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From the Editor

Elan Leibner

Dear Readers:

This issue of the *Research Bulletin* brings a host of offerings on the philosophy, preparation, and practices of teachers in Waldorf education, as well as research into the pedagogy's spiritual and neurological dimensions. We have four original articles from North America and two pieces that originated in Europe.

Dennis Klocek offers an insightful investigation into the spiritual significance and pedagogical ramifications of current neurological research. Focusing primarily on the autistic spectrum, he shows how anthroposophy can shed light on cutting-edge brain imagery and findings on neuro-plasticity. His article, taken from a lecture delivered at a professional conference, points the way towards a holistic approach to working with autistic-spectrum students.

Frederick Amrine's series on the philosophical roots of Waldorf education continues with a challenging and important chapter on the work of J.G. Fichte. Amrine contrasts Fichte's approach to Kant's dualism with the one used by Goethe (see the previous issue of the *Research Bulletin*, Vol. XVII No. 2), and anyone familiar with Rudolf Steiner's *Intuitive Thinking as a Spiritual Path* will notice Fichte's influence on that book. If Goethe focused on the observational pole, Fichte delved deeply into the intuitive element and was the first to "think about thinking" in Steiner's sense. Amrine again manages the rare feat of writing about complex philosophical topics with fluidity and grace.

Michaela Glöckler's lecture at the 2012 International Waldorf Early Childhood Conference in Dornach, Switzerland, is reprinted here from the WECAN publication on that conference. Glöckler describes the three great steps of incarnation: taking hold of the body, taking hold of karma, and finding a way to express the "I AM." With her customary insightfulness and clarity, she sheds light on the challenges and opportunities that confront newly incarnated children and those who wish to work with them.

Gert Biesta is a new contributor to the *Research Bulletin*. A prolific writer and influential thinker in European educational circles, he argues for a shift in the focus of teacher education, away from a narrow focus on skills and competences and towards an emphasis on educational wisdom. Beside the worthy ideas themselves, North American Waldorf educators will do well to note the consequences of governmental interference in education, which often begins with good intentions but grows into a stranglehold that deadens education from the bottom up.

Biesta's insights are especially relevant in conjunction with Liz Beaven's article, the first of two, that describes her research into experiences of teachers who have moved between independent and charter schools. Hoping to bring actual data to an area that has tended to suffer from an abundance of passion but a dearth of factual information, Beaven interviewed ten teachers who have taught in both independent Waldorf schools and public charter schools. Regardless of one's opinion on the promise and perils of public and independent Waldorf education, hearing from those who have worked in both settings is surely an important reality check.

"An Outline of a Study Methodology" is the name of an article I wrote for a previous *Bulletin* (Vol. XVI No.1). In the article for this for this *Research Bulletin*—a follow-up that is actually

the linguistic and philosophical background to the original—I explain the thought process that lies at the foundation of the methodology. Since the study approach has been used in schools and conferences in the intervening years, we thought that including this background would help deepen the understanding of all who wish to study in that way.

Finally, a report from the Online Waldorf Library is here as always, and an index of past *Research Bulletin* issues is included for your convenience.

Happy reading!

From the Co-Director

Douglas Gerwin

In a lecture shortly after the outbreak of World War I, Rudolf Steiner cautioned his listeners against risks of turning one's back on the advances in technology. "It would be the worst possible mistake to say that we should resist what technology has brought into modern life," he said, "by cutting ourselves off from modern life. In a certain sense this would be spiritual cowardice."[1]

At the Research Institute this year, we have thrown ourselves fully into the world of technology with three projects that take advantage of this burgeoning medium. At the forefront of our efforts, thanks to the ongoing generosity of the Waldorf Curriculum Fund, have been several new series of freshly collected articles in the form of eBooks. A six-volume set, under the title *When Healing Becomes Learning*, brings together selected essays from the *Journal of Anthroposophical Medicine* that will be of particular interest to readers of this *Research Bulletin*. We are grateful to our colleagues at the *Journal* for their permission to draw from their rich archives.

Another series of eBooks, just begun, involves the translation of key books and articles on education into Spanish. Until this year, we have been concentrating on the translation of useful resources into English, primarily out of German. But with a widening international readership—especially of our Online Waldorf Library (OWL)—we have felt the need to make some of our resources available to a fast-growing audience of Spanish speakers and readers. The first in this new series, now posted on the OWL, is geared towards readers interested in Rudolf Steiner's indications on play. Originally entitled *On the Play of the Child*, this text is now available as *Sobre el juego del niño*. We thank our colleagues at the Waldorf Early Childhood Association of North America (WECAN) for making this and further titles available for translation.

Finally, with the blessing of the Pedagogical Section Council of North America, we have posted in eBook form five of their celebrated texts, including two by Johannes Tautz (nicknamed the "historian" of the Waldorf movement), one by Jørgen Smit (based on his lectures to North American Waldorf teachers while he was head of the Pedagogical Section in Dornach), and a collection of essays under the title *And Who Shall Teach the Teachers: The Christ Impulse in Waldorf Education*. In addition, we have converted into eBook format Henry Barnes' little gem *The Third Space*, a study of the first Goetheanum building as a metaphor for the underlying form of Waldorf education.

Beyond these new ventures, the Research Institute continues to make available in eBook form a lengthening list of titles, most of them brought out by AWSNA Publications. All of these materials—numbering over 130 eBooks by now—are freely available on the Research Institute's OWL website. Marianne Alsop, who serves as OWL librarian, reports separately on this work in this issue of the *Research Bulletin*.

Behind the scenes, but still in the world of technology, we are working with our new webmaster to redesign and enhance the Institute's own website. In the meantime, the Research Institute is for the first time sponsoring two overlapping rounds of its popular course "Teaching Sensible Science" led by Michael D'Aleo, a Waldorf high school science teacher well known to regular readers of the *Bulletin*. Starting in February, a new cycle of this course was launched at the Waldorf School of Baltimore; and a second cycle is scheduled to begin later during the spring at

the Seattle Waldorf School. Those interested in signing up for these courses—which meet for three weeks over the course of a year—can contact the Research Institute for details or refer to the last issue of the *Research Bulletin,* Vol. XVII No. 2 .

On other fronts, the Research Institute is supporting several research projects already announced in previous issues of the *Research Bulletin* and is preparing some new ones in collaboration with our colleagues in Europe. Stay tuned for updates!

To those who responded to our annual giving campaign, we extend heartfelt thanks for your generosity and words of support and condolences, following the death of David Mitchell, co-director of the Research Institute, whose passing last June was reported in the last issue of the *Research Bulletin.* Those wishing to contribute to the appeal are welcome to forward donations to our office in Wilton, New Hampshire.

Endnote

1. Rudolf Steiner, "Technology and Art", Dornach, 28 December 1914, in GA 275 *Art as Seen in the Light of Mystery Wisdom* (London: Rudolf Steiner Press, 1984), p. 16.

Neurology and Education

Dennis Klocek

Welcome.[1] I'd like to begin by reading a quote from an article in the *New York Review of Books* by the renowned Oliver Sacks, the neurologist. It is wonderful little article called "Neurology and the Soul."[2] He begins by quoting from one of his mentors, Wilder Penfield, who was a neurosurgeon:

> Wilder Penfield, a neurosurgeon, who devoted his entire career to studying seizures, arrived at the end of his life at a view that memory, imagery, sensation, and experience are "engraved in the brain." The active faculties of will or judgment are not in the brain, are not represented physiologically, but are transcendent functions.
>
> For Penfield, there was a biological stream and a supra-biological stream that watches and directs the biological stream. In the patient, decision comes from the mind and engages the neurology. All brain action is automatic and computational, and yet humans are clearly not automatons. The mind in Penfield's view lacks memory or even a need for memory. It can open the memory files of the brain in a flash, but in reality it needs none of the physicality of the brain. However, the mind does need energy, and that is normally supplied by contact with a living brain.
>
> And yet the mind may have a way of surviving even bodily death. Penfield believes that it may do this by establishing an energy flow or energy relationship to the living or with the mind of God in the cosmos. Penfield concludes that the time may come when scientists will be able to make a valid approach to the study of nature of a spirit other than the spirit of a human being.

I use this quote as a beginning of my lecture because here is someone in the public eye, in the public domain, saying exactly the same thing that we find in Spiritual Science. This points to the idea that maybe it's time for anthroposophy to bring to the sciences a cosmology that some scientists seem to be seeking, a cosmology that is currently lacking. The dexterity of scientific experimenters and the rigor of the experiments has yielded a treasure trove of data and information that are in urgent need for people with an education in the spiritual language to address. In speaking with my colleagues at the conference here, they find a need for cosmological insight in their work with their clients and in the medical profession in general. There is a need in the world to bring cosmology of the creation into the scientific dialogue to provide something that is felt to be missing. To be sure, cosmology is not for everyone, but there are colleagues out there who would very much love to hear the spiritual implications of research science. So, this work of finding a cosmic reality in data-driven science is what I feel I can bring to you as a question and, I could even say, as a challenge: to find in the work that you do in science or in education a way to somehow bring insights from the language of the spirit.

It's time for anthroposophy to bring to the sciences insights from the language of the spirit.

I'd like to begin by giving you a very curious picture. In the work of Thomas Aquinas, there is a concept called *adequatio*. *Adequatio* means

the equation of the thing and the mind. In the work of Thomas Aquinas, it was seen to be a kind of spiritual imperative that humans learn how to equate the things in the world that are produced by the action of spiritual hierarchies with the activity of their own minds. If you want to trace that back from Aquinas, the idea of equation of the spiritual reality and the mind of a human goes back into alchemical thinking from the 7th and 8th centuries. Equating of the thing and the mind in the ancient world was given in the formula: *as above so below, as below so above,* by the alchemical adept Hermes Tresmegistus.

But in Thomas Aquinas there was actually a call for a practice, a spiritual practice, wherein the practitioner would learn to assess the degree of equation between the mind and the inspiring being. That's what he called *adequatio*. He was addressing, fundamentally, the varieties of religious experience, as for instance William James: how do I know that it's God talking to me and not me telling myself that God thinks I'm really important?

How do I work that out? Because maybe God's telling me I'm really important, but not for the reasons I think. So the question of *adequatio*, of equating the mind and the being that's inspiring was taken up by a teacher at the university in Vienna in the late 1800s. His name was Franz Brentano.

Franz Brentano was what today we would call a "Don." He was a real *il professore*. He had many students and all the trappings of academia around him, but he was a bit of a rebel. He was also a bit of a recluse, and he brought this strange, almost metaphysical idea from Thomas Aquinas—*adequatio*—into his teachings of the theory of knowledge: how do we know that we know? That's called *epistemology*. And, in line with Thomas Aquinas, what Brentano felt was that there was a force in the soul called *intentionality* or *intention*. And intention was a vectoring force in the soul that allowed the person who had intention to understand that it was his mind that was connecting to the inspiring thing, whether it was an inspiring being or a tree stump. Intention was the key. Brentano was describing a very high level of will that had lost its intentional or motive force of like and dislike as the force behind desire. In pure intent desire simply becomes the urge to know, the urge to know that which is inspiring. It could manifest in the mind as a dialogue with a spiritual being or insight into the spirituality of the archtype of the tree that produced the stump, as the will activity of a spiritual being.

Now, the dilemma for Brentano was that the sense world and all of the environment of learning around him in the late 1800s in the university system in Vienna was going hell-bent-for-leather towards the physical realm, and the whole realm of epistemology and knowledge was veering in the direction of describing the minutia of how the eye operates and things like that. The intent was to pin down the elements of perception and cognition. The focus of the developing sense of psychology was moving towards detailed descriptions of the physical aspects of the perceptive apparatus. Into this environment Brentano brought the idea from Thomas Aquinas that in the soul intent exists as a kind of a force that allows a person to connect to an idea.

At the end of his life, Brentano eventually made a complete reversal on his original experience of the transcendent aspect of Aquinas and went into the nuts and bolts of perception. He evolved towards the position that there is nothing *but* the sense world. Think about it: if you're on the line—publish or perish—and you're making your money teaching at the university, and everybody is worried about the minutia of everything, if that's the general focus of scientific consciousness, and you're talking about mystical union with the spirit—that's a little strange.

But in his teaching life at the university Brentano was very popular. And he had a very illustrious student, Edmund Husserl.

Husserl is the granddaddy of phenomenology as an academic and philosophical concern. Husserl inherited Brentano's penchant for this searching for how the mind interacts with that which is coming towards it. Husserl devised the two philosophical categories of what he called *époque*, which means bracketing. This concept can be traced back to Goethe. To "bracket" my thinking I need to get rid of any previous implications or thought patterns, or imagery, or feelings, or any kind of representation, if I really want to honor the phenomenon. We owe that work to Edmund Husserl, who took the impulse of what Goethe called "higher beholding" and formed it into a very, very complex and profound philosophy. It is a philosophy that is at the root of psychology. In his later work Husserl reacted against Brentano's insistence on the primacy of the sense object and went completely in the other direction. Where Brentano monitored the activity of his mind while engaged with a sense object, Husserl focused on the activity of the mind while engaging archetypal consciousness. He went completely away from the sense world. This is an interesting polarity.

Now there was another very illustrious student of Franz Brentano at the university in Vienna and that was Sigmund Freud. Freud inherited from Brentano the concept of intent, and this became his categories of id, ego, super ego, libido—all characterizations of what makes a mind work while it is engaging phenomena that are coming to it. You can hear Brentano speaking there. Again, intent was the springboard for a prolific researcher in the phenomenology of mind.

There was yet one other very illustrious student of Franz Brentano: Rudolf Steiner. Yes, Steiner was a student of Franz Brentano, and if you want to read about his work with Brentano, read *Riddles of the Soul*. Brentano taught Rudolf Steiner about percept, concept, duality, epistemology, and what today would be called theory of mind.

Theory of mind is the common language today for people who are researching the autistic spectrum. The issue in the theory of mind is called "mentalizing." Mentalizing is: one, I know I have a mind (that's the first symptom of mentalizing), and two, because I know I have a mind, I can recognize mind in others. This is cutting edge stuff for the study of what's known as the autistic spectrum. Where is the mind? What is the mind? That's why I read the Oliver Sacks quote in the beginning. If any of you has seen *Awakenings* with Robin Williams, this film tells the true story of British neurologist Oliver Sacks, who, in 1969, discovered beneficial effects of the then-new drug L-Dopa. He administered it to catatonic patients who had survived the 1917–1928 epidemic of encephalitis lethargica. It was believed at that time that people who were in catatonia had no mind. Why? Because the theory of mind says you have to recognize mind, and if you're catatonic, there's no way to find out whether you recognize mind or not, because you show no symptoms of mind, which is also an aspect of very low-functioning autism. Is there a mind there in this person?

In *Awakenings*, the Dr. Sacks character gives dopamine injections to these catatonic patients, and they begin to awaken and describe the fact that they had still been in their mind even though they were catatonic. But when they come back, their mind is in the place that it was when they got their encephalitis. And then he finds that it is a temporary measure; he has to keep giving them more and more dopamine in order for them to stay awake, and he reaches a certain toxic level of dopamine where he becomes kind of like Faust: if I give them more I kill them, but I also heal them.

In the movie there was a kind of conclusion —I don't want to give the whole thing away, but there was a segment dealing with a woman who, when she starts to come back from this catatonic state, she's in a wheelchair, and every day at a certain time, she stands up and walks towards what the hospital staff thinks

is the water fountain. She's been catatonic for years. But as she is awakening every day, she walks towards the water fountain, and each time she stops in her walking at a certain place. Eventually the whole staff watched this happen and wondered what was going on. And then Sacks made a discovery: every day they parked her wheelchair in such a way that when she stood up, she would walk along the black tiles that were arranged in a line to get halfway across the room. And at halfway across the room, the black and white tiles stopped and a monochrome-colored floor began. Dr. Sacks noticed that she stopped where the line of tiles stopped. Then overnight the staff completed the pattern on the floor of the black and white tiles and formed a line all the way to the water cooler. And the next morning she got up and walked, and when she reached the spot where the separation had been, she stopped. And then she continued and walked towards the water cooler, and walked past the cooler, and looked out of the window.

What Sacks concluded from that was that these people receive their will from the outside. They receive their will from what comes *to* them. They're present in their mind, but they have no will of their own. They can't mentalize. But they do perceive and they are in their mind, but have lost this capacity for initiating will. This is an amazing picture.

So, in order to try to understand these issues, I've spent the past two years reading books about autism and Asperger's syndrome, trying to form pictures of what's happening. My contact with Aonghus Gordon in the UK over the years has helped me in this work. I've seen the work that they do in the UK engaging students in the crafts and the healing that happens in these processes. It is impressive work, but I keep searching for a bigger picture. How can we understand these learning difficulties from an esoteric perspective? I have this question because I keep having the feeling that something in anthroposophy is very vital to understanding this. So please look at your handout.[2]

I'd like to use this diagram to give you a picture of the insights that are possible today due to the development of functional magnetic resonance imaging (fMRI). This is really quite remarkable. With this technology, we can watch how this super-sensible being that lives around the brain enters into the brain in very specific circumstances. And we can do that by watching the metabolic oxygen-assimilating blood flow in the various parts of the brain while a person is engaged in some sort of cognitive task. The therapist will give a task and then watch where the blood flows in the brain: the blood, the carrier of enthusiasm and warmth of the ego, moves into the dead instrument of the brain and animates it. And we can film these movements. Quite remarkable! It used to be that if you wanted to study the brain, you had to chop a dog's cerebrum off and then watch it walk around. That's true! Or, you had to do autopsies or frontal lobotomies. But today we can actually watch the "eurythmy of the soul" —we can say—as it engages the architecture that has fallen out of its cosmic intent. That is the neuro-architecture of the brain. So the creative movements revealed in fMRI have resulted in a temple, a building that the spirits can inhabit sometimes and then pull away, then come in, and pull away. And the structures that have been created are imaginations in the minds of the hierarchies that created them. They're pictures. And, what I'd like to do is use "mythos" as a way to describe these functions for you, so that you can experience them at a whole other level.

The [brain] structures that have been created are imaginations in the minds of the hierarchies that created them.

The first one I'd like to share with you is a process called encephalization. It means "to get a head" or "to create a head." Encephalization

is the process of how neurology develops through the phyla, starting with the ganglia of a worm, going up and up and up, until we get to the neurology of a human being where a head with a brain has been created. So on your chart there is a process of encephalization. Look down here at the brain stem. That brain stem is the result of a momentous event that happens about the fourth week in the embryo. And if you'd like to see a depiction of that, that's in figure 1.[3]

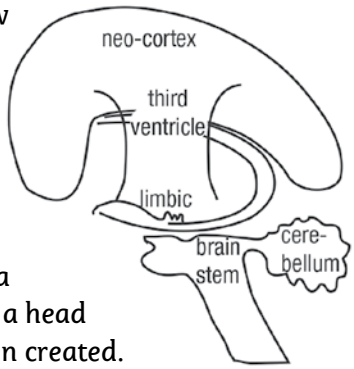

Figure 1

And that's the beginning of encephalization. The embryo starts out as a three-layered disk. At about the second week, there's a groove that is formed in the disk. And this groove is actually like a hole that gets punched down into the middle layer, the mesoderm, and travels from the tail end up to the head end. And this groove that gets punched in eventually becomes what's known as the notochord.

Now, I did some surfing around on that word "groove," and in Greek, the word is *psorat*. That means "a groove." So, there is an engraving into creation in the second week. And that kind of irritation gets engraved in there. Out of that irritation comes, then, in the fourth week, a kind of inflammatory reaction. As that grooving of that notochord goes into that little disk, just after that happens, the heart actually starts out outside the embryonic disk as a hollow. And as soon as that groove happens, the heart begins to move into that place; it's called a stomodeum: the mouth or "hole" of God. The heart that starts outside of the head goes in through the mouth of God and then travels down through the body and rotates.

But simultaneous to the heart going in and rotating down is a movement in the neurology (a kind of inflammation of the neurology) that expands and goes up and rotates. At that time the brain stem explodes upward and starts curling in on itself as the heart moves in and down and starts curling in on itself. Those two movements are simultaneous in the fourth week. The heart comes in and meets resistance in the tissues of the body, then curls in on itself in a kind of folding gesture similar to the meander of a river meeting the resistance of the banks.

One gesture is a force coming in and then suddenly there is a curling in on itself, creating an inner kind of space. We could call the forming of an inner space like this the process of astralization. In the embryo one force coming from the outside and forming a hollow within is the essential gesture of organ formation. In the form of the heart in the fourth week, this gesture of coming back on itself as a meandering stream is mirrored by a hollowing that takes place on the surface of the brain. As the cortex grows, the surface of the limbic brain beneath it maintains itself in position on the lateral portions of the embryonic brain. This gesture of holding onto its space eventually creates a groove in the sides of the brain as the cortex and related organs expand beyond the groove on both sides. Eventually the groove is submerged in brain tissue and is folded in on itself as the cortex expands around it. At term this submerged spiral groove is called the hippocampus, the site of our long-term memory. It is significant that both the hippocampus and the heart are astralized at the same time. That's a very significant coincidence that links the heart to memory and makes it possible for human beings to eventually experience their True Self or "I" Being.

We could call the forming of an inner space like this the process of astralization. That (process) links the heart to memory and makes it possible for human beings to eventually experience their True Self or "I" Being.

When the heart comes in and starts pushing down, there is an organ already there in the back of the brain area in the place where the cerebellum will eventually arise. That organ is the pronephros or primal kidney. The kidneys get pushed down, out of paradise to be recovered late and slow. Adam and Eve get pushed out of the higher realms and fall to the bottom of the pelvis. They make a short upward comeback to settle just above the diaphragm but at the level of the digestive organs. And forever and a day they are wishing to be back in Paradise again. So, that first gesture of the grooving and then the hollowing of the organs at the top of the brain stem creates neurological organs that then receive sensory impulses from the metabolic regions.

The brain itself begins out of that upward surge and inward roll. In it, there is a whole series of lobes that are formed out of that hollowing or rolling-inward gesture. One early lobe that forms out of that hollowing gesture is a little model of what the big brain is going to be, that's the cerebellum. So on your diagram it's the one on the right that says cerebellum; it's in the sensory motor pole.

These organs are in the back of your head. The function of the cerebellum and its core, the vermis, is known as sensory-motor. Sensory-motor impulses arise when we are engaged in finding our limbs in space. These impulses are automatic when we're engaged in movements related to sense experiences. The sensory-motor areas in the brain allow the human soul to rely on the genius of the body as we're moving a limb. The automatic functioning of these lobes allows us to know where a limb is in space without having to bring that position into focus. If you look at a picture of the brain, the sensory motor cerebellum is like a little brain, but it's wedged under the back of the posterior cortex. In that position the cerebellum receives direct impulses from the body via the brain stem. These are impulses from the metabolic areas that stream upwards towards the head. Now there is a curious picture here in this encephalization, because the formation of the cerebellum and the hippocampus (see figure 2) is just the first kind of astralization or in-rolling wave that comes off the brain stem as the embryo matures. The upward moving wave of in-rolling neural tissues creates the limbic structures linked to feelings, and finally the neo-cortex linked to higher cognitive functions. The development of these waves of encephalization is a bottom-to-top process that I like to call *Jacob's ladder.*

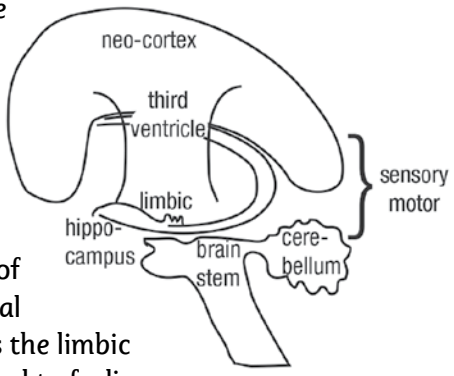

Figure 2

If you look on your diagram here, you have the cerebellum in the back, and then we go up to the middle where there is the hippocampus of the limbic structure. What happens is that the cerebellum forms off of the fourth ventricle and at the same time the limbic structure forms in the floor of the third ventricle.

The limbic structure is a whole ensemble of organs that are brought to a very fine resolution in mammals. And it's in the limbic structure of the brain where the soul life activates feelings, emotions, memory, and learning. So, in the Jacob's ladder imagination we start out with the brain stem down below, then we go up to the cerebellum. Here the organism can have its senses and its motor responses connected to each other; then we move up to the limbic structure where there are feelings integrated into the sensory-motor responses. From the limbic structures we then move up into the neo-cortex, or new brain. The structure of the new brain is not included in figure 3 except for the frontal lobe of the cortex, known as the prefrontal cortex (see the left side of the diagram). This area is an important link to the limbic structures.

Actually the human brain is like a donut. The center of the brain is hollow. And that

hollow is known as a ventricle. In Rudolf Steiner's work with physiology, the ventricles are very important because they don't have anything in them in terms of tissue. He felt that the ventricles were the actual places where human beings form inner images. This is interesting because in the ancient world the third ventricle was known as the "womb of the immaculate conception." We'll take a look at that in a moment.

The ventricles are formed as the cortex goes up and mushrooms in a form similar to the mushrooming or in-rolling of the other lobes. There's a continual unfolding of larger and larger layers that just keep mushrooming up out of the brainstem and in-rolling to form a donut shape. As I mentioned earlier, as the heart starts to move down and to send out blood vessels, the same type of blossoming and flowering is happening up above in the neurology. So finally we have the ventricles arising as the cortex forms, and the last part of the cortex that forms is called prefrontal cortex. That is the area right behind your forehead.

So in the ladder we have brain stem, cerebellum, limbic structure, ventricles as the cortex is formed, and then the last part of the cortex is the prefrontal cortex. Rudolf Steiner gives an interesting picture that the prefrontal cortex is actually an evolution of the olfactory bulb, and if you check that out in physiology, you'll see that it's true. The prefrontal cortex is a metamorphosis in a human of the olfactory bulb, your smell organ in the brain. He says that morality is a fragrance. That opens the door to things like aromatherapy.

A lot of the inner life of lower mammals is designated for smell: for identification and all kinds of stimulus response patterns, and for finding out who is the top dog and, you know, the social order is based on smells. Even in humans the role of smell is very powerful. So here in your diagram, this little bulb on the left under the prefrontal cortex—that's the olfactory bulb in a human brain. In a possum brain two thirds of the cortex is devoted to processing smells and the prefrontal cortex is not present. In humans the prefrontal cortex is this large outgrowth that has come out of the olfactory sense. The actual olfaction in a human has been reduced, but in its place the expanded prefrontal cortex is active when humans are engaged in making moral decisions. To make a moral decision a human must exert what are known as executive forces. A human making an executive decision activates the prefrontal cortex.

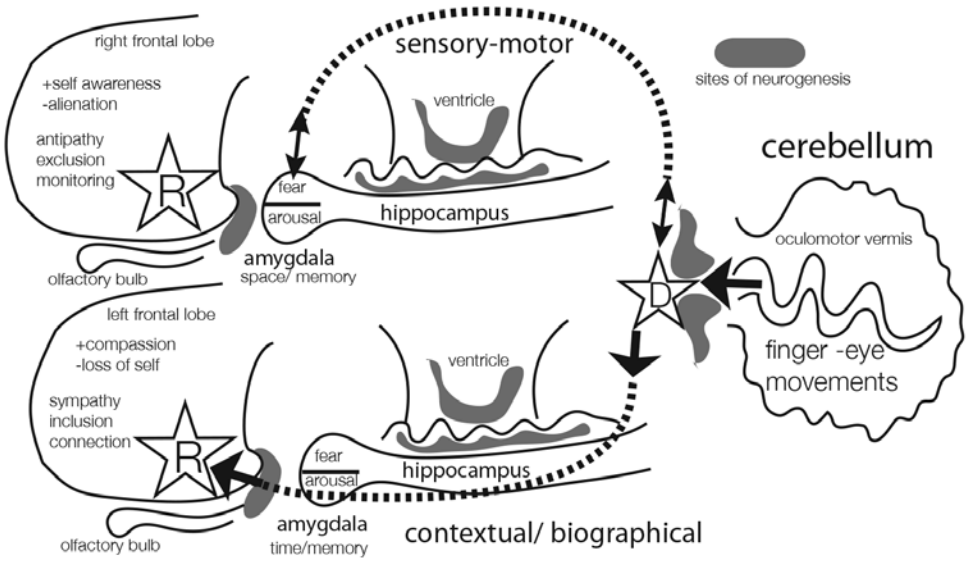

Figure 3

Executive decisions that lead to moral actions require reasoning, and that's the issue. Reasoning is a unique blend of memory and creativity and has to do with mentalizing. Mentalizing means that I ask myself if I have a mind, that is: can I recognize mind? First I need to remember that I have a mind and then I spend the rest of my time looking for it. That's the search for meaning: looking for mind. Because that's who I am as a human being. We could say that "looking for my mind" is the job description of the archetypal human. If I recognize mind in me, I can recognize mind in you. And this is just what is challenged in the minds of people who are on the autistic spectrum. To be clear, research has shown that people who are on the autistic spectrum are in contact with their own mind. The challenge for them is to recognize the activity of mind in the words, gestures, and thoughts of others. In psychology studying the ability to recognize these qualities in another person is known as theory of mind.

> Looking for my mind is the job description of the archetypal human.

So this is encephalization, what I am calling Jacob's ladder. We start down here in the basement, and we come up, and we build and we build, and finally, we end with this organ that can tell "right" from "wrong," good from bad. Then we get into this: is it a thought that allows me to be moral or is it a feeling? Or is it a will impulse?

Today there is an epidemic of people who are challenged in theory of mind. People who are challenged in this way are said to be on the autistic spectrum. And I've heard that one in a hundred persons is challenged in this way, and recently I've heard one in thirty are on the spectrum in some countries. One in a hundred is a clinical, low-functioning autistic person who needs care and support in order to stay alive. One in thirty is somewhere on the spectrum from low functioning to high functioning people who are challenged with theory of mind. And the question is: what is the spectrum? Is it PTSD or ADD or ADHD or any other acronym? When we go into this little diagram, I hope you will see why it's a mix-and-match, neurologically speaking. Any scrambled linkages in these delicate lobes lead to one or another set of symptoms. This is why the healers who work with these people have constructed a spectrum of dysfunctions. What they're finding today is that brain function is not a single activity. It's the action of neurological ensembles that is critical. It's chamber music. And I have to understand which instruments are playing to be able to do that, and that's where fMRI methodology comes in because with it we can pinpoint a particular organ linkage that's not really working. When a person makes a particular decision, that requires him to activate a functional linkage, an emotional linkage, a reasoning linkage, an abstract linkage, a spatial orientation, a contextual orientation, a sensory deprivation thing, or a sensory motor pattern, et cetera, et cetera. Much research is devoted to pinpointing these specific linkages and the neurotransmitters that activate them. But if we look at these linkages as a whole, there are other pictures that emerge. And that's where I want to go.

So Jacob's ladder is the first neurological myth I want to present to you. The key to Jacob's ladder, if you remember the story from the Bible, is that the angels don't just go up, they also come down. And Jacob has his dream by putting his head on a stone. There's a picture here of what a therapeutic approach can be. In order to heal, I have to come back down the ladder out of the cortex and find out why I have a couple of rungs that are cut out. If I just keep going up, I get up to right hemisphere, left hemisphere, prefrontal cortex, and there's nothing left, because we've reached the end of our biological development for that organ. Why? Because we're now in the apocalypse. We're in it. So no new neurological

lobe will spring up in your head that can give you some other unrecognized capacity such as we find in the developmental stages of the brain. In order to develop new capacity we must use the organ that has reached perfection (the brain) in a different way.

There is a great secret in this process called neurogenesis. Ten years ago, twelve years ago, it was commonly believed that adults no longer made new neurons. They could mess around with synapses, but not neurons. But since science has been able to do this very delicate fMRI research, it has been discovered that there are three areas where new neurons develop in the adult brain.

Brain function is not one organ; it's the action of neurological ensembles that is critical. It's chamber music.

So, on your chart, we're going to do a little drama of how the immaculate conception works. In the center is the third ventricle. In the development of encephalization, the hollow of the third ventricle is the fountain-like area whence all the new neurons for further development come in the embryo. It's the fountain of who you can become. The neurons come out as amoebic forms and they migrate to other places. So, indeed, the third ventricle is a womb for neurons. The gray areas in the diagram show the sites in the brain where adult neurogenesis takes place.

In the lower part of the diagram there is a dashed arrow from the dopamine center (star D) through the hippocampus at the bottom of the third ventricle towards the olfactory bulb. Because the olfactory bulb, as we've just heard, is functionally linked to our prefrontal cortex in which is the dopamine-utilizing area of the reward center. The area around the olfactory bulb is one of the areas in the brain that even in adulthood retains the ability to make new neurons. And the reason is that in embryological time there is a huge migration of neurons from the third ventricle into that area. Why do we need new neurons? The sites of neurogenesis are functionally linked to the production of memory and learning. In the diagram there are two dashed arrows. One comes from the top of the amygdala that is linked to fearful memories. This can be seen in the upper part of the diagram. The arrow goes from there to the fear center in the amygdala and back to the dopamine center (star D) in the back of the brain. This circuit of dopamine is connected to short-term rewards for activities that allow me to soothe fear. That is why the arrows go from the fear center to the dopamine center and back again. This circuit is the basis for unconscious, habitual, and sometimes addictive behaviors.

The other dashed arrow goes from the hippocampus through the lower, arousal portion of the amygdala to the reward center in the executive portion of the prefrontal cortex. This circuit involves dopamine and reward, but the impulses have to pass through the hippocampus where short-term, unconscious reward strategies, based on fear, are transformed into long-term memories of my self as a person who has learned things about controlling fear instead of just looking for an instant reward. This circuit builds new memories that can replace the old memories based on fear and reward seeking. The new neurons are generated to change old memories. As an adult I can actually do things to create new neural passageways: exercises, activities, and art (all things that stimulate novelty) create new neuronal patterns so I can learn and re-plasticize my old patterns of behaviors. This is incredible. Incredibly hopeful!

So an unconscious pathway is based on short-term unconscious risk/reward memory patterns in the upper amygdala that are linked to sensory motor responses near the cerebellum that result in the production of dopamine. Together they constitute a habitual, non-contextual source of what is known as procedural memory. That is memory that

happens automatically on the basis of past stimulus/response patterns based on fear and reward reactions.

But in the embryo the largest group of neurons migrates to the bottom of the third ventricle to make the basis of what will later be the limbic structure or the sub-ventricular zone. And it's in that sub-ventricular zone here that we find the picture of the womb of the immaculate conception. In the embryo the sub-ventricular, hippocampal, lower amygdala areas are the sites of new neurons that allow us to learn and grow.

As an adult I can create new neuronal patterns and re-plasticize my old patterns of behaviors.

These areas of the brain are currently the focus of intense research since many of the most widespread neurological challenges for humans come out of these relationships.

To be clear, this diagram is really a strange juxtaposition of parts of the brain that exist side by side. I just put one over the other to be able to illustrate them clearly. They are symmetrical and located in the center of your brain. The upper part is the right side of your brain and the lower part is the left side of your brain. These organs are symmetrically split to right and left. You have a right amygdala, and a right hippocampus, and a right prefrontal cortex; and you have a left of all of those. But you have one cerebellum that kind of brings it all together in the back.

That area is the base of emotional life for a human; feelings are the focus of the limbic structure. The right side of the limbic structure has to do with orientation in space and unconscious inner imaging of the body. All the experiments show that spatial memory is more connected to the right side of the limbic area, while memory of events in time is more connected to the left side. The more unconscious memories of both space and time flow back from the amygdala to the back of the brain on the upper side of the limbic structure. These sensory motor impulses are active when a person is doing actions like running where he or she does not need to consciously give commands to parts of the body. In contrast to this sensory-motor pathway, the contextual pathway is through the hippocampus in the lower side of the limbic structures. This flow is from the back towards the front of the brain.

The hippocampus is the center for contextual memory, and in that area, the dentate-gyrus (wrinkled section above the hippocampus) is a continual fountain of new neurons for neurogenesis. Complex cellular reactions govern the shift of neuronal structures between the dentate gyrus and the hippocampus. The new neurons allow for memories to be changed. The flow of impulses from the hippocampus then moves to the lower portion of the amygdala and on into the prefrontal cortex which becomes active when a person is making decisions based on conscious or focused memories. This circuit changes the nature of the will in the human from the automatic reward-centered will of the sensory-motor circuits to the more benevolent, conscious will based on biographical experiences.

Rudolf Steiner says that the will of the physical body is geared to maximize pleasure. So the upper pathway, through the sensory-motor circuits, is focused on the dopamine center and is part of a feedback dopamine looping called the nigro-striatal linkage. This just means that the unconscious gets a dopamine reward when actions are repeated. In the lower circuit the hippocampus links to the lower portion of the amygdala that then activates the reward center that utilizes dopamine when good choices are made or feelings of compassion are generated in the soul. This circuit then links to the prefrontal cortex, a site of higher cognitive functioning. The result is that dopamine is administered in both circuits. The upper circuit fires when impulses are being played out below the level of consciousness. This leads to impulse control issues and repetitive habitual impulses when

the limbic connections for the lower circuits are not secure. The consciousness is dominated by impulsive behaviors. Passage through the hippocampus allows impulses in the lower contextual circuit to utilize conscious or biographical memories to control impulses.

In the literature the learning strategy for the upper circuit is called "risk/reward." If I do this, will I get the reward? How much am I going to get back from this? Risk/reward is the primary learning mode of the child up to eighteen months of age. The irony is that this very effective learning mode is based on fear impulses that form the developing neurology around survival traits. In the diagram you can see that the upper portion of the amygdala is designated as a fear-driven impulse. Early sensory input in the infant lacks contextual memories and is primarily a fear-based learning that is just organized around getting rewards. Later learning is capable of modifying early fear-based learning of sense-motor experiences. The adult must bring the fears to awareness and place them into context with biographical or declarative memory experiences. However, for many reasons it is possible that the linkages that allow for these modifications are not present in the life of the infant and young child. This then leads to learning difficulties. Researchers have found that, in the autistic child, the amygdalas have a huge development in the first two years and then stop. The child is very good at fear-based learning but is challenged with contextual or biographical learning modalities. In autism, as the rest of the neurology grows around this impacted hippocampus / amygdala linkage, the amygdala gets compromised. Meaning that when that soul comes into that brain to use that amygdala to say, "Is this okay, is this not okay?" the only language available is the more literal sensory driven risk/reward language of the upper circuit. The more subtle, contextual memory patterns of the lower circuit are challenged in this soul, making it difficult for the lower portions of the amygdala to get rewards that lead to cognition based on social exchanges (biography). When this happens, the person has difficulty reading subtle body-language cues from others. Subtle facial gestures that inform the listener about inner states of others are overwhelmed by the literal immediacy of sensory inputs. As a result the inferences or metaphorical aspects of communication are out of reach. This then is the challenge of theory of mind. The person is in touch with the activity of his/her own mind, but the sensory universe that he inhabits with his own form of communication is challenged by the nuanced inner life of another human.

So, on the right side, that experience in the amygdala is a kind of "fear of space." And this includes: alienation, not getting what I want, unease in the body due to too much sensory stimulation. This can lead to the feeling that "maybe I should just shut down here, because it's too much stimulus to the spatial feelings of my body." That's the right side.

The fear impulse on the left side is not space, but time or context. People challenged with time issues can obsess over time commitments, such as being responsible for planning to pay bills, or being surprised by unexpected events that disrupt the schedule, or issues around leave-taking and reentering relationships, or even obsessive daily rituals. When the hippocampus links to the amygdala, the lower portion of that organ fires off and the consciousness of the person can experience a tempering of fear by becoming aware of thresholds of arousal. The lower circuit puts the brakes on the obsessive or compulsive impulse control issues in the soul. Conscious memories make it possible to monitor the onset of fear states and modify them into states of heightened awareness. That kind of influence then links to the dopamine-utilizing function of the reward center in the prefrontal cortex. The result is impulse control that is directed by the conscious soul life of the person. This is the source of moral impulses of compassion and self-awareness.

Harry T. Reis, psychologist at the University of Rochester, speaks about three vital functions for harmonious human relationships: the need for autonomy, the need for connectedness, and the need for feeling competent.[4] So in the right prefrontal cortex, I express my autonomy by monitoring. This is very good if I have problems with impulse. I need to have that right cortex go, "I don't think you should do this." It allows me to hold back on an impulse that is based on fear of space or body integrity in my right amygdala. If my amygdala says, "Attack this or run away," I need to have a prefrontal cortex monitor this so that I can say, "What have I learned about this in the past?"

In reality this activity in the front goes into the back also. And in the center of the cerebellum is an organ known as the vermis. *Vermis* means "worm" and the vermis is that worm-like part of the cerebellum on the right. The vermis is the white matter inside the grey matter of the cerebellum, and the term that's sometimes used is the ocular-motor vermis. Ocular-motor refers to the the muscles that move the eyes. So in the center of your cerebellum you have a very deep nucleus that is connected to the movements that your eyes make when you're going through the world. We could call it "eye eurythmy." As your eyes move in the act of looking at forms in the world, the forms that you perceive create maps in space in your neurology. That's the function of the right side of the brain, to create spatial maps so you can say, "This person is too close to me; that person is at the right distance from me." That's a sense-motor memory. Spatial mapping and fear about space activate the right side of the brain. When that impulse gets sent to the cerebellum, the neurons in the vermis are active and my pupils expand and contract and my eyes start tracking the changes in the forms and shapes of the things around me in space. The vermis is active when I'm monitoring the space. This comes into play as you are driving and watching whether or not you'll be able to pass the slow RV on the mountain road before the lumber truck coming at you from the opposite direction becomes too close. Basically you're triangulating that space as it's changing, and that's your right side doing that.

In the same situation the left side is also active. I have a left prefrontal cortex, a left amygdala, and a left hippocampus. On the left the fear in the amygdala is not triggered by space but by relationships of time. Time in the soul manifests as the experience of context. Shape recognition gives humans hints as to how events are unfolding. This is a subtle realm, but it has to do with the shapes that make up the faces of other people as well as the cues given by a series of eye movements accompanying speech. These seemingly unrelated tasks can be gathered together under the rubric *pattern recognition*. Patterns display figure/ground relationships to humans. Distinguishing a figure against a ground is a fundamental pattern- or context-recognition faculty. The left amygdala is the place where people who have issues with pattern recognition or contextual recognition often have neurological complications. This can result in such complaints as schizophrenia or high functioning Asperger's syndrome.

Shape recognition in the soul creates context. So, if I take this paper and I rotate it in front of you, you're seeing a shape that is changing, but in time you can see that it is the same paper that is turning. Context. The context is: "He's turning the paper" instead of "That's a different paper than the one you had before." If it were otherwise, welcome to the world of neurological challenges: "That's a different paper than the one before."

There's a thing called the Dick and Jane test. Dick and Jane are sitting at a table, and there's a box on the table. And in the box Dick puts a donut. And then the phone rings, and Dick gets up and goes out to answer the phone. Jane opens the box, eats the donut, and puts a pen in there and closes the box. Dick comes back. The question is: what does Dick think is in the box? If you're autistic you say "a pen."

Because that's literally the last thing that happened. That's called not having the context to form a theory of mind about what Dick might be thinking.

We're talking about a deep soul dilemma. When I can only experience the fear gesture in the left amygdala, dorsal striato-nigral pathway, I can't bring biographical or contextual memories forward to put together events in time. Everything is a snapshot. All my inner pictures are like snapshots, and I have to struggle to make a movie out of them. And that happens in this area of the hippocampus where I have to take the short-term snapshot memory and collate it into long-term contextual memories; it's difficult for me to do that when I have a problem in the left side.

An activity like knitting in the Waldorf school sets the stage for eventual connections to a moral imagination.

When I can exert impulse control on the left, I can sense that I am being aroused. So on the left-hand side, this contextual side, I read situations where I begin to sense stimuli that will arouse me, and that quality of arousal can actually start to flow into this dopamine-utilizing area where I begin to be able to monitor habituated arousal. Then I'm in the realm of trying to deal with an addiction. It's an inability in the emotional life to make a distinction between a short-term and a long-term memory that essentially creates both the challenge and the method of healing for learning difficulties. Working through the lower circuit I can consciously get access to the prefrontal cortex. In that area I can find the great gifts of compassion and the ability to monitor my own consciousness.

The people who work with the idea of neurogenesis as a healing modality understand that the mapping of space, the creating of context, the overcoming of fear, the ability to limit arousal symptoms, control them, and integrate them into creative activity all require the integration of ensembles of neurological organs, rather than a drug that targets a specific organ. You can take a drug that targets a specific organ, that allows that organ to kick in with the secretion it needs, the neurotransmitter it needs, but you're only just putting a band-aid on that link. What research is understanding now is that it's possible to stimulate new neurological structures to actually rebuild the lobes that are either lesioned or compromised in some way. This happens when I have to do an activity where the finer motor controls of my eye and hand have to engage an idea that I am trying to work out, and that includes, then, input from my feelings. I need to have the fine motor control connected especially to my sensory input. I have to get the sensory motor inputs of the upper unconscious pathway to link consciously through subtle eye/hand relationships to the vermis. So, an activity like knitting in the Waldorf school sets the stage for eventual connections to a moral imagination. That then has to be worked through by my feelings. We could put that requirement in a nutshell and say "aesthetic experience." So, I'm bringing very fine motor control linked to my feelings when I'm working with a paintbrush or when I manipulate a chisel so that I can make that curve in the wood just so. I'm exercising all of these areas to have a flow; go back and forth and stimulate neurogenesis in all of them.

So artistic or aesthetic experiences engage not only the finer motor controls of the cerebellum. They engage the ocular-motor and auditory centers in the back, but also my feeling life based on biographical or contextual memories in the hippocampus. This is now in the realm of skill development or, in the professional language today, praxis. (Praxis means I do something that is skilled.) So here I have praxis when I bring sensory motor impulses linked to feelings that I then control through evaluative functions of the prefrontal

cortex. These impulses are generated when I evaluate: is this good? is this not good? But then I have to include my feelings about this, about the way the form goes, and how does this color fit that, is this the right color for that space, is this the right word for that poem? This creates what is known in psychology as a lateral integration.

As an exercise we can create a collage, for which we spend three days ripping pages out of *National Geographic* and putting them in an envelope. And then we take a piece of cardboard about the shape of a face, and each one has to take scissors and cut out pictures of dolphins and bears and volcanoes and other things and make a face out of those pictures. And then we have a dialogue with that face: "What are you telling me?" We do this as a symbolic activity in which my feelings begin to enter into the image of a face that is made of symbols of other things in the world. This is a kind of visual alchemy. Yesterday, someone told me that this kind of activity is an exercise that's given to autistic children to help them come out. This symbolic activity stimulates neurogenesis.

So, neurogenesis is this great force that humans have that allows them to actually restructure their own neurology. And it's better than a drug. It's better than surgery. It's actually a resurrection of the neurology, a reforming of the pictures that have been there. And my question now, that I put to you, is: what is the cosmic soul significance that one in a hundred children is coming back with this kind of neurological structure? What does that mean for society that their souls don't have access to the full aspect of their architecture? What does that mean, and what is it saying about computer use? What is it saying about menu consciousness, where I can only use my executive function if somebody has already figured out the menu that I need to choose from? Which is where we're going.

There is an article in *Wired* magazine[5] in which Steve Silberman speaks about the epidemic of autism in Silicon Valley. People are wondering: what's going on? The largest concentration of autistic people in the general population is in Silicon Valley and in Redmond, WA, home of Microsoft. Well, these clusters occur in centers where people can spend their lives in cubicles, doing very complex thought patterns without having to relate to other people emotionally. And that's rewarded in our society by earning them $150K because they can write code for twenty hours a day. These situations raise very deep questions about human consciousness and the children and adults who will be coming to us for education in the future.

I want to read a quote from Goethe, just to finish. "The ancients said that the animals are taught through their organs. Let me add this, so are men. But men have the advantage of teaching their organs in return."

Endnotes:

1. This article was originally given as a lecture at Rudolf Steiner College, CA in 2011 to a conference on Psychosophy and Psychology.
2. *New York Review of Books*, Vol. 37 No. 18, Nov. 22, 1990.
3. All illustrations in this article are by the author.
4. For more on Reis: http://reis.socialpsychology.org.
5. *Wired Magazine*, Vol. 9 No. 12, Dec. 2001.

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The Philosophical Roots of Waldorf Education[1]

Part Two: Fichte's Primordial Intuition

Frederick Amrine

Toppling the Ancien Régime of Rationalism

Another of the deep roots of anthroposophy, and hence of Waldorf education, is Johann Gottlieb Fichte's philosophy of the self. Fichte's dates are 1762–1814, which makes him younger than Goethe, roughly the same age as Schiller, and just a bit older than Hegel. The great temptation to avoid in discussing Fichte is retelling his biography, which is much stranger and more wonderful than any fiction. It is hard to imagine a biography more transparently karmic than Fichte's. But we will just have to resist that temptation.

Fichte is perhaps the least understood and the most undervalued philosopher of all time. There are many reasons for that: Fichte is extremely difficult in multiple ways. His philosophy is dense, original, highly unconventional, and—unfortunately—opaque in its terminology and language generally. Capturing the spirit of his work succinctly is an even greater challenge than it was in the case of Goethe and Hegel, but let's just see what we can do in a short space.

In the first installment of this article, I argued that Kant had inaugurated a great revolution in philosophy, but then found himself trapped in a fundamental dualism because he felt he had to set limits to human knowledge. Goethe, Hegel, Fichte, and Schiller were all swept up in that great revolution, each in his own way, and their attempts to overcome Kant's dualism together amounted to a kind of inner revolution within the greater Kantian revolution. Each sought in his own way to save the spirit of Kant by overcoming the letter of Kant. (Even Kant himself saw that need and said at the end of his life that, had he not been so old, he would have started all over again! We will have more to say about this in the next installment—on Schiller.)

Fichte was a key player—arguably *the* key player—in that second revolution. We have seen how Goethe sought to transcend Kant but save the spirit of his philosophy by turning one of Kant's limits into a threshold, and then crossing it. Let's call that the "outer" threshold, the seeming limit one reaches within sensory perception. Fichte also sought to turn one of Kant's limits into a threshold and then cross it, but he was working at a place one might call the "inner" threshold. In the process, what Fichte accomplishes is a complete transformation not of the old empiricism, as Goethe had done, but rather of the old rationalist project. Fichte transforms and thereby overthrows that ancien régime of rationality. He transforms it in the most radical way possible and thereby creates something entirely new within philosophy, something of which even Kant had only the vaguest premonitions. That is my contention.

What Fichte accomplishes is a complete transformation of the old rationalist project.

The younger generation all became Fichteans in some sense. And that's what makes Fichte the Romantic philosopher par excellence. Without Fichte, no Schelling, arguably no Hegel. Schiller's most important philosophical treatise (which influenced Steiner profoundly) turns on a concept taken from Fichte. Without Schelling and Fichte, no Friedrich Schlegel, no Novalis. No philosophical Romanticism in the form that we know it. Coleridge went off to Göttingen and studied Schelling, who had

studied and promoted Fichte, so both British Romanticism on the philosophical side and its echoes in American Transcendentalism can be traced back to Fichte. Hegel said he wanted to be buried next to Fichte, and he was. So Fichte is all-important. But who reads Fichte today? Almost nobody! And, of the few who read him, who understands Fichte? Almost nobody! He's very hard, but we must try to understand him as best we can, because he was such a great philosopher and one of the most important stepping-stones to anthroposophy.

Thinking about Thinking

Fichte read Kant and caught fire. The spirit of Kant's great revolution burned inside him. But he was also deeply troubled by its shortcomings. What excited Fichte above all about Kant was the possibility of radical autonomy, radical freedom within thinking. But what bothered him about it was that the foundations, the pillars on which Kant's philosophy ultimately rested, were things-in-themselves. They were unknowable because they resided on the other side of a limit Kant had set to human knowledge.

Now in particular, Fichte grapples with the problem of Kant's synthesizing agent within cognition. You will recall that Kant doesn't even try to say what it is. He merely describes the results of its activity in words, calling it "the transcendental unity of apperception." Our inner experience is not atomistic: we don't live in a kaleidoscopic array of disparate impressions, but rather in a world that is unified in various spatial and temporal ways. Sense-data arrive helter-skelter, but that is not our experience of the world. Something must synthesize our experience, but we can't see that agent. There must be some faculty at work, some unknowable faculty.

In his book *On the Metamorphosis of Plants*, Goethe is working at the empirical pole. Fichte sets to work at the other pole, the pole of thinking, and there are some good reasons for that. Fichte is a more systematic thinker than Goethe. And even more so than Goethe, he's committed to the Kantian project; Fichte calls himself a Kantian outright in a way Goethe didn't, but says of Kant that he just wasn't Kantian enough. It's very important to understand that. And Fichte understands, rightly I think, that the problems in Kant's philosophy can be solved only at the pole of the thinking subject, because that was Kant's fundamental epistemological gesture: he tried to account for the possibility of human knowledge from the inside out.

Now, one of the things that's hard about Fichte is that his great masterpiece, *The Science of Knowledge*,[2] was actually the first thing he wrote, but it was so dense and written so quickly, that he then had to spend the rest of his life popularizing it and rewriting it and elaborating it. So there are some other writings, published after the fact as it were, that help to clarify his arguments. For example, there's something called "The First Introduction to the Science of Knowledge," and then there's another called "The Second Introduction to the Science of Knowledge."[3] The first one is quite short and non-technical; the second is longer, and it is written for people who already have some grounding in Kantian philosophy. One can read both of these essays without too much difficulty. In those works, Fichte makes clear why he wants to solve the problem at the pole of thought: it's because there's an asymmetry between the two poles. His popular way of explaining it is to say that on the one side, on the empirical side, there's a single thread of causality; one event gives rise to another event and so on. Only on the side of thought is there a doubled, parallel structure that maps onto the structure of the problem, which is the general problem of epistemology: how are we going to account for a subject knowing the world of objects? And there's a further asymmetry in the situation in that, within this doubling, there's a potential reflexivity that isn't available on the other side. A table cannot table itself, and a rock cannot rock itself, but thinking can think

itself. It's possible to reflect upon one's own thinking. So, on the side of thinking you have the doubled structure of reflection, which maps onto the structure of the problem. And then you can also find an exceptional moment within thinking in which it's possible—or at least it seems to be possible—to make the subject the object. The subject, the thinking subject, can make its own thinking the object of its thinking. That possibility is intriguing: it suggests that there's a game to be played there, as some philosophers would say; you might get somewhere that way. But Fichte argues strongly that if you try to explain the world in terms of things, you lose the game immediately, because the structure is wrong in principle. That just can't be the right place to look for the solution. So he has very good reasons for proceeding in the way he does.

Fichte argues strongly that if you try to explain the world in terms of things, you lose the game immediately.

Stepping behind Logic

In specifically Kantian terms, Fichte is trying to find his way to that inaccessible thing-in-itself that Kant had called "the transcendental unity of apperception." He's trying to get a glimpse of the secret Masonic handshakes behind the curtain, as it were. Fichte's approach is thoroughly Kantian in spirit: he starts with thinking, and then, as Kant had done in his philosophy, tries to step behind the structures and see which constitutive activities must necessarily be in place in order to account for the structures. That's what we mean when we talk about Kant's "transcendental method."[4] You take a structure, and then you look behind it and ask: what activity of mind is presupposed in that structure? That way, you can begin to talk about the constitutive activities of the mind. Fichte says, let's start with the most universal and fundamental and abstract and indubitable things we can think of, which are the fundamental axioms of logic. The first axiom of logic is the principle of identity: A = A. Fichte starts with that fundamental axiom, and then makes an unprecedented move; not even Kant had thought to try it. Fichte says boldly, now let's step behind that axiom.

We recognize that A = A is transparent; we see immediately that it is true. But then if you look hard enough at that "=" in the middle, you become puzzled, because it has not been accounted for. Minimally, that "=" is a relation, but Fichte goes further: he decides that it is really the sign for an activity. For what is it that we mean when we say "equals"? If we say "A = A," we're not saying that "some A exists"; it's not "is" in the sense of "exists as a fact in the world," but rather, it's a statement of a relation: "A stands in a transparent relation to itself." But how do we account for that? In this way Fichte steps behind that enigmatic sign, and he says, well, actually, since we're not describing a state of affairs in the world, that relation needs to be something that was actively posited, actively put in place as a judgment, by a perceiving subject. That "=" has to be the sign for an activity of *setzen* or "positing," which means etymologically in English also a "setting in place."

But why is it that any relation must necessarily be an activity rather than a thing? Perhaps the best way to illuminate this key assertion on Fichte's part is to go back to a great moment in ancient philosophy. This is not in Fichte now, but I'll give you a different way of understanding what he's getting at. I'm referring to an aporia, a philosophical difficulty or puzzle that was solved by Aristotle in a way that remains profound and incisive and relevant to this day. Say that one wants to explain the relationship between any two things. One posits some third thing that explains the relationship between them. Has one solved the problem? No! It's like the myth of the Hydra: you cut off one head and two grow back in its place, because now you have

created two gaps that need to be bridged. If in the middle is a thing, now you've got two problems to solve! Do the same thing again, and you've got four problems! This is called an "infinite regress": the more you try to solve the problem this way, the faster it runs away from you. Aristotle concluded, with characteristic profundity: the relationship between things can never be explained in terms of things; only a process can explain structure. Quoting Aristotle might seem anachronistic, but really that's the heart of philosophical Romanticism, and that takes us right back home. Philosophical Romanticism seeks to explain structure out of an underlying, living process. And that is what Fichte discovers: this most fundamental structure of self-knowledge is something that is actually an activity of pure positing. He says, "A = A" implies "I = I"; what's implied is that there's a unity within the subject, the agent, who is doing this pure positing within thinking—indeed, as the fundamental act of a sense-free thinking independent of and preceding all sensory perception.

So we see that Fichte is working with a model that's trying to solve the problems of philosophy through the structure of self-consciousness. And that might seem very attractive as a solution, very liberating. But, alas, it's not so straightforward. Here comes the wrinkle, a problem and Fichte's solution to that problem, which are both really arcane as laid out on Fichte's pages, but beautiful once you catch on. A very great scholar of German Idealism, Dieter Henrich, wrote a brilliant article about this called "Fichte's Original Insight," and now I'm just going to follow him in my discussion for a while.[5] His article is truly brilliant, and I recommend it highly to anyone who wants a good challenge.

But precisely because Fichte is trying to found philosophy upon self-consciousness, his project can easily be mistaken for the ancien régime of rationalism. As you will recall, Descartes (one of the great founders of modern rationalism) argued, "I think therefore I am"; the only indubitable thing is that I think, because you can't think that you don't think, which would be a logical self-contradiction. So the self-knowledge of the *cogito*, of the "I know," was one of the pillars for the ancien régime of modern rationalism before Kant, but that's not what Fichte's doing here. And, according to Henrich, Fichte's great insight is actually that this model doesn't work. This model of the self knowing itself doesn't work. And here's why. You can schematize the problem in a way that is very abstract but simple once you understand it. "The self"—let's call the agent of cognition "the self"—as subject goes looking for the self (as object), and finds the self (now as subject and object simultaneously). And so the circle is closed. That's the model. But step back from that and ask: does it really work? After all, either you don't have what you went looking for when you started, in which case you find something different, so you're not in the place where you started; or, you find what you had originally, but that means you didn't go looking. You can't go looking for something that you already have. This starts to be kind of Zen-like, doesn't it? It's really a puzzle. But that's one of the things that makes Fichte so admirable: he follows thinking wherever it leads, no matter how difficult it gets; he's very bold in that way. And so he says to himself, here are the two possibilities: either we go out looking for ourselves and find something different, in which case we don't find ourselves, which means that the model fails; or, paradoxically, the thing we were looking for was already there before we started looking. That's very hard to "say" in propositional form; it's like a Zen koan. From the perspective of everyday consciousness, it makes no sense. And wasn't that exactly what Wittgenstein had asserted so surprisingly at the end of his own treatise on logic?[6] If you understand me rightly, you realize everything that I've said makes no sense. It makes no sense, but Fichte tells himself: that has to be the answer, because the other possibility fails. I go looking for the self

and I don't find the self—at least not as a thing to be discovered.

Intellectual Intuition

So where is the self right before it's spoken? —and I mean "spoken" in the Wittgensteinian sense, right before it's put in place as a structure. It's actually impossible to capture the pure experience in a fixed conceptual structure, because the moment the self is "spoken" as a structure, as a thing even within consciousness, it immediately calls forth its opposite. To conceive and say "self" immediately defines a "not-self." And then we're already inside the problem we were trying to solve. The moment you say "I," you're inside the problem, because it has already become an object among other objects. We know that the "I" must be there before we go looking for it; the "I" must be there before we say it. So where is it? We're at the top rung of Wittgenstein's ladder, and there's nothing that can be "said" anymore. But Fichte looks beyond, across the threshold, and sees something that he then describes, in a kind of inner, introspective empiricism. Here you have to imagine looking at me rather than reading and thinking my words because I can't say it; I am acting it out for you, and you are watching me act it out.[7] Where is the "I" before it's "said"? [strong gesture of "positing," of setting something in place, followed by the spoken word: "I."] It's a deed. It's an act of will. It's pure "positing," meaning "placing," "setting in place." Because he's in this new space, because there's no language in which you can say this, you can only "show" it in Wittgenstein's sense, Fichte has to come up with new terms. So he comes up with two new terms to describe this inward experience. Remember, it's impossible in principle to understand relations by mapping a structure, for then the problem simply runs away from you. So it's not a state of affairs, it's not an existing structure, which could be captured in propositional language; it cannot be said, but rather, it's an action that's complete at the moment that it's begun. So Fichte makes up a rather strange new German word, by analogy to the German word for "fact," or *Tatsache*. Fichte makes up a new word, *Tathandlung*, which translates roughly as "done doing." One experiences a "done doing." It's a pure activity of positing that's done the moment that you look at it. And then through introspection, through an inner empiricism of something that's beyond the threshold, you can watch the very first structure of thinking being set into place by the will.

> I go looking for the self and I don't find the self—at least not as a thing to be discovered.

> [The Self] is a pure activity of positing that's done the moment that you look at it.

That is Fichte's "original insight"—original in both senses, "novel" and "foundational." And that insight gives birth to the first sentence of Fichte's *Science of Knowledge*: "The I posits itself absolutely." Very cryptic! What does that word "absolutely" mean? It means not contingent, not dependent on anything outside of itself. It's a pure activity—raw, radical, self-creative autonomy: in every act of knowledge, we call not just the world of our knowing into being; we call ourselves as knowers into being. Every time we know something, even the most fundamental things we can know, we first call ourselves into being, and then immediately we call the thing that is known into being simultaneously with it. And so we're on the top rung of a ladder looking across a threshold into a realm that's beyond the distinction between subject and object. It's a realm out of which the very distinction between subject and object is precipitated. You stand on the top rung of the ladder, kick it away, stop looking at the structure of thought, and look

at the process underlying the structure. You're having an intuition, you're seeing something (from the Latin verb *intueri*, "to see"), but it's not a sensory seeing. It's an intellectual seeing. Fichte calls this "intellectual intuition." Kant had used this word "intuition" for the construction of sensory experience, but now Fichte uses the term to refer to an intellectual—i.e., a purely spiritual—experience.

Look what has happened! That ancien régime of rationality has been utterly transformed. We have stepped behind logic, as it were. The thought structure that was meant to capture the shape of the world—its supposedly pre-existing qualities and attributes that we would just mirror or map—has been transformed, and we become the geniuses; we become the creators who call our knowledge freely into being in an act of pure freedom, at every moment. It is a sublime and profoundly liberating vision. Enough to set your hair on fire all over again.

> We become the creators who call our knowledge freely into being in an act of pure freedom.

And so we arrive at something that is the source of all knowing, in the way that I described. But because it is an utterly free causality, it is also potentially the source of ethics, which is about free action in the world. Kant had wanted to preserve freedom by putting the ethical self on the other side of the boundary of knowledge. If you could know the ethical self, it would become determinate; to know something is to "say," in Wittgenstein's sense, its structure, to determine it, and then it's no longer free. If it has a determinate structure, it's not free, and so Kant protected it by saying: you can't know it. Then you can't touch it with knowledge, and it remains indeterminate. But Fichte finds a way to know this ethical self while preserving its freedom. One knows it intuitively as a freely creative activity, as the primordial subject of its own emergence, something that perpetually calls itself into being. And so this Kantian dualism is overcome again, now at that inner pole. The dualistic picture we received from Kant resolves itself into an organic unity, an integral kind of thinking. Kant's "dual citizenship," as he called it, has been overcome.

> The dualistic picture we received from Kant resolves itself into an organic unity.

A Tragic Fate

All of philosophical Romanticism is implicit in Fichte's "original insight" and flows from it directly. Again, Hegel got it: he saw the importance of Fichte's discovery, and that's why he wanted to be buried next to Fichte. But as you can imagine, it's very easy to misunderstand what Fichte was up to. It's so easy to look at his treatise—which is using logic as a ladder, then kicking the ladder away—and think: this is the strangest, most incompetent logic I've ever seen. But logic is the last thing Fichte is doing: it's much closer to the antithesis of logic. Fichte is using the structures of logic like the rungs of a ladder to climb up to a threshold, where he invites us to have a fundamentally different kind of experience that cannot be captured in a logical framework. Here insight cannot be expressed in propositional form, because it's a pure, creative activity rather than a thing or a state of affairs. But someone with conventional training, someone schooled in the ancien régime of rationalism, will look at Fichte's treatise and be tempted to say: this is the worst logic textbook I've ever encountered in my life. And that's what happened basically in the 19th century reception of Fichte: most people didn't understand at all what he had done. His fate was genuinely tragic.

To this day, surprisingly few people understand Fichte at all. If you want to see a particularly amusing—though from another perspective, sad—example, open the

pages of Bertrand Russell's *History of Western Philosophy*,[8] where Fichte rates merely a couple of paragraphs, nothing is said about his philosophical masterpiece, and Russell wonders aloud whether Fichte might have been insane. Russell had no clue. But again, I submit to you that Rudolf Steiner understood Fichte deeply, especially in his later writings. Later in life, Steiner said of Fichte's *Science of Knowledge*, "Das ist ein Einweihungsbuch!"—"That's an initiation-book!" Steiner understood that Fichte had delivered a powerful meditation that was meant to lead us to a direct experience of freedom. Freedom in this philosophical sense is sheer self-creativity; it's not something that can be "said" in Wittgenstein's sense; it's not something that you can do for someone else; it's not something that you can capture for them. All you can do is show them the way, and then they have to get there themselves. Fichte was exasperated that his philosophy met with so little understanding, and he went to extraordinary lengths to explain and recast and convey somehow to a broader public an insight that was so completely revolutionary, so resistant to the structures of ordinary language, and so counterintuitive relative to established philosophical traditions. It didn't help that Fichte was an extreme choleric, but he just couldn't understand why people would work so hard at thinking about themselves as passive objects rather than as free, creative subjects, and their self-imposed limitation totally exasperated him.

So at the pole of thinking, we find pure perception; and at the pole of perceiving, we find pure thinking.

Taken together, Goethe and Fichte managed to overcome Kant's dualism.

The Balanced Equation

So, where have we arrived? We have climbed up to two different thresholds: the threshold of rationality or the self on the one side, and the threshold of sense or empiricism on the other. Goethe's book *On the Metamorphosis of Plants* is working at the latter threshold, at the threshold of sense and empiricism, and in finding a way to cross that threshold he discovers, paradoxically, pure thinking. Fichte, working at the threshold of pure thought, finds a way to get across that threshold and, paradoxically, finds pure perception. So at the pole of thinking, we find pure perception; and at the pole of perceiving, we find pure thinking. Each of these thinkers has solved the problem of dualism at either pole. Goethe penetrates the threshold of sense and finds intuitive, pure, synthetic, formative activity. Fichte penetrates the threshold of rationality, of logic, and finds intuitive, pure, synthetic, formative activity. It's like a math equation that balances. The problem of epistemology is solved.

Taken together, Goethe and Fichte managed to overcome Kant's dualism. Many of their contemporaries felt one needed both approaches simultaneously. Goethe and Fichte were each one-sided in themselves, but together they saved the philosophical revolution by rewriting the letter of Kant in the spirit of Kant. Some of their contemporaries tried to put Goethe and Fichte together intellectually, but the most successful synthesis by far was accomplished a century later, in the 1880s and 1890s, by Rudolf Steiner. In his early commentaries on Goethe's scientific writings, and especially his book Goethe's *Theory of Knowledge*,[9] Steiner was the first to appreciate and elaborate fully the most important philosophical implications latent in Goethe's scientific work. Steiner then went on to make Fichte's epistemology the centerpiece of his own doctoral dissertation, *Truth and Knowledge*,[10] and then he folded Fichte's fundamental insight about transformed, sense-free thinking

as pure process into the first half of his own philosophical masterpiece, *Die Philosophie der Freiheit*.[11] It was Rudolf Steiner who finally put these two thinkers together in a way that reconciles and secures and cements the tremendously revolutionary aspects of their philosophy that had been so badly misunderstood over the intervening decades. Hence one might say, paraphrasing Owen Barfield, that German Idealism comes of age in anthroposophy.[12]

to be continued…

Endnotes

1. The first two articles in this four-part series are based on lectures originally presented at Esalen and the California Institute of Integral Studies. In many places, the original, oral style has been retained.
2. J.G. Fichte, *The Science of Knowledge: With the First and Second Introductions*, Cambridge: Cambridge UP, 1982.
3. Both are included in the Cambridge UP edition of *The Science of Knowledge.*
4. Unfortunately, the American "transcendentalists" changed the meaning of this term fundamentally. Indeed, one can argue that "transcendental" means for Emerson and Thoreau and company precisely the opposite of what Kant meant by the term. But that is too long a story to tell here.
5. Dieter Henrich, "Fichte's Original Insight," in *Contemporary German Philosophy: Volume 1*: University Park: Pennsylvania States UP, 1982, pp. 15–54.
6. See the beginning of the previous installment.
7. Needless to say, this is exactly what I did when presenting this material originally as lectures.
8. Bertrand Russell, *A History of Western Philosophy*, New York: Simon & Schuster, 1967.
9. Rudolf Steiner, *Goethe's Theory of Knowledge: An Outline of the Epistemology of His Worldview*, vol. 2 of his *Collected Works*, Great Barrington, MA: SteinerBooks, 2008.
10. Rudolf Steiner, *Truth and Knowledge: Introduction of Philosophy of Spiritual Activity*, Great Barrington, MA: SteinerBooks, 2007.
11. Variously translated as *The Philosophy of Freedom, The Philosophy of Spiritual Activity*, and most recently, as *Intuitive Thinking as a Spiritual Path* (Hudson, NY: Anthroposophic Press, 1995). Steiner's own philosophy will be discussed in part four of this series.
12. I am referring of course to Owen Barfield's collection of essays entitled *Anthroposophy Comes of Age*, Oxford: Barfield Press UK, 2012.

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From Un-bornness to "I"-Consciousness[1]

The Three Great Steps of Incarnation

Michaela Glöckler

Three steps are needed for "I"-consciousness awareness to find its place in the physical body. How does this happen? We constantly experience "I"-awareness as a point [a large dot as "point" was drawn on the blackboard]; and if we don't succeed in focusing, concentrating so that we become totally present with ourselves, we are not really there. We have to "be there" to look at the complexity of this world and make it clear to ourselves, the world of thoughts, feelings, of our striving, of what we want to do and are not able to do because of something in our way. There is all this richness, this wealth. On the other hand there are the complex conditions of our life—one billion people are starving; they live with the minimum. Someone else has too much to eat, and those in between ask what planet we are on here where this can be tolerated. Rudolf Steiner said calmly that the social question is a pedagogical question. And the pedagogical question is a medical question. If you don't know what is healthy and what is sick, how can you recognize the healthful aims of education?

> Healthy is being master of possibilities.

In another statement, Rudolf Steiner said that in the future, people will not ask what is true or false but about what is healthy or sick. What is healthy? What is unhealthy? Physicians can define that well. Healthy is being master of possibilities. Sick is not being master and being unable to unfold one's possibilities. Health is being able to serve. Sickness is being limited, restricted from serving. And that is a question of education. How do we have to incarnate so that we become instruments for ourselves and for others too, so that we humanize and do not dehumanize? When we can do this, we will be able to solve the social question. We can also advance possibilities for others. This is the possibility surrounding a young child. The young child is obviously in need of support, and the whole surroundings become centered on the child and on his need for development. We want to please the little child and make him happy. Sometimes we do this with sweets, but it is better to do it through a smile.

But we need a concept of what is healthy self-awareness, self-consciousness. Everything around me, the world in which I am, finds itself within me and finds a point in me from which I can relate to the outer world without losing myself. With all this wealth of feelings and thoughts, it is amazing that we do not lose ourselves. All this is the gift of the physical body. In the physical body self-awareness awakens; the whole world of wisdom finds itself. I have my balance point, my center of gravity. And it is on that balance point that my spiritual center of gravity forms, so that I can sense myself in one point. Then around this point there is my destiny [a large circle was drawn with the point as its center].

> In the physical body self-awareness awakens; I have my balance point, my center of gravity.

Rudolf Steiner stated in his lectures on occult investigations into the life between death and rebirth[2] that an incarnating soul knows that, for the next earth life, he needs a certain kind of education. The soul needs a certain kind of knowledge that he can absorb early on. But often this education is needed at a time of childhood when we do not have the parents

who would offer us a happy life. And if we go to parents who might not give us a happy life, when we would prefer different parents, then this education which we may not be able to reach becomes the most important thing. One cannot imagine all the different situations that incarnating souls experience in spiritual life.

One finds souls who, before birth, had the most terrible struggles in themselves because they saw that they might be abused in youth by a horrible set of parents. We see many souls who go through terrible struggles in the spiritual world as they prepare for their births. This is not only an inner struggle but is also projected to the outside and one has the struggles outside oneself as well. The souls go to their next incarnation feeling a deep split within. Rudolf Steiner described a situation of looking ahead to preview the coming incarnation. We know that the soul prepares for a particular generation, country, language, parents, and so on. But now, because of interference with birth (through abortion), hundreds of thousands of girls, especially, are murdered. These souls then have to reorient themselves, to decide if they want to come. Souls are constantly rejected and sent back.

Then there is the additional struggle to decide between a happy family life and educational constellation or a horrible one. Therefore one of the messages of this lecture is to encourage the founding of new kindergartens. New care centers must be founded in our towns so that the right education will be available to these children who will not get to come in to the proper situation in their families. I once encountered a beautiful founding of a Waldorf school: parents put an ad in the local paper saying that they wanted to found a Waldorf school in their community. "Come to the pub." Thirty people came and then ten founded the school. The more places there are for a good education, the easier it will be for the unborn souls to find the right incarnating possibilities for themselves.

[Returning to the chalk drawing] This circle is our destiny. It has a wide aspect as well. We are constantly in conversation with our destiny, which is our partner, the sphere with which we have to converse.

> Destiny is the horizon with which we are always in dialogue.

Destiny is the horizon with which we are always in dialogue. The more we have this dialogue about its meaning, about the positive side of what we can learn from it, especially in very difficult destiny situations, the better it will be for our "I"-consciousness. There is a wonderful statement from medieval mysticism—"I do not know who I am, I do not know what I know." I am a strange thing, a dot and a circle. I unfold a healthy "I"-awareness only when I am point and circle, becoming aware of myself in my body and developing the ability to have this conversation with my destiny, the developmental chance I have when I bring point and circle so together that attention is brought together for the unfolding of my biography.

> Something always radiates through of the essence of a person. What radiates through is love.

There are three great steps into incarnation. The third step does not have to do with our dialogue partner of destiny. It has to do with our true essence, our true persona, the being that resounds through the body and through the soul—how we feel, think, and act. Always something radiates through of the essence of a person, the radiation of persona. What radiates through is love. Our destiny is tied to the astral body, ether body, and physical body. Everything is inscribed into them, depending on what we have done that is good or difficult. All these consequences are drawn onto the paper or sand of these bodies. Our "I," however, did not experience the fall from paradise, and remains innocent, pure. It is pure love, pure light, the Way, the Truth, and the Life. Our "I" holds within it the goddesses

we are seeing each morning of this conference in eurythmy.[3] If we look at the male virtues of vigor and courage and add these as well, there are expressions of "I" that are neither male nor female. The "I" can bring different properties to expression through a male body than through a female one, which also depends upon what the world around us allows us to do, what is possible for our gender, as for example in China or Peru. If there are no partners to share our destiny with, we reserve our possibilities for another incarnation.

Radiating and holding back are the two sides. The body is a carrier of the "I"-consciousness and it is a carrier of developmental possibilities. Both are there.

There are two beings, Lucifer and Ahriman, who do not like these components at all. Lucifer does not want us to have awareness of the world around us. He wants us to enjoy ourselves, mirror ourselves, and develop aberrations from healthy self-awareness that go toward egoism. Like Lilith, we are not so nice as women if Lucifer tempts us. Men do this too, in their own way. This is where Luciferic temptation comes in. Lucifer is a microcosm interested in small things. Lucifer is happy with vanity. Life has to be fun and joyful, where we can take pride in ourselves and show off. One time when Rudolf Steiner came onto the school playground in Stuttgart, he said there were two ladies sitting in front of the school who should not be allowed in. A teacher who went to look saw no one. But Rudolf Steiner explained that the two he saw sitting there were vanity and the craving for power.

Ahriman, on the other hand, has a deep hatred and lack of understanding for destiny. People are only numbers to him; everyone is interchangeable. Schiller described this through the Inquisitor in *Don Carlos*—people are just numbers. Rudolf Steiner told physicians that Ahriman wants to kill karma. We cannot use a more accurate concept; we must listen to it and ponder on it. Ahriman wants to kill destiny because it makes development possible. Grand Ahrimanic powers focus on the earth, on the solid, the rational, the mathematical. Of course we cannot live without these; all this is his work. But Ahriman wants us to use these powers to dominate and control others. Lucifer and Ahriman cannot understand development, which is a Christian, human, humane motif.

Therefore the third aspect of incarnation is that the persona is always in dialogue with these two powers. Ahriman works with hatred and envy. Lucifer works with enjoyment, pleasure, and vanity. If we keep this in mind, we can understand what is essential. The true persona, the human principle, works with love, dignity, and freedom. If I am not constantly in danger of doing something wrong, I cannot find out for myself what is right. We learn from mistakes, and doing so is always a victory over Lucifer and Ahriman. There is nothing more Christian than making mistakes. If we feel stupid because we have made a mistake and resolve to do better, then feelings of inner strength come. We practice and practice and overcome Ahriman when we devote our time to improving ourselves and do not try to dominate others. Then what arises is an atmosphere around children where they experience that the world is good.

I was so pleased last night when Louise deForest spoke of kindergartens that are too perfect. But there are also "oh dear!" kindergartens where the educators do not understand the requirements of sensory development. It is important that we know why we do what we do, why the walls are a certain color, for example. When each experience that greets the children is consciously chosen, we can feel joy each morning that what surrounds us is good for the children. We radiate our joy in knowing what is good. We must add to the outer experience an understanding of what it stands for, with a commitment to thoroughly know what we are doing. We combine light, air, color, form, and enough space to be flexible. We also allow moments of intentional chaos, so that we can all find our way back to form. Then the children will be able to feel the process toward development.

Taking hold of the body, looking toward destiny from pre-earthly life, and developing "I"-awareness are all things that we need to do. Taking hold of the body is the first step of incarnating. The second step addresses our karmic surroundings. As much as we can, we have to form the child's environment so that he feels addressed, accepted, and taken into a world where people communicate with one another.

Then with the third step of incarnation can come the flash of "I am." Here comes the first shining experience of "I am." I have a body; I have a destiny. But I am not just these. I am more. I am a being. The more my body becomes an instrument of my development, and my destiny the arena of my development, the better my "I" can find itself.

A human egg cell (Image from Gertrude Lux Flanagan, *The First Nine Months of Life*)

In the human ovum we see a point surrounded by a circle. The image of the ovum looks as though it has a subtly glowing corolla around the circumference. The image of a solar eclipse looks very similar. Here we have the microcosm and the macrocosm. Only the sizes are different. But the movements of the stars up in the heavens are the same rhythms, the same movements active in the physical evolution of the body. [To further illustrate this reflection of the macrocosm/microcosm, the image of a developing sun out in some galaxy, with its swirling, spiraling shape, was shown alongside that of the developing tissue fibers of the heart.] The developing heart organ is similar because the fibers move in the same kind of vortex pattern as the developing sun. This cosmic swirling pattern is also shown in human fingerprints. We see these motifs again in the development of children's drawings. [The spiraling condenses to a point that becomes enclosed by a circle.]

After fertilization, there is the tiny hovering of a point forming within the liquid of the amnion, surrounded by the circle of the trophoblast. The play between the inner and the outer continues with the development of the ear and eye. The ear is a wonderful spiral that goes entirely inside; when we hear we internalize. The eye goes out and becomes global. Rudolf Steiner observed these similarities and polarities.

There is dramatic play of forces from week to week that creates the organ systems in such a way that they work well together. The

A developing sun

Two stages of hand development in utero (*The First Nine Months of Life*)

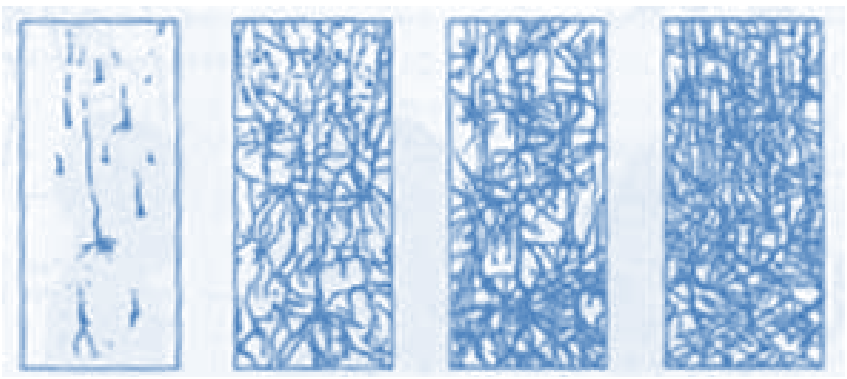
organs develop first. Only then do the limbs begin to take shape. The limbs are inserted into the physical body from the outside. The head evolves from the center. The "destiny" person, the person of action, comes from the periphery. [The forming of the limbs from the periphery was demonstrated by a series of photos that show just the little buds that will develop into hands and feet. By gradual steps indentations appear in the buds which begin to differentiate into fingers and toes. The shape of the fingers and toes appears to be impressed upon the hands and feet from the outside.]

Then the child is born and enters independently into the physical world. The child is freed from the mother's narrow body. This first liberation opens the doorway to more freedom. Every learning process is a bit of liberation. Learning something new gives us more freedom for the future because we have learned something new to use. Aborigines say that initiation is always when we learn something new. In the Shinto tradition, a new initiation occurs every two-and-two-thirds years, just as Rudolf Steiner saw. [Something unique to human beings was demonstrated in a slide showing the arrangement of human teeth.] The child and adult have the same size and shape of gum and positioning for the first ten teeth. This does not change with the loss and replacement of the baby teeth. This allows the human being to speak. In animals, it is not the same. The teeth and the jaw change with growth. [A slide showed how a baby chimpanzee's face and jaw are similar in profile to a human child. But as the chimp matures, the jaw becomes much more prominent and thrusts forward.]

The more specialized something becomes, the less it is free. There is less freedom for the being to meet the world with. Animals grow apart from the human being and specialize themselves. With our arms we cannot fly like birds, but we can do so many other things. Waldorf education wants to educate toward freedom. That means that, as much as possible in early childhood, the first years of school should be without specialization. Then the human instrument has more possibilities. Then there is no one-sidedness and the more human and less animal-like we will be.

When we speak, the glottis is closed. When we breathe, it opens. We stop breathing when we speak. Parallel to this is brain development. It is a stormy activity. Everything we bring to the child from the outside stimulates development. [A slide illustrated this stormy picture of development. Pictures of nerve fibers in the brain were shown from the newborn through the ages of 3, 15, and 24 months.] The brain becomes increasingly complex and chaotic-looking in this pattern of complexity.

What is happening within the brain is caused by the experience of outside stimuli meeting the child. This is all unconscious preparation for the persona. This physical instrument will be the physical home of the "I" that can meet others. [This thought ended with a photo of a little child walking along behind two adults. The child is walking with head bowed and hands clasped behind his back in exact imitation of the two men.]



Microscopic sections of the human cerebrum showing synapses between brain cells (From M. Glöckler, S. Langhammer, C. Wiechert: *Education – Health for Life*)

We carry the laws of the cosmos within us, which direct how we form ourselves. But there is also an aspect of our higher being that is always in communication with the hierarchies. This can express itself in different ways. How can we meet our different children in their different developments of self-awareness? If we take seriously these three steps, we can become masters of the physical body, of physical development. But we can also be experts of destiny. For ten to fifteen minutes in each faculty meeting we should read lectures on reincarnation and karma and lectures about life between death and new birth.

There is also an aspect of our higher being that is always in communication with the hierarchies.

Why? This is the world where the "I" decides to come back to the earth. This is the world where beings communicate with other beings, where our "I" is connected with the dead, with the elemental beings, with the angelic hierarchies, the divinity, the trinity that forms our body in its image, differentiating it into three parts. We are images of the divine essence. If we study lectures on destiny we understand that whatever we do in one life to improve radiates in our next life in a more healthy body and a more harmonious destiny. Then we can become citizens of two worlds. With the children we can give them a helm in spirit, soul, and body. We all keep Natasha [mentioned by Louise deForest in her opening lecture as the child she has learned most from because she feels that she failed her] in our minds as the potential for our learning.

Endnotes:

1. This article is from a lecture delivered at the World Kindergarten Conference 2012 in Dornach, Switzerland. Originally published in *The Journey of the "I" Into Life: A Final Destination or a Path Towards Freedom?* Nancy Blanning, ed., Spring Valley, NY: WECAN Publishing, 2012, with permission.
2. Rudolf Steiner, *Life Between Death and Rebirth* (selections from GA 140).
3. A eurythmy performance representing a series of goddesses going from Isis (Egyptian), Layla (Iranian/Sufi), Lakshmi (Indian), Kore (Greek), Lilith (Hebrew), Banshee (Celtic), to Sophia (Russian).

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Teacher Education for Educational Wisdom[1]

Gert Biesta

Introduction

In recent years policy makers and politicians have become increasingly interested in teacher education. In the UK the government has published a new policy framework for school education in England—a paper called "The Importance of Teaching"[2]—which not only sets out the parameters for a significant transformation of state funded school education but also contains specific proposals for the education of teachers. In Scotland the government commissioned a review of Scottish teacher education. The report, with the title "Teaching Scotland's Future,"[3] also makes very specific recommendations about teacher education and the further professional development of teachers.

In many countries discussions about teacher education are being influenced by developments at the European level, particularly in the context of the Lisbon strategy (2002) which sets the aim of making the European Union into "the most competitive and dynamic knowledge-based economy in the world,"[4] and the Bologna Process, aimed at the creation of a European Higher Education Area. In the wake of the 2005 Organization for Economic Cooperation and Development (OECD) report on the state of teacher education—a report called *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*[5]— the European Commission produced a document in 2007 called *Improving the Quality of Teacher Education*[6] which proposed "shared reflection about actions that can be taken at the Member State level and how the European Union might support these." As part of this process the European Commission also produced a set of "Common European Principles for Teacher Competences and Qualifications."[7] While none of these documents has any legal power, they do tend to exert a strong influence on policy development within the member states of the European Union—a point to which I will return below.

One could see the attention from policy makers and politicians for teacher education as the expression of a real concern for the quality of education at all levels and as recognition of the fact that the quality of teacher education is an important element in the overall picture. But one could also read it more negatively by observing that, now that governments in many countries have established a strong grip on schools through a combination of curriculum prescription, testing, inspection, measurement, and league tables, they are turning their attention to teacher education in order to establish total control over the educational system. Much, of course, depends on how, in concrete situations, discourse and policy will unfold or have unfolded already. In this regard it is interesting that, whereas in the English situation teaching is being depicted as a *skill* which can be picked up in practice (with the implication that teacher education can be shifted from universities to so-called "training schools"), the Scottish discussion positions teaching as a *profession*

Now that governments in many countries have established a strong grip on schools, they are turning their attention to teacher education in order to establish total control over the educational system.

which requires proper teacher education and further professional development.

While there are, therefore, still important differences "on the ground," we are, at the very same time, seeing an increasing *convergence* in discourse and policy with regard to teaching which, in turn, is leading to a convergence in discourse and policy with regard to teacher education. The main concept that is emerging is the notion of "competence" (see, for example, Deakin Crick, 2008; Mulder, Weigel & Collins, 2007). The notion of competence is interesting for at least two reasons. Firstly, it has a certain rhetorical appeal—who, after all, would want to argue that teachers should *not* be competent? Secondly, competence focuses the discussion on the question of what teachers should be able to *do* rather than only on what teachers need to *know*. One could say, therefore, that the idea of competence is more practical and, in a sense, also more holistic in that it seems to encompass knowledge, skills, and action as an integrated whole, rather than to see action as the application of knowledge or the implementation of skills. Whether this is indeed so also depends on the particular approach to and conception of competence one favors. Mulder, Weigel & Collins (2007) show, for example, that within the literature there are three distinctive traditions—the behaviorist, the generic, and the cognitive—which put different emphases on the "mix" between action, cognition, and values. While some definitions of competence are very brief and succinct—such as Eraut's definition of competence as "[t]he ability to perform the tasks and roles required to the expected standards" (Eraut 2003, p.117, cited in Mulder, Weigel & Collins, 2007)—others, such as Deakin Crick's definition of competence as "a complex combination of knowledge, skills, understanding, values, attitudes, and desire which lead to effective, embodied human action in the world, in a particular domain" (Deakin Crick, 2008, p.313), are so broad that it may be difficult to see what is *not* included.

What is worrying, however, is not so much the notion of competence itself but, first and foremost, the fact that the idea of competence is beginning to monopolize the discourse about teaching and teacher education. After all, if there is no alternative discourse, if a particular idea is simply seen as "common sense," then there is a risk that it stops people from thinking at all. While European documents about teaching and teacher education have no *legal* power—decisions about education remain located at the level of the member states—they do have important *symbolic* and *rhetorical* power in that they often become a reference point many want to orientate themselves towards, perhaps on the assumption that if they don't adjust, they run the risk of being left behind. We can see a similar logic at work in the problematic impact that PISA (OECD's Programme for International Student Assessment) has had on education throughout Europe. What I have in mind here is not the fact that PISA is interested only in particular "outcomes"—although there are important questions to be asked about that as well—but first of all the fact that PISA and similar systems create the illusion that a wide range of different educational practices *is* comparable and that, by implication, these practices therefore *ought to* be comparable. Out of a fear of being left behind, out of a fear of ending up at the bottom end of the league table, we can see schools and school systems transforming themselves into a definition of education that "counts" in systems like PISA, the result being that more and more schools and school systems begin to become the same.

If there is no alternative discourse, …then there is a risk that it stops people from thinking at all.

It is, however, not only the tendency towards uniformity that is problematic. It is also that through the discourse about competence a very particular view about education is being repeated, promoted, and *multiplied*. This is often not how ideas about

the competences that teachers need are being presented. Such competences are often presented as general, as relatively open to different views about education, as relatively neutral with regard to such views, and also as relatively uncontested. They are, in other words, presented as "common sense." One thing that is important, therefore, is to open up this common sense by showing that it is possible to think *differently* about education and about what teachers should be able to do, at least in order to move away from an unreflected and unreflective common sense about education. But I also wish to argue that the particular common sense about education that is being multiplied is problematic in itself, because it has a tendency to promote what I would see as a rather un-educational way of thinking about education. And this is the deeper problem that needs to be addressed in order to have a better starting point for our discussion about the future of teacher education.

The "common sense" about education has a tendency to promote a rather un-educational way of thinking about education.

The "learnification" of education

I invite you to take a brief look at the key competences enlisted in the document from the Directorate-General for Education and Culture of the European Commission, called "Common European Principles for Teacher Competences and Qualifications."

Making it work: the key competences

Teaching and education add to the economic and cultural aspects of the knowledge society and should therefore be seen in their societal context. Teachers should be able to:

Work with others. They work in a profession which should be based on the values of social inclusion and nurturing the potential of every learner. They need to have knowledge of human growth and development and demonstrate self-confidence when engaging with others. They need to be able to work with learners as individuals and support them to develop into fully participating and active members of society. They should also be able to work in ways which increase the collective intelligence of learners and cooperate and collaborate with colleagues to enhance their own learning and teaching.

Work with knowledge, technology and information. They need to be able to work with a variety of types of knowledge. Their education and professional development should equip them to access, analyze, validate, reflect on, and transmit knowledge, making effective use of technology where this is appropriate. Their pedagogic skills should allow them to build and manage learning environments and retain the intellectual freedom to make choices over the delivery of education. Their confidence in the use of information and communications technology (ICT) should allow them to integrate it effectively into learning and teaching. They should be able to guide and support learners in the networks in which information can be found and built. They should have a good understanding of subject knowledge and view learning as a lifelong journey. Their practical and theoretical skills should also allow them to learn from their own experiences and match a wide range of teaching and learning strategies to the needs of learners.

Work with and in society. They contribute to preparing learners to be globally responsible in their role as EU citizens. Teachers should be able to promote mobility and cooperation in Europe and encourage intercultural respect and understanding. They should have an understanding of the balance between respecting and being aware of the diversity of learners' cultures and identifying common values. They also need to understand the factors that create social cohesion and

exclusion in society and be aware of the ethical dimensions of the knowledge society. They should be able to work effectively with the local community and with partners and stakeholders in education: parents, teacher education institutions, and representative groups. Their experience and expertise should also enable them to contribute to systems of quality assurance. Teachers' work in all these areas should be embedded in a professional continuum of lifelong learning which includes initial teacher education, induction, and continuing professional development, as they cannot be expected to possess all the necessary competences on completing their initial teacher education.[8]

I would like to make two observations. The first is that in this text, school education is very much positioned as an instrument that needs to deliver all kinds of societal goods. Education needs to produce such things as social cohesion, social inclusion, a knowledge society, lifelong learning, a knowledge economy, EU citizens, intercultural respect and understanding, a sense of common values, and so on. This is a very functionalist view of education and a very functionalist view of what is core to what teachers need to be able to do. It paints a picture in which society—and there is, of course, always the question who "society" actually "is"—sets the agenda, and in which education is seen as an instrument for the delivery of this agenda. In this text the only "intellectual freedom" granted to teachers is about *how* to "deliver" this agenda, not about what it is that is supposed to be "delivered." (I put "delivery" in quotation marks to highlight that it is a very unfortunate and unhelpful metaphor to talk about education in the first place.) This functionalist or instrumentalist view of education does not seem to consider the idea that education may have other interests—perhaps its own interests (I return to this below)—but predominantly thinks of the school as the institution that needs to solve "other people's problems."

This functionalist view of education predominantly thinks of school as an institution that needs to solve "other people's problems."

My second observation concerns the fact that in this text, education is predominantly described in terms of *learning*. We read that teachers are supposed to nurture the potential of every learner, that they need to be able to work with learners as individuals, that they should aim at increasing the collective intelligence of learners, that they should be able to build and manage learning environments, integrate ICT effectively into learning and teaching, provide guidance and support to learners in information networks, and view learning as a lifelong journey. For me this document is another example of what elsewhere (see particularly Biesta 2004; 2006) I have referred to as the rise of a "new language of learning" in education. This rise is manifest in a number of "translations" that have taken place in the language used in educational practice, policy, and research. We can see it in the tendency to refer to students, pupils, children, and even adults as "learners." We can see it in the tendency to refer to teaching as the facilitation of learning or the creation and management of learning environments. We can see it in the tendency to refer to schools as places for learning or as learning environments. And we can see it in the tendency no longer to speak about adult education but rather to talk about lifelong learning.

Now one could argue that there is no problem with this. Isn't it, after all, the purpose of education that children and students learn? Isn't it therefore reasonable to think of the task of teachers as that of supporting such learning? And doesn't that mean that schools are and should be understood as learning environments or places of learning? Perhaps the quickest

way to make my point is to say that for me the point of education is *not* that students learn, but that they learn *something*, that they learn this for particular *purposes*, and that they learn this from *someone*.[9] A main problem with the language of learning is that it is a language of *process*, but not a language of content and purpose. Yet education is never just about any learning, but always about the learning of something for particular purposes. In addition education is always about learning from someone. Whereas the language of learning is an *individualistic* language—learning is, after all, something you can do on your own—the language of education is a *relational* language, where there is always the idea of someone educating somebody else. The problem with the rise of the language of learning in education is therefore threefold: it is a language that makes it more difficult to ask questions about content; it is a language that makes it more difficult to ask questions of purpose; and it is a language that makes it more difficult to ask questions about the specific role and responsibility of the teacher in the educational relationship.

The problem with the rise of the language of learning in education is threefold; it makes it more difficult to ask questions about content, purpose, and the role and responsibility of the teacher in the educational relationship.

All this is not to say that learning is a meaningless idea, or that learning has no place in education. But it is to highlight the fact that the language of learning is not an *educational* language, so that when discussions about education become entirely framed in terms of learning, some of the most central educational questions and issues—about purpose, content, and relationships—begin to disappear from the conversation and, subsequently, run the risk of beginning to disappear from the practice of education too. In my own work I have referred to this development as the "learnification" of education (see Biesta 2010a). I have deliberately constructed an ugly word for this because, from the standpoint of education, I think that this is a very worrying trend. This means that if we wish to say anything *educational* about teacher education, if, in other words, we wish to move beyond the language of learning, we need to engage with a way of speaking and thinking that is more properly educational. Once we do this we may find—and this is what I will be arguing below—that the idea of competences becomes less attractive and less appropriate when thinking about teacher education and its future. Let me move, then, to the next step in my argument, which has to do with the nature of educational practices.

What is education for?

I have suggested that the language of learning is unhelpful as an educational language because if we just say that students should learn—or that teachers should support or promote students' learning—but do not specify what the learning is supposed to achieve or result in, we are actually saying nothing at all. This shows something particular about educational practices, namely that they are *teleological* practices—the Greek word *telos* meaning "aim" or "purpose"—that is, practices that are *constituted* by certain aims, which means that, if you take away the orientation towards aims, you take away the very thing that makes a practice into an educational practice. In my work—particularly the book *Good Education in an Age of Measurement* (Biesta 2010a)—I have therefore argued that if we want to move back from "learning" to "education" we need to engage explicitly with the question of purpose in education. I have referred to this as the question of *good* education in order to highlight that when

we engage with the question of purpose in education we are always involved in value judgments, that is, in judgments about what is educationally desirable.[10]

By arguing that there is a need to engage with the question of educational purpose, I am not trying to define what the purpose of education should be. But I do wish to make two points about how I think we should engage with the question of purpose. The first point is that educational practices always serve more than one purpose—and do so at the very same time. The *multi-dimensionality of educational purpose* is precisely what makes education interesting. It is also, secondly, why a particular kind of judgment is needed in education. By saying that this question of educational purpose is multi-dimensional, I am trying to say that education "functions" or "works" in a number of different dimensions and that in each of these dimensions the question of purpose needs to be raised. In my own work I have suggested that we can distinguish three dimensions in which the question of purpose needs to be raised—or to put it in more simple language: I have suggested that educational processes and practices tend to function in three different domains. I have referred to these domains as *qualification*, *socialization,* and *subjectification* (see Biesta 2010a, and for a Swedish version Biesta 2011; see also Biesta 2009). *Qualification* has to do with the ways in which education qualifies people for doing things—in the broad sense of the word—by equipping them with knowledge, skills, and dispositions. However, education is not only about knowledge, skills, and dispositions but also has to do with the ways in which, through education, we become part of existing social, cultural, and political practices and traditions. This is the *socialization* dimension of education. While some take a very strict and narrow view of education and would argue that the only task of schools is to be concerned about knowledge and skills and dispositions, we can see that over the past decades the socialization function has become an explicit dimension of discussions about what schools are for. We can see this specifically in the range of societal "agendas" that have been added to the school curriculum, such as environmental education, citizenship education, social and moral education, sex education, and so on. The idea here is that education not only exerts a socializing force on children and students, but that it is actually desirable that education should do this.

While some would argue that these are the only two proper and legitimate dimensions that school education should be concerned about, I wish to argue that there is a third dimension in relation to which education operates and should operate. This has to do with the way in which education impacts the person as a subject of action and responsibility. This is the *subjectification* dimension of education. It is important to see that subjectification and socialization are not the same—and one of the important challenges for contemporary education is how we can actually articulate the distinction between the two (for more on this see Biesta 2006). Socialization has to do with how we become part of existing orders, how we identify with such orders and thus obtain an identity; subjectification, on the other hand, is always about how we can exist "outside" of such orders. With a relatively "old" but still crucially important concept, we can say that subjectification has to do with the question of human freedom—which, of course, then raises further questions about how we should understand human freedom. (For my ideas on this see, again, Biesta 2006; also chapter 4 in Biesta 2010a.)

To engage with the question of purpose in education requires that we engage with this question in relation to all three domains. The reason why engagement with the question of purpose requires that we "cover" all three domains, lies in the fact that anything we do in education potentially has "impact" in any of these three domains. It is important to

acknowledge that the three domains are *not separate*, which is why they can be depicted as a Venn diagram of three overlapping areas. The overlap is important because, on the one hand this indicates opportunities for *synergy*, whereas on the other hand it can also help us to see potential *conflict* between the different dimensions.

Given the possibilities of synergy and conflict, and given the fact that our educational activities almost always "work" in the three domains at the very same time, looking at education through these dimensions begins to make visible something that, in my view, is absolutely central about the work of teachers, which is the need for making situated judgments about what is educationally desirable in relation to these three dimensions. What is central to the work of teachers is not simply that they set aims and implement them. Teachers *constantly* need to make judgments about how to balance the different dimensions; they need to set priorities and they need to be able to handle tensions, conflicts, and "trade offs"—as gains in relation to one dimension often imply losses in relation to another.

What is beginning to emerge from this line of thinking is that, because education is a teleological practice and because the question of the *telos* of education is a multi-dimensional question, judgment about what is educationally desirable is an absolutely crucial element of what teachers do.

Judgment and wisdom in education

If I try to bring together the lines of my argument so far, the point that is emerging is that the question is not so much whether teachers should be competent to do things—one could say that, of course, they should be competent—but that competence, the ability to do things, is in itself *never enough*. To put it bluntly: a teacher who possesses all the competences teachers need but who is unable to judge which competence needs to be deployed when, is a useless teacher. Judgments about what needs to be done always need to be made with reference to the purposes of education—which is why the language of learning is unhelpful as it is not a language in which the question of purpose can easily be raised, articulated, and addressed. And since the question of purpose of education is a multidimensional question, judgment needs to be *multidimensional*, taking into consideration that a gain with regard to one dimension may be a loss with regard to another dimension—so that there is a need to make judgment about the right *balance* and the right *trade off* between gains and losses, so to speak. Exerting such judgments is not something that is done at the level of school policy documents, but lies at the very heart of what goes on in the classroom and in the relationships between teachers and students—and this goes on again, and again, and again.

The idea that education cannot do without judgment about what is educationally desirable stands in sharp contrast to another recent trend in discussions about teaching and teacher education, which is the suggestion that teaching should become an "evidence-based" profession, totally driven by scientific knowledge about "what works." This idea is problematic for a number of reasons, a discussion of which partly lies beyond the scope of this paper (for more on this see Biesta 2007; 2010b; and in German Biesta 2010c), albeit that the main problem here is not dissimilar from what I have said about the idea

of competences, which is that, while insights from research may give us an indication of what might be *possible* (albeit that the extent to which research can say anything about this is far more limited than the proponents of evidence-based education tend to assume), whether what is possible is educationally desirable remains a question that such research cannot answer but that requires the judgment of teachers and others involved in the educational process.

Discussions about the role of scientific evidence in teaching do relate to a much older question in the educational discussion, which is the question of whether teaching should be understood as an art or a science. One person who has very concisely and very convincingly argued against the idea of teaching as a science is the American psychologist William James (1842–1910). He writes:

> Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality.
>
> The most such sciences can do is to help us to catch ourselves up and check ourselves, if we start to reason or to behave wrongly, and to criticize ourselves more articulately after we have made mistakes.
>
> To know psychology, therefore, is absolutely no guarantee that we shall be good teachers. To advance to that result, we must have an additional endowment altogether, a happy tact and ingenuity to tell us what definite things to say and do when the pupil is before us. That ingenuity in meeting and pursuing the pupil, that tact for the concrete situation, though they are the alpha and omega of the teacher's art, are things to which psychology cannot help us in the least. (James 1899, pp.14–15)

While James provides a convincing argument as to why teaching should not and cannot be understood as a science—and actually needs tact, ingenuity and, so I wish to add, judgment—he has less to say about the positive side of the argument, that is, the idea that education should therefore be understood as an art. A thinker who has something very helpful and important to say with regard to this question is Aristotle (384–322 BC), and the interesting question he allows us to ask is not *whether* teaching is an art or not, but *what kind of art* teaching is (see Aristotle 1980).

Aristotle's argument starts from the distinction between the theoretical life and the practical life. While the theoretical life has to do with "the necessary and the eternal" (Aristotle 1980, p.140) and thus with a kind of knowledge to which Aristotle refers as science (*episteme*), the practical life has to do with what is "variable" (ibid., p.142), that is, with the world of change. This is the world in which we act and in which our actions make a difference. With regard to our engagement with the world of change, Aristotle makes a distinction between two modes of acting, *poiesis* and *praxis* or, in Carr's (1987) translation, "making action" and "doing action." Both "modes" of action require judgment, but the kind of judgment (and hence the kind of knowledge needed to make such judgments) is different. *Poiesis* is about the production or fabrication of things—such as, for example, a saddle or a ship. It is, as Aristotle puts it, about "how something may come into being which is capable of either being or not being" and about things "whose origin is in the maker and not in the thing made" (which distinguishes *poiesis* from biological phenomena such as growth and development) (Aristotle 1980, p.141). In short, *poiesis* is about the creation of something that did not exist before. The kind of knowledge we need for *poiesis* is *techne* (usually translated as "art"). It is, in more contemporary vocabulary, technological or instrumental knowledge, "knowledge of how to

make things" (ibid., p.141). Aristotle comments that the end of *poiesis* is *external* to the means, which means that *techne*, the knowledge of how to make things, is about finding the means that will produce the thing one wants to make. *Techne* therefore encompasses knowledge about the materials we work with and about the techniques we can apply to work with those materials. But making a saddle is never about simply following a recipe. It involves making judgments about the application of our general knowledge to *this* piece of leather, for *this* horse, and for *this* person riding the horse.

But the domain of the variable is not confined to the world of things; it also includes the social world: the world of human action and interaction. This is the domain of *praxis*. The orientation here is not towards the production of things but towards bringing about "goodness" or human flourishing (*eudamonia*). Praxis is "about what sort of things conduce to the good life in general" (ibid., p.142). It is about good action, but good action is not seen as a means for the achievement of something else. "(G)ood action itself is its end" (ibid., p.143). The kind of judgment we need here is "about *what is to be done*" (ibid., emphasis added). Aristotle refers to this kind of judgment as *phronesis*, which is usually translated as "practical wisdom."

Two points follow from this. The first has to do with the nature of education. Here I would argue, with Aristotle, that we should never think of education *only* as a process of production, that is, of *poiesis*. While education is clearly located in the domain of the variable, it is concerned with the interaction between human beings, not the interaction between human beings and the material world. Education, in other words, is a social art, and the aesthetics of the social is in important ways different from the aesthetics of the material (which is not to say that they are entirely separate). This does not mean that we should exclude the idea of *poiesis* from our educational thinking. After all, we do want our teaching and our curricula to have effect and be effective; we do want our students to become good citizens, skillful professionals, knowledgeable human beings; and for that we do need to think about educational processes in terms of *poiesis*, that is, in terms of bringing about some*thing*. But that should never be the be all and end all of education. Education is always more than just production, and ultimately education is precisely what production/*poiesis* is not, because at the end of the day we, as educators, cannot claim that we produce our students; instead we educate (Latin, *e ducere*, to lead out) them, and we educate them *in* freedom and *for* freedom. That is why what matters in education lies in the domain of *praxis*.

> Educational judgments are …not "technical" judgments but value judgments—and perhaps we can even call them moral judgments.

The second point is that the idea of "practical wisdom" captures quite well what I have been saying about educational judgment. Educational judgments are, after all, judgments about what needs to be done, not with the aim to produce something in the technical sense, but with the aim to bring about what is considered to be educationally desirable (in the three—overlapping—domains I have identified). Such judgments are, therefore, not "technical" judgments but value judgments—and perhaps we can even call them *moral* judgments. What Aristotle adds to the picture—and this is important for developing these views about education into views about teacher education—is that practical wisdom is not to be understood as a set of skills or dispositions or competencies, but denotes a certain quality or excellence of the person. The Greek term here is αρετη, *arete,* and the English translation is "virtue." The ability to make wise educational judgments

should therefore not be seen as some kind of "add on," that is, something that does not affect us as a person, but rather denotes what we might call a holistic quality, something that permeates and characterizes the whole person—and we can take "characterize" here quite literally, as "virtue" is often also translated as "character."

The question for teacher education is therefore not how can we learn *phronesis*. The question rather is, how we can become a *phronimos*; how can we become a practically wise *person*. And more specifically the question is: how can we become *educationally wise*. This is the question of teacher education, and in the final step I will present some suggestions for what all this might mean for the future of teacher education.

The question for teacher education is therefore: how can we become educationally wise?

Virtuosity: Becoming educationally wise

The main idea emerging from the discussion so far is that teachers need to develop the "ability" to make wise educational judgments. This "ability" should not be seen as a skill or competence (which is why I put it in quotation marks), but should be understood as a quality of the person. This means that the overarching orientation of teacher education should be the question of how teachers can become educationally wise. How can we become educationally wise?

One interesting observation Aristotle makes in relation to this is "that a young man of practical wisdom cannot be found" (ibid., p.148). This suggests that practical wisdom is something that comes with age—or perhaps it's better to say that wisdom comes with *experience*. This is one important point for teacher education, to which I will return below. The second point of relevance here is that when Aristotle comes to points in his writing where one would expect a definition of what a practically wise person looks like, he doesn't come with a description of certain traits or qualities, but actually comes with *examples*—and one main example in Aristotle's writings is Pericles. Pericles appears in the argument as someone who *exemplifies* phronesis; he exemplifies what a practically wise person looks like. It is as if Aristotle is saying: If you want to know what practical wisdom is, if you want to know what a practically wise person looks like, look at him, look at her, because they are excellent examples. If this makes sense, it suggests three things for the education of teachers, and we could see this as three "parameters" for our thinking about the future of teacher education.

First of all it means that teacher education is about the *formation of the person* (not, I wish to emphasize, as a private individual, but as a professional). It starts, to use the terms I introduced earlier, in the domain of subjectification. Teacher education is not about the acquisition of knowledge, skills, and dispositions per se (qualification), nor about just doing as other teachers do (socialization), but starts from the formation and transformation of the person-as-educational-professional, and it is only from there that questions about knowledge, skills, and dispositions, about values and traditions, about competence and evidence come in, so to speak—*never the other way around*. What we are after in the formation of the person is educational wisdom, the "ability" to make wise educational judgments. Following Aristotle we can call this a virtue-based approach to teacher education. While we could say that what we are after here is for student-teachers to become virtuous professionals, I prefer to play differently with the idea of "virtue" and would like to suggest that what we should be after in teacher education is a kind of *virtuosity* in making wise educational judgments. The idea of virtuosity might help us to appreciate the other two "parameters" of my thinking about

teacher education, because if we ask how we can develop virtuosity—and here we can think, for example, about how musicians develop virtuosity—we do it through *practice*, that is, by doing the very thing we are supposed to be doing (after all, it is impossible to gain virtuosity in piano playing by studying the flute), and we do it through careful study of the virtuosity of others. And these are precisely the two other "parameters" of the approach to teacher education I wish to propose.

The second component, therefore, is the idea that we can develop our virtuosity for wise educational judgment only by practicing judgment, that is, by being engaged in making such judgments in the widest range of educational situations possible. It is not, in other words, that we can become good at making judgments by reading books about it; we have to do it, and we have to learn from doing it. At one level one may argue that this is not a very original idea, i.e., that we can only really learn the art of teaching by doing it. But I do think there is an important difference between, say, learning on the job (the picking-skills-up-on-the-job-approach the English government seems to be returning to) and reflective practice, or even problem-based learning and what I am after here. What I am after is what we might call judgment-based professional learning, or judgment-focused professional learning. It is not just about any kind of experiential or practical learning, but one that constantly takes the "ability" for making wise educational judgments as its reference point and center (which means that, from day one, student-teachers should be engaging with the question as to what is educationally desirable).

The third component has to do with learning from examples. While on the one hand we can develop virtuosity only through practicing judgment ourselves, I think that we can also learn important things from studying the virtuosity of others, particularly those we deem to have reached a certain level of virtuosity.[11] This is not to be understood as a process of collaborative learning or peer-learning. The whole idea of learning from studying the virtuosity of others is that we learn from those who exemplify the very thing we aspire to, so to speak. The process is, in other words, asymmetrical rather than symmetrical. The study of the virtuosity of other teachers can take many different forms. It is something that can be done in the classroom through observation of the ways in which teachers make embodied and situated wise educational judgments—or at least try to do so. We have to bear in mind, though, that such judgments are not always "visible"—also because they partly belong to the domain of what is known as tacit knowledge—so there is also need for conversation, for talking to teachers to find out why they did what they did. This can be done on a small scale—student-teachers interviewing teachers about their judgments and their educational virtuosity—but it can also be done on a bigger scale, for example through life-history work with experienced teachers, so that we not only get a sense of their virtuosity but perhaps also of the trajectory through which they developed their educational virtuosity. (We should also bear in mind that, as with musicianship, in order to keep up one's virtuosity, one needs to continue practicing it.) And we can also go outside of educational practices and study images of teachers in literature, film, popular culture, and the like. We will, of course, encounter both successes and failures, and we can, of course, learn important things about the virtuosity of educational wisdom from both.

> Each educational moment in which judgment is called for, is in some respect radically new and radically unique.

Conclusion

These, then, are three reference points or parameters for thinking about the future of teacher education: a focus on the formation and transformation of the person towards educational wisdom; a focus on learning through the practicing of educational judgments; and a focus on the study of the educational virtuosity of others. It is what follows when we approach the task of teacher education in an educational way rather than with reference to a language of learning, and if we take the role of the teacher seriously rather than letting this be replaced by evidence and competence, also in order to capture that wise educational judgment is never the repetition of what was in the past, but is always a creative process that is open towards the future for the very reason that each educational situation, each moment in the practice of education in which judgment is called for, is in some respect radically new and radically unique. If we recognize this as being at the very heart of educational processes and practices then, I wish to conclude, we need teacher education that is orientated not towards evidence nor towards competence, but towards the promotion of educational wisdom.

> Good teaching means good crisis management, which involves teaching students how to cope with the struggles and crises of learning.

Endnotes

1. This is a shortened and slightly edited version of a paper originally published in *Research on Steiner Education*, Volume 3, Issue 1.
2. http://www.education.gov.uk/b0068570/the-importance-of-teaching/ [Retrieved 27 Feb. 2011].
3. http://www.reviewofteachereducationinscotland.org.uk/teachingscotlandsfuture/index.asp [Retrieved 27 Feb. 2011].
4. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm [Retrieved 27 Feb. 2011].
5. www.oecd/edu/teacherpolicy [Retrieved 27 Feb, 2011]
6. http://ec.europa.eu/education/com392_en.pdf [Retrieved 27 Feb. 2011].
7. http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf [Retrieved 27 Feb. 2011].
8. From http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf [Retrieved 27 Feb. 2011].
9. This is a rather "quick" way of putting it. Elsewhere I have argued for the importance of the distinction between "learning from" and "being taught by," suggesting that it is the latter notion that really allows us to engage with what is distinctive about education (see Biesta, in press).
10. The idea of "good education" is also meant to provide an alternative for the ideas of "effective education" and "excellent education" which both, in my view, are highly problematic notions.
11. An interesting question here is whether we should focus only on those who exemplify educational virtuosity or whether we can also learn from studying those who do not exemplify this virtuosity. The more general question here is whether we can learn most from good examples or from bad examples. With regard to educational virtuosity, I am inclined to argue that it is only when we have developed a sense of what virtuosity looks like that we can begin to learn from those cases where such virtuosity is absent.

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Independent or Charter?
Study of Teacher Choice: Part One

Liz Beaven

In 1991, the Milwaukee Urban School in Wisconsin opened its doors, bringing the possibility of Waldorf education to inner city children. This marked the first venture of Waldorf education in North America outside the territory of independent schooling. Since then, there has been considerable interest in the potential of Waldorf education in the public sphere, with the development of a number of schools inspired by Waldorf education.[1] Public sector growth has been particularly concentrated in Northern California but is growing in other states. Expansion into the public realm has provoked discussions on principles of practice and philosophy, fundamentally reflecting two major questions: In North America, can Waldorf education exist and thrive in the public sector? What are the immediate and long-term impacts for the Waldorf school movement of development in the public sector?

Seeking to take a fresh look at the dynamics at play between charter and independent schools, I undertook a study of a group of teachers who have had experience in both settings. Rumors abound regarding differences in compensation, approaches to teaching, school organization, freedom and regulations, teacher training, and similar topics; I was interested in exploring any differences through the voices of teachers who have moved from an independent school to a charter and vice versa, hearing what they experienced when they made this move. What emerged was a multi-layered picture of individual biographies, schools, strengths and weaknesses, ideals, practical life, and opportunities and challenges. The study process was illuminated by the thoughtfulness, depth, and open and generous sharing of a group of ten teachers as they reflected on their varied experience, their values, their motivation, and their sincere care for Waldorf education and for the needs of children.

I was interested in exploring differences through the voices of teachers who have moved from an independent school to a charter and vice versa.

This article offers a summary of the study process and key results. A discussion of their possible implications for further research or practice will follow as Part Two in the next edition of the *Research Bulletin*.

Study Context

From its 1919 beginnings in post-war Stuttgart, Waldorf education has possessed a strong social mission. Steiner stipulated that the first school should be open to all those who sought it and should operate free of government control. The social mission of Waldorf education can be seen throughout its history as it spread across the world. In the United States, a wider social mission was less visible for much of the twentieth century; in 1991 a change occurred with the opening of the Milwaukee Urban School and its express intent of bringing the gifts of Waldorf education to under-resourced inner city children. The 1990s were marked by an explosion of growth in both independent schools and public ventures. After sixty-five years of quiet, relatively unnoticed development, it could be argued that expansion into the public sphere dramatically heightened the overall profile of Waldorf education.

Development in the public sphere has not been without obstacles—most notably in the form of a lengthy legal challenge brought by the People for Legal and Non-Sectarian Schools (PLANS).[2] Seeking to protect the integrity and quality of Waldorf education, the Association of Waldorf Schools of North America (AWSNA) became the holder of use of the terms *Waldorf, Steiner,* and *Rudolf Steiner* in educational settings.[3] Public schools inspired by Waldorf education cannot currently become members of AWSNA and are not permitted to use these terms. Despite these challenges, growth in the public sphere has accelerated. The schools have created their own association, the Alliance for Public Waldorf Education, which was founded to provide support for these public initiatives "to promote and support high quality public schools inspired by Waldorf education." (www.allianceforpublicwaldorfeducation.org) Similar to AWSNA, the Alliance has developed a path to membership and holds an annual conference. At its January 2013 conference, it was reported that Alliance membership has increased from 14 member schools in 2000 to 25 in 2012 and 43 in 2013 (38 full members and 5 new initiatives), a robust 58% growth over a twelve-month period. The majority of these schools are in California.

Development in the public sphere has not been without obstacles, but, despite those, has accelerated.

Charter school legislation provided the primary framework for the development of public schools inspired by Waldorf education. Charter schools are public institutions supported by public funds and operating under a specific agreement (charter). Charter regulations were first introduced in Minnesota in 1991; California followed in 1992. Often referred to as "public schools of choice" (www.calcharters.org/understanding), charters now exist in forty-one states and the District of Columbia. Similar to many of the independent schools, they are generally founded out of the interests of a group of parents or teachers. They have greater freedom from rules and regulations than regular public schools and can generally define their values, design curriculum, and hire and fire personnel. The level of autonomy and freedom enjoyed by charter schools varies between states and schools; there is a wide variety of type of charter with differences in structure, degree of autonomy, and salaries. All must meet federal, state, or district accountability standards including completion of mandated student assessments. Public funding does not generally meet the full charter school budget. Unlike some states, California law does not allow the conversion of independent schools to charter status. The charter school movement overall has seen rapid growth; the number of charter school students quadrupled from 1999/2000 to 2009/2010 and charters grew from two to five percent of the nation's public schools. (National Center for Education Statistics)

The Research Project

This was a qualitative study based on interviews with ten participants, each of whom had at least several years' teaching in both independent Waldorf schools and public schools inspired by Waldorf education. The majority had both a California teaching credential and Waldorf certification. Participants were purposively (deliberately) selected after conversations with school administrators and Rudolf Steiner College faculty members and my own knowledge of Northern California schools. I attempted to select participants with experience of a range of schools and to have equal numbers of those who had moved from independent to charter school or charter to independent. This proved to be a challenge; it was much easier to locate teachers who had moved from an independent to charter setting. Every potential participant readily agreed to take part. The study was

primarily located in Northern California due to its number of schools; one participant was living and working in Southern California.

Interviews were confidential; neither individual nor school names have been disclosed. A profile of key characteristics of the participants is offered to provide context for their perspectives:

4 commenced their teaching careers after traditional public school teacher training
8 received their Waldorf teacher training at Rudolf Steiner College, Sacramento
8 hold a California credential (the 2 semi-retired teachers do not)
9 have a certificate in Waldorf education (1 did part of the training but did not complete)
2 had their first teaching experience in traditional public schools
5 began their teaching career in an independent Waldorf school
2 began their teaching career in a charter school inspired by Waldorf education (1 had Waldorf training at this time, 1 did not)
2 have teaching experience in other private school systems (Catholic and Montessori; one began her career in a Catholic school)
4 currently work in an independent school
5 currently work in a charter setting
2 are primarily mentors and teacher educators
3 have kindergarten teaching experience
7 are or have been class teachers
3 are or have been high school teachers
3 are or have been school administrators
2 are Waldorf alumni
10 are parents of current or former Waldorf students
2 have also been parents of students in charter schools
1 has been a parent in "mainstream" public schools
The total years of teaching experience ranges from 8 to 30+ years
Age range is early 40s to late 60s
2 are males, 8 are females

Interviews were semi-structured. I asked the same set of open-ended questions at each interview, but interviewees took the lead and established their own priorities and flow. At times they covered more than one question in a response. Without exception, interviewees answered all questions freely and thoughtfully. I conducted eight interviews in person and two by phone. They lasted from fifty minutes to over two hours. Nine interviews were recorded (audio only) and I took extensive notes. I transcribed the recordings and notes in full after each interview.

When all interviews had been completed and transcribed, I analyzed the transcripts for common or repeated themes and significant differences. This type of research almost inevitably has a subjective element; I attempted to reduce bias by maintaining a standard framework of interview questions and being as vigilant as possible about any tendency to drop into discussion, insert my personal opinion, or select transcript material that matched my expectations. Analysis was initially structured around the interview questions, and responses were grouped into major themes as they emerged. These are summarized and discussed below. Sample participant quotations have been used to more clearly "voice" and illustrate the findings.

MAJOR FINDINGS

Determinants of Choice: Reasons for Moving between Schools

Although there were several unique situations, the major reasons for teachers' decisions to move between independent and charter schools could be grouped into three major categories: social mission and access to education, financial considerations, and a desire to deepen their work.

Social Mission. Social considerations were primary in deciding to move between schools: every participant had concerns about access to education. Several noted that tuition levels

continue to climb, impacting the demographics of the independent schools. One felt that these increases "simply do not seem sustainable." Another reflected on Steiner's intentions, believing he stated that the education would eventually be out in the wider world of education, not confined to independent Waldorf schools. Another expanded on that theme: it was time for Waldorf education "to get out of the monastery and into the missionary" activity. These teachers had been attracted to the pioneering mission of a new charter and its social goals, which they saw as congruent with this ideal. Several noted the greater economic diversity of the charter population, stating that these children, too, were deserving of a Waldorf education but would never have access to an independent school, even with financial aid.

Deepening of Work. Ideals also took teachers from charters to independent schools. In this direction, the ideals were a perceived freedom of practice, a search for like-minded colleagues, and a chance to deepen their work. One recalled a search for greater alignment of beliefs about children and her practice, remembering that she had found it painful to administer standardized tests to second graders. She also spoke of the journey and destiny of the class teacher, of sensing that her work with her class at a charter school had come to an end and that she had been destined to move, called to the independent school by her new class. Another recalled that his charter school had lacked study, with the majority of teachers largely untrained and seemingly uninterested in anthroposophical study. He wanted his school environment to be in accord with the ideals and language of his training; he wanted to be part of a school working strongly with an anthroposophical view of the human being.

Financial Considerations. Only one teacher named financial considerations as the primary reason for changing schools. Others mentioned finances as an important but not deciding factor. Two reported a significant drop in salary—in one case, by almost half—on moving from a charter to an independent setting. For another, a move from charter to independent resulted in an increase. Others had realized a significant gain in income when moving from independent to charter. One noted: "[In the independent school] the salary is really only designed for a single person without dependents," and further reported that the majority of lower school teachers were married women who were not fully dependent on their salaries. Another commented on the difficulty in providing for a family on the current salary and the stress that this caused. Both of these teachers were weighing their choices, juggling their responsibilities and their ideals.

Differences in benefits emerged as a significant motivator for change. A retirement plan—or lack of one—was most frequently cited. Although many independent schools have taken steps in recent years to institute or strengthen retirement plans, these tend to be small and not adequate for full retirement. One teacher, recalling that he had acquired contributions toward state retirement in his early years at a charter school, realized that topics such as retirement had not been part of his thinking as an idealistic young teacher when he had made the switch to an independent school—a lack of awareness he now suspects is "stupid."

The benefit of tuition remission was also discussed: this appeared to help retain teachers in the independent schools, most particularly at the high school level. Several shared stories of colleagues who had stayed at an independent school only for the duration of their children's remission. In one instance, a teacher noted that she would not have been able to afford private high school tuition on a charter school salary, despite the fact that the salary was considerably higher than that of the independent school. She had moved to allow her child to complete his education. It is important to note also that several

participants remained in independent schools long after their children had graduated, and that one participant chose to remain at a charter for several years while paying tuition at an independent school, a decision that was a sacrifice but one she felt gave her more professional objectivity.

In reviewing the *why* of teacher movement between charters and independents, it is noteworthy that for the majority of participants it was a movement *towards* something, not a movement *away*. Most retained very positive feelings toward their prior experiences.

Choices as Parents

For six of the participants, parenting had been the doorway to discovery of Waldorf education and to becoming ever more deeply engaged through volunteer work, substitution, study groups, and then teacher training. Decisions as parents influenced their career paths and their choices of school setting. Every participant is or has been a parent in an independent Waldorf school. Three paid tuition at an independent school, separate from employment or remission. Two had the experience of working "opposite" their children (children were at an independent school, parent at a charter). For five, charter schools had not existed as an option when their children were of school age.

Several described being "hooked on Waldorf education" as a non-negotiable reality for their children. One noted: "At one point we realized we had spent more than $100,000 on their education, and agreed that we were fully committed to spending whatever it took to keep them in Waldorf." (At that time she had not begun teacher training.) Another recalled the "huge sacrifice" that had been required to provide an independent Waldorf education—there were no charters available as an option at that time for either of these families. She went on to observe that tuitions have continued to climb and that attendance at an independent school today would be "out of the question" for her family.

Several noted the importance of tuition remission and, by extension, employment in an independent school. One recalled the impact of parenthood on her choices, weighing the beauty and richness of an independent setting against a reduction of financial stress in a charter. Ultimately, she concluded, she would not place her children "just anywhere," but could imagine a charter setting that was right for them—a school that was working out of an anthroposophically-inspired understanding of the human being. Her children are happy in their current school, but she noted, wryly, that other factors needed to be considered: "[Economic] survival trumps a beautiful campus."

It is noteworthy that for the majority of participants it was a movement towards something, not a movement away.

Two participants were now grandparents, watching their alumni children make decisions about education. One stated that it was "really hard as a grandma to see that my children can't afford a Waldorf school." Another has suggested charters for her grandchildren, based on the burden and stress that paying an independent school tuition would cause. Observing another of her children, she noted that, even with a high income, "it is a stretch" to be at an independent school.

Two participants had had a poor experience with one of their children's teachers (one in a charter school, one in an independent school). Despite this, none expressed doubt or regret about their decision to give a Waldorf education to their children. One spoke of the gift of having a child with learning challenges seen as a spiritual being who was forming a destiny rather than as someone with a problem to be "fixed." Those with current or recent high school students did not feel that charters were a viable option; the independent schools offered

a much richer experience.[4] One observed: "My child is who he is because of the opportunities he was afforded as a matter of course." They agreed that the charter option is becoming more viable as the high school charter work strengthens, and one commented that the absence of independent tuition payments could free up opportunities for enrichment outside of school.

Collegial and Inner Work

Responses to these two topics often intertwined. Participants commented on faculty study, relationships with colleagues, and their personal inner work. In general, there was agreement that the independent school environment offered more support for inner work and study.

Although faculty study, including study of Steiner's works, was described in both settings, several felt that colleagues in the charter schools seemed overall to be less connected to anthroposophy. This varied depending on the level of training of faculty and the number of teachers who had come from a strong independent school environment (in several schools, many teachers were currently receiving training). One reflected that, although she considered her charter school to be very strong, there had been more time and encouragement for inner work at her independent school. She attributed this in part to the general "ethos" of the school and in part to its more rigorous program with significant demands on teachers. She also felt that the question of inner work needed to be looked at before and after settlement of the PLANS lawsuit; she had witnessed a greater freedom to study and discuss these aspects once the case had been resolved.

Colleagues in the charter schools seemed overall to be less connected to anthroposophy.

Another noted that in an independent school, inner work and practice combine in "an open and easy flow." One observed that this depended not only on school setting, but also on one's role within a school: class teaching meant working "more directly with the children and the inner work flowed from that," but the teacher had less time: "In my current position I have more time for inner work and can choose to do it or not. For me, this is not a question of private or public."

Several related inner work and collegial relations, observing that, overall, in an independent school there was more discussion of inner work and an anthroposophical framework: "Most of the teachers were versed in anthroposophy and this was the basis for discussions." In contrast, said another, in a charter one's work was "more private, not an easy conversation piece. … [that it was] not easy to bring this across [to colleagues] unless they have background" and, at least for this teacher, therefore more difficult to maintain on one's own. Another added it is "easier to do the inner work when you know colleagues are doing it too and can share with each other some of the struggles, can give tips. … If colleagues are doing similar work, it is easier." One teacher described an independent school's "depth and total commitment" compared to more external support in a charter, but wondered whether this commitment was sustainable "with the young people coming in." She described mentoring conversations in an independent school, during which she "easily brought in the spiritual part, working with angels, et cetera," compared to in a charter setting where she felt "a lot of tiptoeing had to be done." However, she cautioned from her experiences in many schools: "Collegial work seems to be all over the map between schools. A teacher has to want to do this work."

For others, a feeling of isolation actually strengthened their work: "In some ways you have to work harder in a charter school—aligning personal beliefs with what is being brought to children, digging deep,

maintaining consistent study. Here [in an independent school] it is almost easy to fall asleep—study is built into the regular rhythm and it was tricky to do that in the charter [during the PLANS case]. You had to work much harder to warm the space in the charter school. … Here there is a long line of teachers standing behind you; the walls have been worked and you feel this support." Another observed: "In some ways, I am much more aware of it, it is a far more useful tool. I see results and the power of it; in the private school everything was so enmeshed in everything, families were knowledgeable and kids overall came healthy. I see inner work as homeopathic and powerful." For her, the impact of study and inner work was more strikingly evident and potent—"like kryptonite"—in a charter setting working with less advantaged children.

Most described a stronger collegial environment in the independent setting.

Most described a stronger collegial environment in the independent setting where it was supported by a much greater amount of time spent together in meetings and events and more opportunities for contact, communication, and collegial warmth—or conflict.

School Structure and Organization

Participants were asked to comment on the impact of school structure and organization. They highlighted areas in which the different model of the charter or independent school impacted their work. Major topics included administrative structure and support, workload, and resources.

The quality and style of the leaders is hugely important, no matter the model.

Administrative Structure and Support. School leadership was identified as the most obvious and consistent difference. Charters operate with a director or principal who has significant authority and the capacity to make decisions that impact classrooms, teachers, and students. This includes the evaluation of teachers; the principal is responsible for the quality of the teachers and education. One teacher described a goal of the director model as "freeing teachers to teach." Part of the director's work was seen to be "protecting teachers from cranky parents"—this was mentioned repeatedly. Teachers experienced a clear structure of protection and support, "a system of boundaries; [an issue] goes through many layers and can often be figured out. … The teacher can keep teaching" while this takes place. "Parents know there is a line they cannot cross."

Independent schools, even those with a strong administrative function, practice distributed, more horizontal leadership; teachers directly experience "carrying" the school through participation in a College of Teachers or other core group and work on many committees. One teacher observed: "I got put into everything—the College, committees, … carrying the school—hiring, firing, listening to … parents." The positives of peer-based administration in a school were noted: a supportive and warm atmosphere, peer mentoring, and a community life that is developed through shared work and in meetings. One administrator identified peer-based evaluations as a downside of this more collegial working: "It can be hard for colleagues to say the difficult things." Most agreed that the quality and style of the leaders is hugely important, no matter the model.

Workload. School structure directly impacts teacher workload. There was general agreement that, despite comparable or greater classroom contact hours required in the charter schools, the workload of the independent school is more demanding. One noted that he had far more classroom hours in a charter, but when he switched to an independent school he was recruited for the College of Teachers

and joined numerous committees. There were "long, long meetings deciding things for the whole school." This level of engagement, which he had sought, came at a cost: "Faculty children are often the last to be picked up from aftercare." Another observed that there was "much less of a burden" in the charter school. A teacher could stop at the end of the day when "the business of school is closed." There were "far fewer demands outside of school hours." However, another noted that a certain level of demand is inevitable in Waldorf teaching: "You have to be constantly learning and studying." She felt that, overall, teachers in the charter school were less willing to engage in this way, but wondered if this was more of a generational influence also impacting independent schools. This thought was reinforced by one of the younger participants who observed that the workload was heavy in each setting, but that in the independent setting, so much time was spent on parent work that it went "over the top." She saw colleagues who she felt were giving up their lives for the school, something she was not willing to do.

The workload of the independent school is more demanding.

Student Resources. Teachers described differences in physical resources, but there was no uniformity of response. Some independent schools had larger campuses; others were much more cramped. One teacher described finding a "treasure trove of Mercurius supplies" in an independent school and the added resource of a well-established teacher library. Independent schools tended to have greater human resources in the form of many years of practice and an atmosphere that encouraged collegial sharing.

There was uniform agreement that the charters were better equipped to support students with special needs. Teachers noted that, although most independent schools have made great strides in provision of learning support, the charters have a "huge plus" with assessment, access to psychologists, speech therapists, resource specialists, student study teams, and a clear process for the creation of an independent learning plan. This contrasted with the independent setting in which it "falls to the teacher to create curriculum, main lesson, assess students, and set goals"—with varying degrees of success. Although they agreed universally that student support was superior in the charter schools, a note of caution was sounded. One teacher felt that the accountability requirements of the public system could lead to over-early interventions and a tendency to label rather than allow the unique destiny of a child the time and space to emerge. When it comes to practice "on the ground," however, there were real and growing challenges to be addressed: "I get the principle of extra lesson or therapeutic eurythmy, but it does not solve the issue that right now, right in front of me, there is a gap in abilities. This child is at third grade in math and the class is at fifth grade. What can I do?"

Charters were better equipped to support students with special needs.

Working with Students and Parents

Participants were asked to reflect on differences between the parent and student communities. The most common observations centered on socio-economic differences and their impact.

Teachers described the independent school community as much wealthier, with more parents with college educations and professional occupations. Overall, they reported only slightly greater ethnic diversity in the charter schools, with one teacher observing that her city independent school was more diverse than her suburban charter school had been.

Income differences showed in a variety of ways. One teacher reported that families in the charters were usually larger with more of a

"down-home" feeling. Families were generally more local—"from the neighborhood, whereas the independent school drew from the entire county." There were conflicting reports on the impact of income on ability to support the school: one felt that charter parents were more available to volunteer, while others felt that parents were more likely to volunteer in an independent setting where there were more two-parent homes and more parents at home or with part-time jobs.

Entitlement formed a recurrent theme: parents in the independent schools were paying high tuition and this often came with expectations. One administrator noted that often he heard statements such as: "I pay, so I should be able to have my child in the advanced orchestra group." Issues around payment came up a lot: "struggles about paying, righteousness, wanting a say in decisions, struggling with a lack of money for tuition." Although parents in charter schools may have serious financial difficulties, in most instances this does not impact their ability to have their children in the school.

Entitlement formed a recurrent theme: with high tuition came expectations.

Several commented on a greater weight of parent expectations in the independent schools: "I find I spend so much time with parents. Their expectations are huge." This teacher found that she was asked frequently to justify what she was doing, explain herself, and compromise with parents. She noted that, from the earliest grades, these parents had a high end-goal in mind, whereas at the charter school, many parents "would be very happy with a California State [university] education." Another commented that she had received more phone calls out of hours in her first two weeks in an independent school than in the previous four years in a charter, and she was relieved when the school ceased publishing faculty phone numbers in an effort to provide privacy for teachers. In contrast, there were several comments on the absence of parents at charter schools; this was particularly noted at the high school level, where many homes had little culture of schooling or confidence being in a school setting. They were "much more removed. …I never see some of the parents." All teachers stated that they had found parents in both settings to be generally respectful, appreciative, and supportive.

In the public setting, "Parents know there is a line they cannot cross."

Discussions of students also reflected socio-economic differences. One teacher found that there was not the same level of agreement among parents in her charter school, although she felt that this was increasingly true in the independent schools as well. As a result, children tended to be less protected. One observed "a certain heartiness" in young children in a charter kindergarten—they were perhaps less protected but also less materialistic, with fewer worldly possessions and experiences. Many described the gratitude of charter school children. One teacher who had worked with inner city children commented: "They were so openly grateful, so open to new things, anything with the hands excited them, something that they could do on their own." She found it amazing to experience this level of gratitude, despite an almost overwhelming range of problems [this was a very poor inner city venture] and contrasted it with her experience of independent schools where "the children don't expect to be waited on, but school is nothing out of the ordinary." One teacher found the children at the independent school to be "more open and trusting"—he attributed this to an environment that had fewer restrictions and regulations and believed that the result was one of greater warmth.

Several teachers commented on the impact of admissions criteria: in the charter school

they knew that they had to work with the children in front of them; they could not be turned away. One felt that the independent school's freedom to select children made a significant difference. However, others noted a counterbalance in the independent schools' need to maintain enrollment and retain students, a pressure not lost on parents and the subject of comments from several teachers.

It was interesting to review comments from high school teachers. Charter high school work is relatively new and, as such, offers a fascinating forum for study. The high school teachers in this study noted that their students (most of whom had no prior Waldorf education and many of whom came from low-income homes) had no experience of artistic activity. They were "not accustomed to having independent thoughts, creating an idea, imagining a different way." The teacher ascribed this to the students having been "taught the answer" in their earlier schooling. Many came from homes that lacked resources; they had no understanding of a school as a community and did not know that "learning can be fun, exciting, or cool." This contrasted with independent school students of the same age where "you could ask the students to do anything; they may complain but most have the will to do the work. They are willing to discuss their thoughts; you are very lucky to get this at the charter."

The impact of admissions criteria: in the charter school the children could not be turned away.

Despite these differences, this teacher found no real differences in how she related to students: "I look at who is in front of me and adjust." The high school charter movement is relatively new and the school reported on here currently requires its teachers to modify and remediate in many areas. It will be interesting to see how student responses change as charter schools becomes more established and familiar.

Endnotes

1. The Association of Waldorf Schools of North America (AWSNA) holds the service marks for the terms *Steiner, Rudolf Steiner,* and *Waldorf* in educational settings in the USA. After consultation with AWSNA, the term "school inspired by Waldorf education" has been employed in this article.
2. The PLANS case argued that anthroposophy, the philosophy that inspires and informs Waldorf education, is a religion and that as a result of this, any use of Waldorf pedagogy in the public sphere violates First Amendment separation of church and state. The case began in 1998 and went through multiple appeals, and was finally dismissed without merit in 2011.
3. AWSNA's web site states: "Waldorf," "Steiner" and "Rudolf Steiner" are internationally registered service marks in the field of Education. In the United States, the Association of Waldorf Schools of North America (AWSNA) holds the rights to these service marks through the U.S. Patent and Trademark Office. Only schools, institutions or organizations which have received express permission from the Association of Waldorf Schools of North America may represent themselves as Waldorf schools or use the words "Waldorf," "Steiner" or "Rudolf Steiner" in their names, subtitles, and program descriptions. Only independent schools affiliated with AWSNA and meeting AWSNA's criteria for use have been granted permission to use these service marks. (whywaldorfworks/04_AWSNA/documents/PDFKB3.pdf), revised 04.09.2009)
4. There are currently two charter high schools inspired by Waldorf education in California: the George Washington Carver School of Arts and Sciences in Sacramento (opened in 2007) and the Credo School of Arts and Sciences in Sebastopol (opened in 2012).

Liz Beaven *has over twenty-five years' experience in Waldorf education as a class teacher, school administrator, and teacher educator. She has worked actively with questions of public and independent education for over ten years. The research reported in this article was conducted during a recent sabbatical period and reflects one of her major interests: the expansion and forms of Waldorf education in the modern world.*

Language, Art, and Deep Study

Elan Leibner

In the Spring 2011 Issue of the *Research Bulletin* (Vol. XVI No.1), I published an article titled "An Outline of a Study Methodology." The article described a four-step protocol for studying demanding texts. In Fall 2012, while preparing to describe this protocol to an organization unfamiliar with Steiner's work,[1] I realized that there is a whole background to this approach, a background that I had taken for granted while writing and speaking to Waldorf colleagues. After a few conversations, the idea that there may be some benefit to an explicit description of what was assumed in the original article motivated this second piece. At the end of this article, I have re-presented a brief description of the methodology itself. The spoken character of the original presentation has been left largely intact.

The Twofold Nature of Language:

In every language what is originally a connected and unified whole is broken into two parts: signs and meaning. Written and spoken languages are only the clearest examples of meaning-making. Body language, facial expressions, and the use of color, tone, symbol, clothing, and every other manner through which we communicate thoughts, feelings, and attitudes—all follow the same principle. On the one hand there are perceptible signs (letters, gestures, sounds, and so forth), and on the other there are never-perceptible meanings. No meaning is ever sense-perceptible. Obviously, words written in a language you do not understand convey no meaning for you, and culture-specific gestures (e.g., "thumbs up") are not always understood by persons in a different culture. The meaning is found not *in* the words (written or spoken) or gestures, but *through* them. Words also don't have a finite meaning. That is why new thoughts can be expressed with "old" or familiar words, and also why those familiar words can be misunderstood in their new arrangement.

On the one hand there are perceptible signs, and on the other there are never-perceptible meanings.

Secondly, for a language exchange to exist, we have to have a speaker and a listener to the speaking. I use the terms "speaker" and "listener" here in a broad sense; "author" and "reader" are also applicable. The speaker experiences some meaning, produces a set of signs, and the listener has to interpret those signs and arrive at the intended meaning of the speaker. We can speak of *mis*communication only because the assumption is that proper communication *could* have taken place, that is, the speaker and the listener could have ended up understanding the same thing (the same meaning). An exchange assumes two entities capable of producing and understanding meaningful signs. We cannot speak of a miscommunication in the conversations that I have with myself in the shower.

Summarizing, then: in language we have perceptible signs, hidden (non-sensory) meaning, a speaker, and a listener. This summary sounds simple, but it points to fields of study that extend well beyond the theme of this article. We will restrict ourselves here to the study of texts, but the principles we explore have wide and far-reaching consequences. They point towards a view of the world, including the natural world, as having the nature of a text, rather than

being a world of objects, and to a spiritual discipline aimed at reading this text rather than reducing it to non-meaningful formulations. A text implies both interconnectedness amongst the separate "words" and an author. There is a human and natural ecology implied that we have to leave largely in the background.

The Four Levels of Language:

For simplicity and clarity, I will discuss written and oral language here, though other forms of speaking in the sense just mentioned would also apply in most instances. Also, importantly, the levels are not separated by stiff boundaries. Most uses of language flow between levels, and there are innumerable midpoints as well. Think more watercolor wash than oil paints. The transitions are not sharp.

1. The first level of language is what we can call *Information*. Examples of this level are owner manuals, ordinary directions, and road signs. The essential characteristics of informational language are that: 1) the meaning is finite, and 2) it is intended to be comprehended entirely and with as little effort on the part of the listener as possible. In fact, the success of this level of language is measured by precisely these comprehension-criteria: did the reader fully understand how to operate the camera after looking at the manual? Did the driver find the destination? Did the soldier understand the command? The aim is to have as little ambivalence in the text as possible, with no room for opaque language. If the listener does not understand the communication readily, then it has not been a successful exchange. Anyone who has ever tried following poorly given directions knows how unsatisfying they can be. Conversely, a well-written set of instructions makes the work simpler to accomplish and more successful. In short, on the informational level we want the signs to reveal the full meaning and the meaning readily discerned by observing the signs.

2. The second level of language is what I would like to call *Discourse*. This is the level on which the exchange between the participants is ongoing, the roles of speaker and listener change at least occasionally, and which is open for new meanings to emerge while it is ongoing, and perhaps even later. The archetype of this level of language is a *good question*: even the questioner does not fully know the answer, and there is a common sense that the realm of meaning is fluidly entering the exchange, appearing as signs in the perceptible world. The discourse differs from the informational level in its quality of unfinished-ness. New ideas are possible and even welcome. However, one requirement of this level (that distinguishes it from the next level) is that the realm of meaning should still emerge as fully expressed as possible, so that the participants still end up with a common, *thinking* understanding of the meaning. Less of the meaning is conveyed at the initial stages of the signs than was the case on the informational level, but we want it, in the end, as fully fleshed out as possible.

The discourse differs from the informational level in its quality of unfinished-ness.

Just this once I want to point to an intermediate level between the four main ones, so the basic fourfold structure is not understood as being too rigid. For example, an *argument* can happen entirely on the informational level, but it can also reach towards the level of discourse by becoming a conversation. The main difference has to do precisely with the willingness of the participants to consider new possibilities. Inasmuch as they strive only to prove the rightness of their pre-existing views, the argument will remain informational in character. But where there is openness, a discursive level can be reached. Similarly, when appeal is made to emotions through the use of charged terms, the next level is woven into the experience, albeit often in its debased aspect.

3. The third level of language is *Poetry*. With poetry we are entering a level of language in which the meaning is no longer comprehensible through thinking alone. There is always a quality of feeling that is added, and that has to be experienced by the listener (or, more commonly, reader) if the poem is to be "fulfilled." A good poem captures a quality of feeling in such a way that the reader can find it as well. A bad poem is still a set of signs of the poet's experience, but those signs give the reader no meaningful experience. With good poetry there are qualities that cannot be expressed in informational-level alternatives. It captures something that has to be felt, and the feeling-comprehension of the reader has to capture the feeling-expression of the poet. We are now dealing with a level of meaning-making that requires what Georg Kühlewind calls *cognitive feeling*. We will return to this shortly, but for now, note that the signs already convey the potential meaning less fully than at the level of discourse. We can point to legends and myths as forms of poetic language. Their meaning is multi-layered and requires effort and inner participation on the part of the reader. A good novel is also poetic in this sense; the distinction between prose and poetry is not important here. When signs are used to manipulate the emotional state of the listener on behalf of the speaker's agenda, we meet the debased form of the poetic level. This is how most forms of propaganda and advertising operate.

4. The fourth level of language is *Demanding/Meditative Texts*. On this level, the signs are but tips of immense icebergs (or, better perhaps, "light-bergs") of meaning. The writer or speaker has had a fully conscious experience of profound spiritual truth, and has tried to cloak it in words that, however, can only be understood as a kind of code. There are communications of this nature in all esoteric traditions. Comprehension on this level of language is intensely demanding of the reader or listener (hence the designation), and requires an exceedingly mobile level of inner experiencing. One of its most salient characteristics is that it cannot be understood unless the reader is willing to give up the certainty that pervades the simpler realms of language. By demanding this flexibility, the text can lead to comprehension that transforms the reader. When we talk of using art in deep study, it is for texts written at this level that we are directing our efforts. There are many forms of harm that can befall those who try to understand demanding texts on a simpler, especially the informational, level. For example, some religious groups try to interpret Scripture as an informational text, i.e., literally. Inevitably, the result is a cocooned and in-bred framework of untenable concepts, such as the idea that the world was created in six twenty-four-hour periods.

On [the demanding] level, the signs are but tips of immense icebergs (or "light-bergs") of meaning.

Art:

As already mentioned in the case of poetry, art is also a special case of meaning-making. The artist utilizes a medium (color, form, sound, movement, words, and so on) to clothe in sense-perceptible vestments an experience from the realm of meaning. This experience need not have been fully conscious, but it must, if it is to be meaningful to others, have some communicable dimension. Great art, said Paul Klee, does not reproduce the visible; rather, it makes visible. We can ask: makes *what* visible? In the sense of our line of thought, it is *meaning* that is made visible (or audible, etc.). But this "making visible" has the special quality I mentioned earlier: perceiving it requires a kind of feeling. This is not feeling in the sense of emotions. It is not a me-feeling, but rather a feeling for the qualities present in the artwork, a feeling of "that." This is why art

appreciation can grow over time and even be taught. At first we have me-feelings: I like it, or don't like it, and so on. Later, we can put these emotions aside and contemplate the art on its own terms: we can live into the yellow streams and the black lemniscate almost as though we were painting them, streaming with our consciousness into the work in order to discover its ineffable qualities. The stories of its creation, the technique, the materials, the composition, all of these can add layers of experience that enhance our comprehension of what "it says." Of course, we can still like it or dislike it, but we can understand, or rather experience directly, its qualities regardless of our emotional response.

Artistic creations, as with the poetic level of language, are nearly always incomplete; they require an audience to experience them in order to become "fulfilled." Almost all artists will tell you that the most highly valued opinion for them is the opinion of their peers. When someone else who speaks your artistic language finds your work good, there is a sense of completion that even selling it for very high prices cannot give.

Artistic creations are nearly always incomplete; they require an audience to experience them in order to become "fulfilled."

There is an exception to this general principle, and it is an important part of the process I want to describe next. When art is created in the process of studying demanding texts, the creator of the art can also be its audience, and in that sense it is complete because one person can be both the artist, or speaker, and then later on, the listener. We can tell ourselves artistic stories. This rarely satisfies artists in other situations. But the artistic phase of the study does not have to satisfy others; it is a step in a ladder of comprehension that each participant creates for him/herself. We do not have to be good painters, eurythmists, or poets to use those arts meaningfully during the study process.

An Approach to the Study of Deep/Demanding Texts:

Writing a summary: Write the passage in your own words (10-20% of length). For a longer text, summarize each theme within the text (every 1 to 4 paragraphs, typically). Groups can divide the text into themes and have each person or small group summarize one section. Regardless, read the summaries in order, first forwards and then backwards from the end to the beginning.

Reducing the summary: Reduce each summarized passage to a phrase, e.g., as a chapter title. Repeat the reading forwards and back. Next, have a discussion on the movement of the themes in the passage or text. Try to "see the text from above."

Artistic engagement: Render the summarized segment artistically. This can be in poetry, painting, drawing, music, movement, sculpture, or any other artistic language. It is better to try for the gesture of the passage than for specific details from it, since we are now trying to develop the cognitive feeling, and we are seeking for movement rather than "stuff." When the entire passage or text has been rendered artistically, the participants can read the summaries and the chapter titles as they move from section to section of artistic renderings, even backwards again, and then sit quietly and ponder the artistic rendition and what it "says."

Questions leading to meditative verses: Each participant tries to find a real question, some theme from the text that s/he wants to contemplate further because it feels pregnant with potential meanings that have not yet become perceptible. Then, the whole meaning of the passage is brought full circle back to a meditative text, only this time it is the student's own creation. By trying to express the dynamic meaning of the text in a new dynamic,

meditative form, the student can attempt a level of comprehension that approaches the original experience of the author. As lesser lights than the author's we follow, we accept that our verses will not equal the originals, but, nevertheless, we come nearer to the level that Kühlewind calls *cognitive will.* This is the level of cognition in which everything is movement, willed, but with a "soft" will, a receptive and gentle will that is the essence of every truly creative act. Demanding texts are written through this kind of *gentle will,* and should be approached only in the same way. We are trying to become receptive, but actively receptive. The artistic phase served as a *stairway to heaven,* if you will, and now if we are to "walk with the angels," we have to become writers of code, capturing in few signs the wide fields of meaning in which our contemplative process has landed us.

If we follow the gestures of the discursive, the poetic, and the meditative levels of language through this study sequence, we see that the three soul forces have to undergo a kind of inversion:

Thinking, which in the ordinary course of life has an acquisitive nature, has to become intuitive, that is, to merge with the spiritual realities around it.

Feeling, which is ordinarily self-directed in the form of emotions, has to become cognitive and sense the qualities of things.

Will, which is ordinarily an outward, forceful element, has to become the "soft will" of receptive, meditative knowledge.

In this way, the study of demanding texts can become a path of discovery similar in nature to spiritual practice.

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Endnote

1. Original lecture given to *The Academy for Jewish Religion,* Nov. 11, 2012.

Elan Leibner *was a class teacher at the Waldorf School of Princeton for eighteen years. He is the editor of the* Research Bulletin*, chaiperson of the Pedagogical Section Council, and a freelance mentor and consultant to schools. He can be reached at waldorfresearchbulletin@gmail.com.*

Report on the Online Waldorf Library

Marianne Alsop

The Online Waldorf Library, affectionately referred to as OWL, is now twelve years old and continues to offer a wide variety of resources on Waldorf education.

Due in part to a remarkable collaboration between the Research Institute for Waldorf Education, AWSNA (Association for Waldorf Education in North America) Publications, and WECAN (Waldorf Early Childhood Association of North America), the eBook project, envisioned only four years ago, has brought about the online availability of over 130 eBooks dealing with Waldorf education. Each eBook, offered as a pdf file, is free to download to OWL site visitors. Included are all volumes in the Foundations of Waldorf Education series, teacher-education and class-teacher materials, plays for class teachers to adapt and use, North American Pedagogical Section publications, six volumes of articles compiled from the *Journal of Anthroposophical Medicine,* and many more. To view a list of all eBooks, from the OWL Home page click on "Books," then on "eBooks" which appears at the top of the list.

In addition to the inclusion of ever more eBooks on Waldorf education, the Research Institute and OWL are arranging for translation into Spanish a number of titles on early childhood and class teaching themes. Our first effort, *Sobre el juego del niño* by Freya Jaffke, is now one of several translated books available on OWL.

In our "Journals" section you can find all articles in the Pedagogical Section journal Rundbrief from 2009 to the present and a listing by issue of all articles in each issue from 1995. Previous issues of the *Research Bulletin* and *Gateways* are made available online as soon as the newest editions are published.

Questions and research inquiries are always welcome. Feel free to contact me at *owlibrary @sbcglobal.net*. Your interest and support are greatly appreciated.

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About the Research Institute for Waldorf Education

The Research Institute for Waldorf Education (RIWE), founded in 1996 in order to deepen and enhance the quality of Waldorf education, engages in sustained dialogue with the wider educational-cultural community and supports research to serve a wide range of educators in their work with children and adolescents.

The Research Institute supports projects dealing with essential contemporary educational issues such as attention-related disorders, trends in adolescent development and innovations in the high school curriculum, learning expectations and assessment, computers in education, the role of art in education, and new ways to identify and address different learning styles.

As a sponsor of colloquia and conferences, the Research Institute brings together educators, psychologists, doctors, and social scientists for discussions on current issues related to education. We publish the *Research Bulletin* twice a year and prepare and distribute educational resources, including a growing collection of eBooks and articles to help teachers in all aspects of their work. These are all available without charge at the Online Waldorf Library (OWL), which is overseen by the Research Institute.

As an initiative working on behalf of the Waldorf movement, the Research Institute receives support and guidance from the Pedagogical Section of the School of Spiritual Science and financial support through the Waldorf Schools Fund, the Waldorf Curriculum Fund, and the Association of Waldorf Schools of North America (AWSNA), of which the Research Institute is a daughter organization. The Research Institute is a 501(c)(3) tax-exempt organization and accepts contributions through its annual giving campaign and special appeals.

Summary of Activities Supported by the Research Institute

PROJECTS

The following projects are in process or have been undertaken by the Research Institute:

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*

Subject-Specific Colloquia, 2000–2010:

Chemistry
Mathematics
Computer and Information Technology
English
United States History
Life Science and Environmental Studies
World History – Symptomatology
Physics

Proceedings for all of the above are available from AWSNA Publications at: www.whywaldorfworks.org.

RESOURCE DEVELOPMENT

Online Waldorf Library, a website of resources for Waldorf education
Themes in Waldorf Education, compilation of Rudolf Steiner's indications on teaching language arts and mathematics
Education, Teaching, and Practical Life by Rudolf Steiner
Developmental Signatures – new source book
Earth Science by Hans-Ulrich Schmutz
Over 200 articles placed on OWL from Steiner Library
150+ eBooks created and placed Online for teacher reference

Please visit our website at:

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