence is not the final word. To the World Wide Web we must add the World Wise Web, a web of human relationships for those who seek both wisdom and its application.

And where does this idea lead when we look at education? Human nature is not different in this sense from the rest of nature. Convenience and profit now dictate how we approach young human beings, too. On the one side: "Global competition means we have to produce more engineers and programmers!" On the other: "My child's feelings were hurt, so he doesn't feel like completing his craft project before graduation." The idea that authenticity means identifying a child with his or her own self, not with a profit motive or emotional chicken soup—that idea is almost nowhere to be found.

It would be so very tempting to pronounce here that Waldorf education is the answer to the quest for authenticity in education. Follow the curriculum, best practices, AWSNA self-study guidelines for your school, Sound Circle instructors' methodologies, and voila: Authentic education!

Of course, understood correctly, that Waldorf education is the answer to the quest for authentic education is exactly what I will be saying. But I would like to characterize Waldorf education more as a verb than a noun or an adjective. I would like to ask you to "waldorf" with your students rather than "give them a Waldorf education." Using nouns as verbs is known as verbing. I once saw a cartoon that said that "verbing weirds the language." It seems apt, however, because in making Waldorf into a verb we come closer to its spirit, and hence to its potential authenticity. I believe that, in the long term, we may be better off ditching the name altogether and just empowering ourselves to educate. The curriculum that has been taught in Waldorf schools is wonderful, wise beyond compare. But even this remarkable achievement can become a burden if the person teaching it is slaving under it like one whose spirit has been shackled by tradition.

What is the alternative to predetermined do's and don'ts?

See the child, love the child, know yourself: Now teach. This is the immensely simple and so endlessly difficult maxim of authentic education. For what it includes, and also for what it excludes, it comes close to pedagogical anarchy if applied selfishly—and to a truly

human education when applied with humility and courage. Let's look at those exhortations. See the child, love the child, know yourself: Now teach.

See the child.

Every tuft of hair, every gesture, every speech impediment or artistic talent is a sign. A sign in the sense that words are signs, pointing towards meaning. But words are someone's words, and someone else has to understand them. The tuft of hair, the tilted head, the nervous laughter—they are the speaking of the child's invisible spirit. You have to permeate them with the light of your mind, to read the signs together into speech if you are to see the child so that you can help connect the spirit with its instrument—that is, if you are to foster authenticity. The language anthroposophy has given you should help as a set of principles to organize your seeing. Used well, it fosters true beholding. Used badly, it's an obscuring curtain, a nominal classification that absolves you of the charge to see.

> Rather than rearranging the manifestations of reality for convenience and profit, we need to rearrange convenience and profit to accord with reality.

And how will you know whether the child is seen, and grows authentic? The child will let you know. Ask every evening, and the answer shall be given unto you.

Love the child.

Though he may not love you—at least not initially. Love even the child you cannot grow to like. Liking is of the soul. It half sleeps and cannot lightly be convinced to vacate the soul dwelling it acquired in the murky past. But love is of the spirit. You may let your actions flow towards what the moment asks of you even if every disliking strand of you begs permission to mock, or cringe, or run away, or blame heredity, nutrition, media, traffic and weather together, or the Montessori kindergarten for all that ails the child. Be like the angel, your angel, that has stood by you despite all that you have done to make yourself unworthy of angelic love.

And how will you know if you have loved? Love is a peculiar force. The more you give away, the more you have. If it grows within you, you have been giving it away. The child you have loved will form a bond with the Self she means to be. This need not mean without trouble, all confident and happy. But she will confirm the fact that you are on her side as she seeks to find her way. Your relationship will bear the stamp of your love for her, rather than your like or dislike of her. It will grow authentic.

Know yourself.

"Know thou thyself" is an ancient call, an ancient riddle. Who is to know whom? It directs us to the mystery of cognition, which is well beyond the scope of this address. Today I would like to speak of it in a humbler sense. Know yourself, that you are also an embodied Self, that in this embodiment you have talents, weaknesses, abilities, and disabilities. Launch into the teacher's journey with warmth, enthusiasm, and determination. Please, please do not attempt to do everything as well as the teachers in your teacher education courses have demonstrated. You were given examples of lessons by people whose special strength is music, or drawing, or movement. They were not all as musical as the musician or as talented a storyteller as the storytelling master. What made them good enough to be invited to teach you was that they developed their gifts.

So in your first year or two, concentrate on developing and nurturing a teaching style that builds on your gifts. Are you a poet? Teach math in rhyme, geography through the poetry of the regions you wish to explore, and history with ample samples of the dramatic, the epic or the lyrical. Are you a lover of nature? There

is English in the trees and mountains of your community, physics in the meandering brook, and history in rocks and wildlife. You are given the freedom to meet your students' needs in a manner unique to the uniqueness of the day and tasks at hand. When you have built a teaching hut from which to set forth every day, then surely you can work on developing those talents that you did not receive as a gift of destiny. Nature's lover can engage his dormant love of music, and the poet can brave her fear of colored chalk or movement. Live on the edge of the comfortable, enlarging it.

But first get comfortable. Ask for help. Accept the help. True help is of the same nature as the teaching we are looking for; it seeks to help you find your voice. At times it may simply mean that someone else will carry music, nature, or poetry for you. As a seasoned teacher I can promise you that people like me long to be asked for help by their new colleagues. Take advantage of them. A mentor worth his oats will strive to help you teach the way you ought to teach, connecting your gifts of destiny with the task at hand: that is, to teach authentically.

So know yourself, and love the child you've learned to see. With your colleagues, form the Waldorf Pentecostal circle of those who seek self-knowledge, a new seeing, and Love in its noblest, most spiritual sense. Together, you will know more, see more, and love more.

Now teach!

References

1 Ralph Waldo Emerson, "Self Reliance" from *Selected Essays* (New York: Penguin, 1985).

2 For an enlightening discussion of the absurdity of these "nothing but"s see Georg Kühlewind's essay, "Theories of Consciousness" in *Feeling Knowing* (Fair Oaks, CA: Rudolf Steiner College Press, 1993).

3 Dennis Klocek spoke these words during a seminar for mentors held in Seattle in April, 2011.

Elan Leibner *is the editor of the* Research Bulletin. *He was a class teacher at the Waldorf School of Princeton for eighteen years. Since 2008 he has been involved in adult education, consulting, and mentoring in Waldorf schools in the US, UK, and (soon) China.*

Soul Breathing Exercises

Dennis Klocek

Editor's Comment: In this brief article, Dennis Klocek offers a short, practical contribution to the inner, meditative practice of teachers. His is the first of what is hoped will be a series of regular contributions from him and from others in support of this all-important aspect of Waldorf education.

Soul breathing exercises are useful tools for transforming belief structures in your soul that may be preventing growth. The first of these two sets of exercises addresses issues in your past that have served to form beliefs in the present. These forces in your life constitute your spirit biography. They are dimly-sensed impulses that form an energetic platform for your beliefs and actions. The second set addresses issues in the present that continue to aggravate or irritate you. This is your present biography. The goal of these exercises is to see how your spirit biography and your present biography are linked. This gives insight into karma.

Spirit Biography

Bring to mind the image of a loved one who has departed. Set yourself to wondering about what this person is doing now in the dimension where he or she now exists. This should be done just as if the person were alive. In this exercise we are wondering about the spiritual biography and evolution of the individual's I Am or True Self. Contemplating the person's life after death in this way can help to inform us about the life lessons to be learned across the threshold of death. Our wondering about this individual's ongoing spiritual biography creates forces of wonder in our souls that engender trust in the processes of life and soothe any fear of death.

Next, imagine a situation in which you were involved in a strong trial. Recall the feelings around the trial and focus on one of them. Then imagine the good things that have come about as a result of being tested by the issue that generated the strong feeling during the trial. See if you can feel just how anxiety turns to awe as you realize how the wisdom of the cosmos provided you with precisely the trial needed to get you to move in a particular direction. Next, see if you can recall a similar trial in the life of a departed loved one. Try to imagine how that person faced the trial. Compare how you faced the trial with the way you imagine your loved one might have faced the trial. Take these images into sleep for seven days in succession and write a few sentences about any dreams that seem related to these exercises.

Recall someone who is departed who provided an example of forgiveness for another during life on earth. Select a situation in your life now where someone has done something to you about which you still feel soul sore. Ask the departed to show you how to turn your soul towards forgiveness for the misdeed. Your feeling of harmony for the departed and the way in which they are membered into the world soul allows them to participate in your soul life in a creative and productive way. The feeling of harmony for them eventually can be transferred to another person whom we are struggling to understand.

Present Biography

Pick someone in your present life about whom you have the feeling that the way this person acts in a certain situation makes you upset and confused. You wonder to yourself: "How can someone do that? How can such a person be like that?" Try to imagine that you

are leaving your own body and walking and gesturing in the manner of this other person when he or she is undertaking the activity that causes you to be upset. You may want to actually move your hands the gestures this person makes while speaking, for instance. Then imaginatively dissolve these movements and reduce your inner dialogue to silence. Repeat this activity daily until sooner or later the person's soul configuration appears in your imagination simply as a gesture or intention towards activity without the movement of the hands to make the intention manifest. This exercise puts you into the mood of the karmic relationship between your self and the other person.

Now take the same person and situation as the object of the next exercise. Imagine that the thought pattern of the other person could be a geometric drawing. When this person answers a question, would it look like a spiral, a square, a set of interlocking rectangles? Would the person's thinking processes look like a jagged point, a set of curved lines, a tangle of wire? Would they look like interlocking triangles or more like a river delta of flowing and branching lines. Try to imagine the person's pattern of thought during the times when his or her thinking is upsetting to you. Then think the pattern away systematically. That is, if a triangle represents the person's thinking, pay attention to how you draw the triangle. Try to observe the order of the sides of the triangle as you draw them. If it is a tangle of lines, repeat the tangle drawing until you can attempt drawing it in reverse. If that is too much to remember, then trace the tangle in reverse. The important part is to reverse the drawing process of the symbol. This is because in the next part of the exercise you will dissolve this symbolic representation of the person's thinking process in reverse. When you dissolve it imagine it disappearing as if you were erasing a drawing in reverse. This empties your imagination. Bring your emptied imagination to complete silence. This allows you to breathe into the thought processes of the other person without forming strong responses and judgmental opinions about the person or yourself and puts both of your souls on an equal level so that a healing feeling can arise between you.

Dennis Klocek *lectures internationally on topics in the natural sciences and on self development through inner work. He has taught adults for thirty-five years in a wide variety of subjects. He has written seven books, the latest of which,* Climate, Soul of the Earth, *presents his thirty years of climate research based on planetary motion. He is the Director of the Consciousness Studies program at Rudolf Steiner College in Fair Oaks, CA, and the founder of the Coros Institute for the promotion of inner work as a path of self development. His website <dennisklocek.com> is a source of downloadable audio lectures on many topics.*

Teaching Sensible Science Course:
A Sensible Science Moment

by Kelly Larson

Pondering the smooth reflective surface of the lake beside me, my gaze is drawn further out where small ripples sparkle. "How many suns do you see?" echoes from the morning conversation. Looking up, dark olive green mixes with forest, lime, yellow; shimmering giggles against a dusky cobalt sky that lightens to seeming grey at the horizon. Time no longer matters; what is past floats away; what lies anxiously ahead fades to being only this moment. Sounds drift by and I allow them to fade into the background unnamed, sharing only this moment in shimmering, transformative, and illuminated shadows, slowly connecting and opening up to the world. No worry or concern; all will be as it should if I remain open and trust.

As I slowly find my way back along the street, not speaking to those with whom I am sharing this journey, the harsh vibration of a lawn mower resonates within my bones, jolting me. Birds flit through shadows of a monarch. Cars on the street seem to fly by disconnected, closed off and too fast for the rippling water or giggling leaves. Without seeing, I am aware, sensing peripherally all around my being in circles of energy rather than driving towards a point in the future. I am here. Warm silky caressing air brushes gently against my skin. Tears well, as words form in my mind, "It is mine to choose, and the universe supports my choice. Though I may fail, at least I am alive in choosing uncertainty."

Inspired by this reflective exercise from the "Teaching Sensible Science" course led by Michael D'Aleo, the emotions that arose were powerful and at times intense. In the open, safe environment created by this course, several participants had the courage to share their experiences. This simple activity, undertaken on the edge of Lake Michigan in Chicago, took us for a short time out of ourselves and allowed us to be completely present in the world, noticing the smallest details.

> Someone who can be in the present
> and see the future is very powerful.
> All we have to do is choose it.
> – Michael D'Aleo

This second week of three provided a multitude of practical hands-on experiences taken from the physics and chemistry curriculum of the seventh grade, including building and firing a lime kiln, working with different equipment, and leading labs. Yet the team leading the course encouraged us to go deeper, suggesting that cultivating openness is one of the greatest gifts we can give our students. Providing the space to share their intimate perceptions of the world, we open the door for them to seek patterns and explore relationships. This is the seed for will activities. In exploring their perceptions and discerning what resonates within themselves and with others, students are given the opportunity to discover a deeper sense of self.

Ultimately, Michael explained, this is what the students are hoping we can do with them. By allowing them a safe place to be vulnerable together, they can bear witness to their own being and develop a wakeful clarity of thinking. Meeting the challenges of our world requires a new way of thinking. The students must be awake to the interconnectedness of every activity in this integrated world. Rudolf Steiner, in a lecture given on September 22, 1920 (entitled "Balance in Teaching"), said: "Living reality can never be expressed in rigid concepts, and in dealing with a child, it is the intimate elements of life that are all-important." It is too easy to break science down into rigid concepts. Instead the course leaders encouraged us to allow the intimacy of life and experience to guide our teaching of science, so that our students discover for themselves the relationships that resonate as truth.

Michael opened the week by reciting a poem he had written that made clear the choice was ours to make.

> If you choose life
> It will bring
> uncertainty.
>
> If you choose certainty
> What remains is only dead.
> Then there is no life!

It is our job to teach the students not to live only in this world, but rather to go beyond and live into their future. In Waldorf education we endeavor not to assign fixed identities to our students, but rather to see in each student who s/he is striving to become. The phenomena-based science we bring to the students in grades 6–8 exemplifies this intention. We could teach with fixed concepts and conclusions, just as in times gone by when the world was said to be flat, or we can open the door for the students to discover what they believe to be true for now. This is a challenging thought for people living in our instant-gratification and fact-hungry world. Michael brought to the discussion the idea that too much of the Intellectual Soul drives us to a point, as an arrow, and there forward movement stops. He suggested that a properly used Intellectual Soul will find times to step back, open up and broaden the perspective, in order then to move forward.

When we began the course in February, we discussed science as being the "space between," a place where conditions are not fixed and creativity exists. Naming something, though it feels safe and certain, also makes it dead. It cannot grow, change, or transform. Only living perceptions can do that. Michael continued to challenge our habits of thought: "It is not thoughts that need to be enlivened, it's the activity of thinking itself."

To the degree that we work with established facts, we find ourselves working in the past with what was, not with what is becoming. Phenomenological science strives to open the door for students to discover new ideas and concepts rather than live in a world so defined that it is dead and unchanging. As their teacher I am charged with assisting them to find relationships and posing open questions to inspire them to think more deeply.

Through this course I came to realize how often I use a term to name something rather than clearly describe my experience, my feeling, or my sensations. As I carried this thought with me into the closing of the school year, I caught myself labeling a child rather than describing what I had observed under particular conditions. With spring bursting forth and collegial or personal conflicts arising, I found myself pondering: If science is the expression of these conditions now, where are the relationships? If emotion is the expression of the current conditions and if love is seeing within another human being that quality that others have failed to recognize, can I shift the conditions enough to feel more love towards those with whom I find myself in conflict? Could I move beyond labeling the individual or

the situation and instead look to the moment and the conditions? In this shifting could we all experience something different?

As we closed our discussions at the end of the week the question arose: "How do we transition back to the life and relationships that have not been part of this journey with us?" We wondered aloud if we would be met with openness, if for some of us nothing would change and if we had changed, what must we do to carry this forward?

A truly powerful teacher training transforms not only the classroom but all aspects of the teacher's life. In some trainings this may occur on occasion by accident, or by intent. It is inspiring to be engaged in a training that holds the transformation of its participants as one of its primary objectives.

Kelly Larson *is a class teacher at City of Lakes Waldorf School. She has taught for the past twenty years, first in public middle schools, then in the Master of Teaching and Learning program at Saint Mary's University, and for the past seven years in a Waldorf classroom.*

The "Teaching Sensible Science"course, sponsored by the Research Institute for Waldorf Education, is carried by a quartet of faculty led by Michael D'Aleo, an engineer and high school science teacher, and includes Gary Banks, also an engineer, class teacher, and high school science teacher; Lylli Anthon, a long-time class teacher; and Barbara Richardson, eurythmist and coordinator of Foundation Studies at the Center for Anthroposophy. Hosted by Chicago Waldorf School and made possible through a grant secured by AWSNA from the Waldorf Educational Foundation, "Teaching Sensible Science" is structured to support the teacher working with the sciences of grades 6–8 to achieve a depth not only of understanding but, through that understanding, of personal growth. It meets for three one-week sessions over a period of nine months.

The Online Waldorf Library

by Marianne Alsop

Over the past few months OWL site visitors have requested help with a number of research questions. Recent inquiries have requested materials for faculty study, child study, teacher mentoring, many home schooling questions, meditations for teachers, spacial dynamics articles, foreign language teaching in the high school, and first grade readiness, among many others.

In the spring of 2012, the OWL web site will feature an upgraded data base retrieval system specific to online libraries. Two search capacities, one for books and the other for articles in journals, dissertations, and research articles, will allow site visitors to find what they are looking for much more efficiently. All articles will still be available in pdf format. There will also be two new areas on the website. All titles by Rudolf Steiner will be easily found in one section, and a new Home School Resource section will offer a grade-by-grade guide to OWL articles and books.

The number of eBooks continues to grow and these have become one of the most accessed areas of the OWL web site. Increasingly students in Waldorf teacher training courses are finding their reading materials in eBook format which saves them time and money. A number of eBooks will be added to the OWL over the next few months, and I encourage all site visitors to have a look at these titles. As always your comments and suggestions are welcomed.

Visit

www.waldorflibrary.org

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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, survey of Waldorf graduates, 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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Teaching Sensible Science Seminars
Sexual Education Grades 4–12
Survey of Waldorf Seniors
Waldorf High School Research Projects

Books and Papers

The following books and papers were printed by the Research Institute and are available from AWSNA Publications

- *Topics in Mathematics for the 11th Grade*
- *Tapping the Wellsprings of Health in Adolescence*
- *New Approaches to Teaching Grammar*
- *Developmental Signatures: Core Values and Practices in Waldorf Education for Children Ages 3–9*
- *Education, Teaching, and Practical Life* by Rudolf Steiner
- *Survey of Waldorf Graduates, Phase I*
- *Survey of Waldorf Graduates, Phase II*
- *Survey of Waldorf Graduates, Phase III*
- *Effects of High-Stakes Testing on Children*

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Chemistry
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English
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World History – Symptomatology
Physics

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