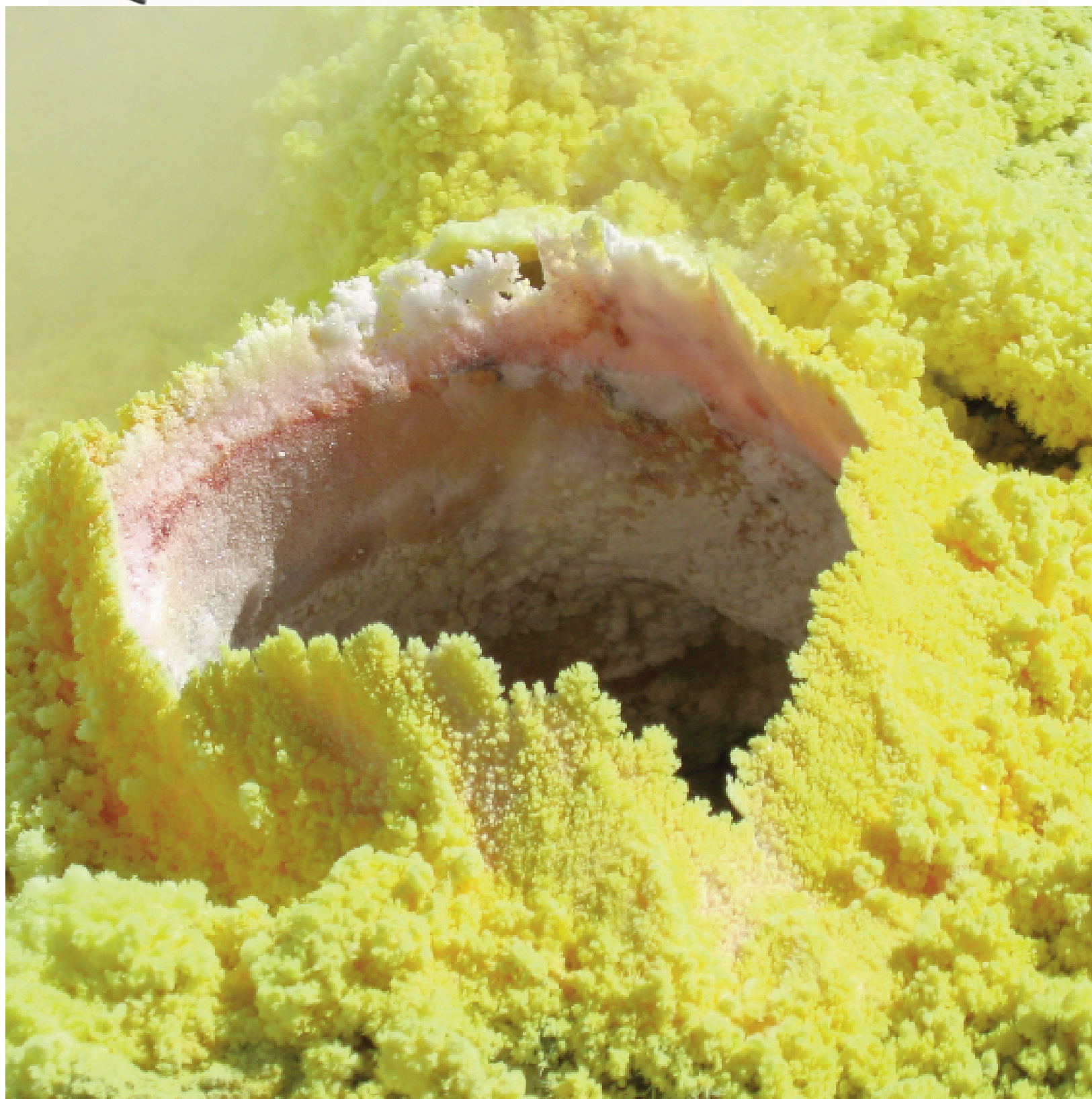




ATHENA

Association for Therapeutic Eurythmy in North America

SPRING 2011



A Spring Rain Song

He was hidden in the nascent
emerging buds of the
lilac branches, singing his
ornate, urgent, compelling song
to the back of the hall
to the ladies, to the heavens
letting the world hear his
beautiful, erudite trill
shared in joy,
piercing the momentary gloom
of the gentle spring rain

Raymond A. Foss

ATHENA

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2011-2012

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Spring comes on the World

Spring comes on the World –
I sight the Aprils –
Hueless to me until thou come
As, till the Bee
Blossoms stand negative,
Touched to Conditions
By a Hum.

Emily Dickinson

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Front Cover: Beautiful yellow sulfur deposits are often
seen around the rims of volcanic vents.

Back Covers: Photos of iron and sulfur

ATHENA NEWSLETTER

Please send contributions to:

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Deadlines: March 1 and Nov. 1

Although welcomed,
the viewpoints expressed in the
ATHENA Newsletter are not necessarily
those of the publisher.

LETTER FROM THE PRESIDENT

“Hope is not a feeling. It is not the belief that things will turn out well, but the conviction that what we are doing makes sense, no matter how things turn out.”

Vaclav Havel

Pile the bodies high at Austerlitz and Waterloo.
Shovel them under and let me work –
I am the grass; I cover all.

And pile them high at Gettysburg
And pile them high at Ypres and Verdun.
Shovel them under and let me work.
Two years, ten years, and passengers ask the conductor:
What place is this?
Where are we now?

I am the grass.
Let me work.

Carl Sandburg

Dear Members,

We are springing forward. We who live in the northern climates wait patiently for warmth and new growth. This year the hopefulness of spring means so much more as all around our earth people are experiencing so much suffering. It brings to mind the healing forces Carl Sandburg speaks of in his poem. He wrote of older sufferings and tragedies and yet, he reminds us there will be change and recovery.

ATHENA is looking forward to our next big endeavor, the two-year training in dental eurythmy. We know from pedagogy that the whole of the etheric body is manifested in the teeth. This will lead to a wonderful deepening of our work.

This issue continues our study of the constitutional types with a discussion of the sulfur/iron polarity. The newsletter always welcomes input from members, especially case studies or informal summaries of the work we do with patients. Please take a minute to write down the healing and transformation you see in the people with whom you work. It is the heart of our communication with one another.

Let us all welcome the new members to our profession, as the TETNA graduates join us!

Blessings on our work!

Mary Ruud, President of ATHENA

PS If you would like a copy of the lectures from Dr. Broder von Laue and the eurythmy work from the 2010 conference in Denver, either in a booklet form or online, contact Mary Ruud at <mhruid@aol.com> or <livingartseurythmy@gmail.com>.

LETTER FROM THE EDITOR

Dear Members,

Welcome to the spring issue of the ATHENA Newsletter, with many gifted contributions! Once again President Mary Ruud has offered invaluable help in soliciting articles and providing photographs and poetry. Dr. Bertram von Zabern offers a most comprehensive article, “The Formation of Memory in Children with a Strong or a Weak Sulfur Metabolism,” well worth rereading to glean from the many layers of the depth of his experience. I am grateful that he shed light on the Circle/point Meditation, which, when practiced, will awaken a sense of metamorphosis within one.

Brigida Baldszun submitted the article by Dr. Margaete Kirchner-Bockholt, which just happened to address the therapeutic eurythmy for the sulfur-rich or the sulfur-poor type of constitution! It is our intention to provide practical examples of therapeutic eurythmy and your contributions will document the work and be of help to other therapeutic eurythmists. Please consider writing for future issues. The theme of the Constitutional Types will continue to be the main focus, our golden thread for the next few years.

Maria Walker Ebersole reports on the graduation of the Therapeutic Eurythmy Training of North America. ATHENA Board Members invited the graduates to publish their research papers in this Newsletter and two are included here. Past graduates are welcomed and encouraged to do the same. Please know that we are interested in your ongoing work in the field of therapeutic eurythmy. As busy as Glenda Monasch and Dr. Adam Blanning are, they continue to write for other publications and offer their articles to us, as well. Thank you to one and all for making this another informative issue well worth sharing!

Maria Ver Eecke

PS The recent graduates of TETNA wish to acknowledge both David Reé, who sang “In diesen heiligen Hallen” from the Mozart’s Magic Flute (scene 3, Sarastro’s solo) and the “Camphill Gospel Singers” for uplifting the event with song!

The Annual General Meeting of ATHENA
will be held the evening of August 11 at 7 p.m
at Kimberton Camphill Village,
Kimberton, Pennsylvania

THERAPEUTIC EURYTHMY TRAINING

PROFESSIONAL TRAINING FOR DENTAL ANOMALIES

With Mareike Kaiser, co-founder of the
Ita-Wegman Centre in Graz, Germany
August 9-15, 2011

This Continuing Education/Professional Training in Dental Eurythmy is a unique opportunity to have this particular training for therapeutic eurythmists in the United States. The presenter will be Mareike Kaiser from Austria, the therapeutic eurythmist who has had possibly the most extensive experience in this area of expertise in the world. Ms. Kaiser is known in Europe for this specialty and over the last years has developed the training in several countries in Europe. It is essential for this body of knowledge, expertise, and insights to be passed on to therapeutic eurythmists in North America. The location of the training will be in a Camphill Community setting and will provide daily practical sessions, demonstrations, and lectures from Ms. Kaiser for the therapeutic eurythmists attending. There will also be an opportunity for participants to consult individually with Ms. Kaiser and to share experiences with each other in the course of these days.

“By looking at the anomalies that arise in the teeth we can achieve insight into the individual. The threefold understanding of the human organism can help us here. By understanding how the teeth are connected with the whole human being a new therapeutic approach is opened up. Eurythmy therapy has proven to be very effective in this respect. It works directly with the life-forces and thereby it can not only straighten teeth and correct the different anomalies, it also works to harmonize the individual as a whole so that their true nature can shine through.

The teeth are the most intense part of the human being, compacted into form. Assessments are based on the constitutional predisposition, as life habits find expression in character as the end point. Therapeutic Eurythmy allows the harmonizing, healing influence in the posterior region through intensive revival forces. Change processes, particularly in the growing human being, create profound and lasting health. Through her experimental and research work in cooperation with dentists, physical therapists, and eurythmy therapists, Ms. Kaiser has developed eurythmy therapy exercises specifically for the physical nature of solid tooth and mouth causing significant and demonstrable change and harmonization.”

Claus Haupt, Dentist,

*Quoted from the Association of Certified Therapeutic
Eurythmy in Austria*

Testimonials include one parent who tells of major dental work, which did not have to be carried out for his child due to the Therapeutic Eurythmy exercises that were carefully practiced and strengthened the child internally. These included a cross-bite, a gap between the front teeth, an open bite, and a malocclusion of a premolar that would have required quite extensive dental work.

This work is beneficial for adults and youth as well as for the growing child. The extraordinary opportunity to train with Mareike Kaiser is not to be missed!

Some money is available to assist with travel grants: apply to Mary Ruud, MHRuud@aol.com. Please find the registration form as an insert in this issue of the newsletter.

ANNOUNCEMENT FROM NEWS

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Siegward Elsas, M.D. studied medicine at the anthroposophically-inspired University Witten/Herdecke in Germany and began developing an anthroposophical and Goethean approach to neuroscience, and physiology in general, during his studies there 25 years ago. He has been an Assistant Professor of Neurology at Oregon Health and Science University, where he pursued a phenomenological approach to neuroscience with his research team, correlating internal observations of consciousness with electro-neurophysiology. Using this approach, Siegward has developed and researched the effectiveness of meditation and emotional balance as a new treatment of epilepsy, which is a condition of temporarily altered consciousness. In the near future, he will contribute this therapy and research to his new work at the Ita Wegman Klinik in Arlesheim, Switzerland, from where anthroposophic medicine originated.

EMBRYO IN MOTION: UNDERSTANDING

OURSELVES AS EMBRYO

Four-DVD Set Now Available
with Jaap van der Wal, PhD, MD

This beautiful Four-DVD set was professionally recorded live in Portland, OR, June 3-6, 2010.

To learn more about the Four-DVD set and for instructions on how to order it, go to the “shop” portal on the Portland Branch website at <www.PortlandAnthroposophy.org>.

THE FORMATION OF MEMORY IN CHILDREN WITH A STRONG OR A WEAK SULPHUR METABOLISM

BERTRAM VON ZABERN, M.D.

When Rudolf Steiner laid the foundations of the work with “children in need of soul-care” in his Curative Education Course, his approach was holistic in the widest sense. He wanted to train the young curative educators’ and doctors’ ability to see the whole human being, the reincarnating individuality living a life of struggle with an imperfect body. However, what appears to be handicaps in children with special needs is part of a spectrum of child development. Therefore Rudolf Steiner’s teachings about curative education are of great significance for new concepts of child development and human life in general.

The teacher described the formation and recall of memory as a process that extends from the spiritual self to the physical body. It so passes through the spheres of the astral and the etheric bodies. The memory process thus vibrates between the sensory-nervous system centered in the head and the metabolic system centered in the lower body. Rudolf Steiner explained the interplay of the four members of being by using a geometric configuration that forms the beginning of a fourfold figure-of-eight. What works in the head’s periphery becomes center in the metabolic realm, and vice versa.

The intertwining layers lead us to understand the human being on the different levels. In the physical body, tangible to our immediate observation, we find the outer bone structures of the skull metamorphosed into the inward structure of the long bones of the arms and legs. Proceeding from the observation of the solid to the living warmth, in which the spiritual self is active, we find in the head a very steady inner warmth which defies external weather temperatures, whereas the temperatures of the hands and feet may vary widely with our actions in the environment. This far-reaching view gives us a glimpse of a spiritual human physiology and psychology. When students asked Rudolf Steiner how to work with the anthroposophical approaches which were so new, he exclaimed “become dancers!” There is no doubt that he meant eurythmy.

Rudolf Steiner went one step further by linking memory with the body chemistry of sulphur and iron. Sulphur is the substance of fire, metabolic activity, and will energy. Iron is at home in the process of breathing. Like no other element, iron has the quality of loosely binding and releasing oxygen, as it is done in the hemoglobin of the red blood cells. It is the substance of balance, courage, and moral intelligence.

As a beginning, the curative educators were asked to observe the appearance and the behavior of children with blond or reddish hair and those with dark hair. Rudolf Steiner simply suggested that in the first the organism is rich in

sulphur, in the latter poor in sulphur while iron is prevalent. He explained how the sulphur-rich metabolism absorbs the images of memory too much so the child cannot retrieve what was memorized. On the opposite, a lack of sulphur cannot hold on to impressions that should become memory. These impressions are radiated back and become obsessions.

Let us look at the constitutions connected with a stronger or weaker sulphur metabolism. Children with blond or reddish hair have a less pigmented skin, often being inclined to have rashes. They may react with very high fever when having a cold. They also may have a fiery temperament. Children with dark hair have usually more skin pigmentation. They are often less energetic and sometimes even melancholic. As much as we see the characteristics, we learn to individualize them, because each child is unique. We should be aware that the observations described in the Curative Education Course were made in the typical population of central Europe in the 1920s. It remains our task to learn from what was presented and to discover its phenomenology also for instance in people of African or Asian descent.

Our considerations would remain onesided, if they would not include the role of iron, the substance that balances and even overcomes the metabolic force of sulphur. Rudolf Steiner mentions, that in a sulphur-poor condition, we have to look for the “content of iron in the human organism”, a remark which opens up a new dimension in the understanding of the sulphur-rich and the sulphur-poor constitutions. The prevalence of iron is best seen in the red blood cells, which have no nucleus and are of much lesser vitality than the white blood cells. Iron is at the center of the breathing process that starts with the conscious breathing to reach down into the unconscious metabolic life. The balance of its diving down and returning to the surface shows how sulphur and iron processes work together, each side needing its counterpart.

Sulphur as a mineral looks yellow. It will melt and even burn when heated with a match. It will then produce the malodorous sulphur dioxide smell. Because of its chemical activity, sulphur is part of every protein, recognizable by the hydrogen sulphide smell with every decay of living substance. Iron glows with heat and it makes sparks when it is forged into ingenious tools and machinery. In the living organism the qualities of sulphur unfold in the digestive system, whereas iron is at home in the process of breathing.

How does a prevalence of sulphur processes appear in a sulphur-rich child? Based on how the sulphuric element presents its properties in nature, we will observe the metabolism of a blond or red-haired child. Does the child suffer from frequent colds or bouts of fever, or from diarrhea or a bloated stomach? Does he or she have skin rashes? Which foods are preferred or not tolerated, and what about the quantities? Such observations have to be individually made in every child. In doing so, Rudolf Steiner’s characterizations are an invaluable guide. – Similarly, we try to familiarize ourselves with the properties of the iron element in nature in

order to understand its processes in the human being. Whatever iron does in the life of the human organism, it is transformed into a state where it will become a servant to the human spiritual life. By its formative forces, iron counterbalances the sulphurous metabolism. It gives form to the life of protoplasm, even bringing it close to dying. This becomes manifest in the formation of hemoglobin, carried by red blood cells having a fading metabolism and a life span of only one-hundred and twenty days.

In the Curative Education Course, Rudolf Steiner leads his audience to look into the soul life connected with these processes: forgetfulness where sulphur is prevalent, inability to forget where iron is too active. Today, almost eighty-seven years later, this is still a post-modern theory of learning. Memory is not only a task of the brain, but it happens between the polarity of sulphur and iron, when the breathing dives down to the realm of unconsciousness, where it touches metabolism and from where it re-emerges on the surface of consciousness.

A good teacher knows that being able to forget creates the space for new impressions. If an impression cannot be forgotten, it becomes an obsession and makes new learning impossible. What in a healthy student is in equilibrium, can shift to the one or other extreme. Then we see a child who cannot remember what was taught the day before. There may be another child who is constantly preoccupied with the same story instead of paying attention to anything new. The teacher and therapist may be concerned about either extreme, which, however, is not a rare part of anyone's life. A participant of the Curative Education Course told us students that most young people in the audience were so overwhelmed with enthusiasm that they remembered almost nothing, but were fired up for a life time. They remembered, though, and never forgot the moment when Rudolf Steiner had asked them why they did not jump with their heads into the ceiling out of joy for the truth.

Even before we try to come closer to a meditative insight into the workings of the higher members of being, we have already an inkling of how the metabolic heat of sulphur is transformed into the heat we find in the head and how the breathing power of iron weaves between the two realms. As an exercise to intensify our thinking, Rudolf Steiner gave the meditation of the point and the circle. The circle becomes a point, and the point a circle.

How much more alive is the insight into memory formation with such a perspective! What impresses us fully unfolded in the conscious life of sense perception, thought and imagination, vanishes and is folded into the life of will, inner energy and doing. Memories are the function of the whole human being, not just of brain cells. They are saturated with emotions. Through time they are transformed into abilities. The teacher's advice to practice "devotion to small tasks" has been remembered. It became a power of doing for curative educators to build a world-wide movement.

Where the upper and the lower loops of the lemniscatic interplay cross, a carpet of life is woven out of the fire of sulphur and the breathing of iron. Each child does this in an individual way, which has to be approached genuinely. Children with "vulcanic" outbursts of temper may have to be guided through tasks, which challenge their energy meaningfully and give them pride. An obsessive-compulsive child who keeps repeating the same questions or phrases needs a warm-hearted leadership toward the joy of planning and doing things.

Rudolf Steiner's therapeutic suggestions bring help from both sides of memory formation: through the consciousness of the spoken word and through nutrition. The sulphur-rich children will strengthen memory by speaking the morning verse in school every day. They will benefit from meals containing plenty of root vegetables. – A sulphur-poor child should be spoken to individually by the teacher in a warm and low voice, so he or she can follow him with trust and let the obsessions go. Their food should be richly balanced with fruit.

Therapeutic eurythmy reaches from consciousness to the realm of metabolism. It can harmonize the breathing of the sulphur-rich child and deepen the breathing of the sulphur-poor child. Working with a verse will benefit both constitutions: The sulphur-rich through repetition, leading from simplicity to more detail, from emphasizing vowels to work with consonants, from a fiery rhythm toward a calmer one. – The sulphur-poor child may like to begin with a more detailed content of the verse and be led from repetition toward change, from pursuing images toward the experience of inner warmth.

The sulphur-rich and the sulphur-poor or iron-rich constitutions are part of a spectrum of constitutions that pervade one another. Especially for the problem children of the present, the restless children with poor attention, and those who are irritable and aggressive, Rudolf Steiner's insights open new avenues for a healing education.

Literature:

R. Steiner, *Education for Special Needs, The Curative Education Course*, SteinerBooks

W. Holtzapfel, *Childrens' Destinies*, Mercury Press

B. von Zabern, *Compendium for the Remedial Treatment of Children, Adolescents and Adults in Need of Soul-care*, Mercury Press

CURATIVE EURYTHMY AND REMEDIAL EDUCATION

MARGARETHE KIRCHNER-BOCKHOLT, M.D.

Reprinted from the *Golden Blade*, 1974

Translated by Nalley Hummel

Dr. Margarete Kirchner-Bockholt, who passed from us in April 1973, was appointed by Rudolf Steiner to develop Curative Eurythmy in the light of his lectures on the subject in 1921. The following article was first published in Natura in 1926. We are grateful for permission to print a translation of it, both as an introduction to the use of Curative Eurythmy in pedagogy and as a tribute to Dr. Kirchner-Bockholt's many years of devoted pioneer work in this field.

A new means of healing has been given to us in Curative Eurythmy. We have learnt of its extraordinary effects through years of application, not only with adults, but especially with children. It is an indispensable factor in remedial education. Eurythmy was given by Rudolf Steiner as an art, and is known as such all over the world through the work of the Eurythmy Section at the Goetheanum. It rests on the elaboration of regular forms of movement for single sounds. This regularity is obvious to us in the formation of the vowels and consonants in our language. Nobody would think of making his mouth round in order to say an Ah, or of making it angular in order to say an Oh; he will naturally follow the ordinary rule of making his mouth round for an Oh and opening it wide for an Ah. The same rule holds good for eurythmy, and those who practice it find that when they give expression to an Ah, they naturally open their arms wide at an angle, and expressing an Oh, they carry out a rounding movement, as in speaking. It cannot be otherwise, for these movements are taken from the human organism itself. They were discerned through supersensible vision and given to us by Rudolf Steiner. Hence it is not difficult for us to find these forms again in our organism.

In the natural movement of our arms we have an A (ah). We open them wide if we want to apprehend the world with wonder. This movement does not come naturally to the eyes. They show the E (eh) in their functions and in the structure of the optical nerves. If we are to see anything clearly and consciously, one optical nerve has to cross over the other. Everywhere, when we perceive, when there is an activity of the nerves, we encounter the E (eh) in this anatomical crossing over of the nerve-fibers.

In the upright column of the spine, which stretches in its power between earth and heaven, in contrast to the animal's horizontal back we can recognize the I (ee). The embracing gesture of the ribs, which lie protectively around the heart, reflects the rounding forces of the O (oh). In the legs, standing on the strong earth, we find the parallel form of the U (00).

So we recognize in the forms of our organism, in our anatomy, the form-forces of the vowels. We cannot do this with the consonants. They lead us into dynamics; out of anatomy into physiology. There, everything remains in motion, does not lead over into stable forms of the physical body, but into the dynamics of the etheric body and its interplay with astral body and ego. This can be demonstrated most characteristically by the vibrant sound R in its eurythmic form, showing how it can set the etheric body in motion from out of the astral body. In the R we have a motion like the rolling of a wheel, where, during a continual forward movement, a backward movement for every point on the wheel can also be observed. So we have in the R a rhythmical interplay between a going out of the astral body and a coming back again, and this stirs up the etheric body. It is a similar process to the one we need to have in our intestinal activity. In the horns of a bull this outgoing impulse is, as it were held fast, and the bull's forward thrusting movement can even remind us of the movement of the R.

In the L we have a sound which, even in speech, shows that it has something to do with the element of water. Its eurythmic movement may become apparent if we try to enter into the dynamics of the etheric body of a plant. Just as the physically solid element of the earth is here laid hold of by the forces of life and light streaming in from the cosmos, and the unformed physical is thereby led over into a form that conforms to the archetype of the plant, so do the forces at work in the L lay hold of the physical element and bring it under the laws of the watery etheric.

Even these few examples can show how in the single sounds real forces are at work, as they are also in the formative and life-creating processes of earthly creatures. They are none other than the forces that radiate in from the spheres of the planets and the Zodiac. These are the forces that build up the human being, and where there is illness they can also heal. In order to see this, and to learn how to make use of it, we need to change our medical way of thinking.

We are accustomed to considering organs one by one, each with its finished structure, situated above, or below, to the right or left, of its neighbors, and with its function determined by its structure. Nowadays, the doctor usually intervenes only when something in the structure of a particular system of organs is disturbed. But these illnesses are not the whole story. They are those which manifest on the coarsest, most physical level. More important for taking effective action are those that occur in the fluid organism – the human body is about 75 per cent fluid – or even in the organism of air and warmth which we can picture as a hidden “man within man”. Here we have disturbed activities, of which disturbances in the organs are only static expressions; and it is precisely these activities that we can come to influence through Curative Eurythmy.

These activities are quite different if we look at the forces which radiate down into the organism from the head,

from the upper part of the human being, and see how quite other forces come to meet them from the lower man. Our metabolism, through the absorption of nourishment by way of the blood, provides the substances for building up our organs. The force radiating down from the nervous system of the head lays hold of these substances and molds them, gives them their contour and structure. The two systems of forces, carried over into blood and breathing, meet in the rhythmic system.

We must see qualities of soul and spirit in these processes that shape our organs. The firm structure of thought works sculpturally on the nervous system of the head, while the impulse-bearing element of will surges up from the metabolism; our feeling flows between them in our rhythmic system. There is always a danger that in the organism one system may reach over too strongly into the other, and the rhythm that ought to be there will then be disturbed.

The harmony of this system of forces is especially unstable in the child. Hence we have here the greatest possibility of intervening with the healing powers of sound. A few examples will show how this can occur.

A boy came to our children's home, the Sonnenhof, when he was nine years old. The trouble was that his whole organism was much too strong and hard. The structure of his bones was strong and powerful; the muscles barely developed; his angular movements showed that they came more out of the dynamic of his bony system than out of the dynamic of his muscles, in complete contradiction to his age. His dark eyes and hair showed that in his organism iron was preponderant over sulfur, for sulfur is the substance that makes the organism mobile and alive from out of the metabolism and gives rounder forms and bright eyes and hair. This shortage of sulfur, combined with the brittle organs, made it impossible for the child to carry his soul and spirit down into his metabolism in the right way. Hence his body could not be adequately permeated and ensouled and so it remained immobile and his consciousness dream-like. The part of his astral body which was left outside the physical assumed the form of pictures of animals that came toward him as lions, etc.

The task now was to lead into his metabolism, through eurythmy, those forces which were missing. This was done through the sounds R, L, M, N. The sounds worked on him quite directly. When the boy came to Curative Eurythmy in the morning, he stood there immobile, unhappy, with melancholy eyes. One saw that it was not possible for him to set the heavy burden of his limbs into motion. It took the greatest effort to get him to speak, even slightly, the rolling of the R. One needed at least, "Rosse rasend rennen, und ein grosses Rad von Riesen den Berg hinaufrollen lassen", in order to rouse him to activity. If that succeeded, a great deal had been achieved and we could go on to the L. [Translation: "Horses run madly, or racingly, and have a large wheel being rolled up the mountain by giants."]

The L is a sound in which the physical element is raised up out of its heaviness and by the time the boy had done

a series of L's, his temperament altered visibly. Previously so melancholy, he became more and more cheerful; his face grew bright. He clearly experienced a liberation through the fact that he could overcome his heaviness by his own strength and come more under the influence of the forces of the etheric body, in which children of his age live by nature and from which they gain their sanguine temperament.

Now that his metabolic forces had been activated by these sounds, a sulfuric influence made itself felt in him. One could see it: he almost ran wild; he jumped about and played the fool and it was hard to bring him to rest. One felt, quite clearly, that one could not leave it at that: the work was only half done. Now one had to give direction to these forces that had been aroused. This was done through the M. The M allows us to lay hold of the external world in a loving, thoughtful gesture; or, speaking physiologically, it leads the dammed-up metabolic forces rightly, through the out-going stream of the breath, into the external world.

The climax of the exercises, and also our pleasure in them, was reached with the N. The boy, who had otherwise preferred to sit or stand, jumped about with easy bounds and his awkwardly large hands did their best to respond to the sound of the N. In this way the activity of the will-forces in his metabolism was drawn up into the conscious forces of his head. He was always happy and gay when he left his lesson, and the memory of this experience led him to ask for Curative Eurythmy again and again, although starting off was always difficult for him. Besides Curative Eurythmy, the boy received medical treatment. He had arsenic baths and, internally, a pituitary preparation.

Another child was the exact opposite in almost everything: blue eyes, light hair, thick-set, plump, always in motion. Here we have an organism that has more than enough sulfur. Everything in it is loosened up, fluid, and the astral body, which in this case is weak in itself but highly mobile, finds no resistance from the ether body and no real place where it can gain a hold. So the astral body remains almost inactive in the organism, and is only just able to bring the etheric body into continual vibration. On the other hand, it squanders its forces by losing itself in its surroundings. It is absorbed by everything it sees and hears. All the forces of nature – fire, air and water – are its element. The strong mobility of the astral body is expressed in the child's speech through a preponderance of the R sound. This was the first sound he spoke and was his favorite for a long time. The counterpart in the physical is a too rapid intestinal motion, with a marked tendency to diarrhea. Hence it was not permissible to enhance this child's dynamic energy through the consonants. We had to help him through the vowels, so as to give his organism, with its tendency to flow away, firmer, more controlled forms. This was done through the sounds U (oo), E (eh) and Oe (like the vowel in [the word] "first"). The effect of the contact between crossed arms and legs in the E-gesture is that the ego and astral body take a stronger grip on

the etheric body and the physical body and give them firmer shapes. The consciousness, which had been outside in the surroundings, as it were, comes to itself and gathers itself together. Concentration becomes possible for the child.

The U has in a certain sense an opposite effect, for it raises the ego and astral body more out of the physical and etheric bodies, but then these bodies are consolidated by the U-forces streaming into them and the flowing away of the organism is held in check. So we lay hold of the organism from two different sides and bring the two sides into balance through the Oe. The path taken during a lesson such as this leads away from excessive activity to restfulness. The boy, previously at the mercy of his surroundings, now had the possibility of becoming calmer and of setting up his own resistance. It was often like a miracle to see how, under the influence of the E-sound, for example, he became quiet and thoughtful, while his own soul-spirit nature began, for once, to count.

These examples may serve to show how Curative Eurythmy can work into remedial education. Of course, this is only part of its sphere of action. On a later occasion we will go further into the connections between sounds and the organism, illustrated from other forms of illness.

BRINGING MOVEMENT INTO LIFE AND HEALING ADAM BLANNING MD, AND GLENDA MONASCH TE, USA

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Movement can be a potent therapy. We need to recognize this, because as our medical therapies become more technology-drive our therapeutic lens is getting smaller and smaller. Detailed modern scientific medical treatments need to be balanced with treatments that also acknowledge and enliven the patient as a whole person. Many people sense this, and long for something different. Eurythmy therapy, a complementary movement therapy first developed in Germany and Switzerland, brings just that kind of whole-person enlivening. Eurythmy therapy has now been practiced for many decades in clinics, hospitals, and schools, with recent scientific studies confirming its potency. It is a unique therapy because of the way it fosters physiologic flexibility, it has been shown to influence disease processes, and it provides a pathway for patients to consciously participate in their own therapeutic process.

Eurythmy (greek: “harmonious rhythm”), as a movement art, was introduced in the early 20th Century by Dr. Rudolf Steiner, an Austrian philosopher and educator, well known for bringing scientific clarity and description to the spiritual processes that stand behind the natural world and the human being. Eurythmy was developed as a new art form, in

about the same period that its sister movements of Waldorf education, biodynamic agriculture, and anthroposophic medicine were finding expression in the world. All of these arose out of the exploration of how we as human beings can recognize and work with the archetypal processes—physiologic, emotional, and spiritual—that stand behind our movement, growth, learning, and healing. As the last century has seen an explosion of medical knowledge about the human body, our view of disease has not only become more precise, but also more abstract. Microscopic and chemical analysis brings scientific detail, but it also invariably leads to a certain compartmentalization of our view of the human being. The more our gaze focuses on those details, the less we can hold an image of the patient as a whole human being. Many people comment that they sometimes feel removed from or ignored in their own medical treatments. As a society we know infinitely more about all the details of cellular biology and physiology, but in many ways that has pushed us farther away from an understanding and a responsibility for our own health. Eurythmy therapy works to re-establish and strengthen the connection between ourselves and our bodies—it is almost 100 years old, but it is actually a very modern form of mind-body medicine. It brings this gift of re-integration by working on several levels: through whole body movement, through archetypal gestures and patterns, and through the conscious participation of the individual.

The first gift that eurythmy brings is whole body movement, which includes the limbs. As a movement art it is difficult to describe (see some of the links to video of actually eurythmy practice and performance), since pictures and diagrams give only a frozen glimpse of what is really a very dynamic process. Whole body movement is not something that we experience very much today, because as a modern society we move less and less. This is evidenced by the fact that an estimated two-thirds of Americans are now overweight or obese. This is due not only to the fact that we have so many labor-saving devices and too much television, but may also be due to the fact that as a general rule we do not feel comfortable moving our bodies. We have become unpracticed. Large movements involving the whole body are now more rarely part of our daily activity. In previous centuries, people’s daily rhythm was full of large movement, whether it was physical labor (digging, chopping, scrubbing), transportation (walking, hiking, bicycling) or community (social dance). Skillful and beautiful movement is today admired in professional athletes and dancers, but is rarely celebrated as an everyday activity. Movement, as a regular part of our experience, has been lost.

Broad medical consensus does recognize, of course, that movement—generally referred to as exercise—is vital part of our overall health, and we are all encouraged to do thirty minutes of aerobic exercise, three times a week. This certainly can qualify as whole body movement, but it too often falls into the previously mentioned inclination toward compartmentalization: we stop by the gym to run on a

treadmill, but then surround ourselves with televisions and iPods to move our attention away from what we are actually doing. Our limbs may be moving, but our heads are somewhere else. In contrast, eurythmy asks us to be deeply connected and conscious of our movements. Why is this connection important?

Restoring a conscious connection to what we are doing with our body is important because it is a potent way to influence our own physiology. Sometimes we can feel totally cut off from our physiology, and that the only way we can influence it is to decide whether to take a prescribed medication. But there are other, deeper connections between our actions and our health. With conscious movement, conscious activity, we can start to reawaken the pathway to our own physiology.

One example of this “pathway” that has been well-studied is heart rate variability, how much or how little our heart rate goes up and down over a give period of time. Our heart rate and circulation are actually right on the threshold of conscious activity and unconscious physiology. In our brain and nerves we are conscious and actively sensing during all of our waking hours. In our breathing, we can easily become aware of and consciously influence our breathing pattern, but most of the time it is an unconscious process, in which we actively intervene only rarely. Going a step further—our heart rate and circulation are even more remote from everyday consciousness, and we may actually only become aware of them when we are ill or out of balance. The variability and flexibility of our heart rate has also been studied as a doorway into our general physiologic health, with greater variability associated with youth and good health, narrowed variability with chronic disease in such varied illnesses as post-traumatic stress disorder,¹ epilepsy,² and atopic dermatitis (eczema).³ In a 2009 study using eurythmy therapy in cancer patients, it was shown that eurythmy therapy stimulated heart rate variability, while conventional ergonomic training, at comparable work loads, actually attenuated the heart rate variability.⁴ We can perhaps interpret this to mean that “exercise,” simply as repetitive whole body movement is not enough. We need to be actively engaged, not removed, from what we are doing.

Eurythmy’s power also comes from the way that it can resonate on both a conscious level and a purely physiologic level. This is true because archetypes of thought or form have their corresponding processes within the body’s own biochemistry. There is truly a mirroring that can happen between what we think, what we consciously decide to do, and what happens in our body. This mind-body link is actually very familiar to us, as we know that when we are stressed or depressed our body does not function as well as it usually should. The same relationship, but reversed, reminds us that when we are physically ill, experiencing pain, or worn out to exhaustion, that our mood, memory and concentration are affected. The influence can go both ways: body to mind, mind

to body.

Eurythmy can serve as a bridge between the two, because specialized movements—gestures, patterns, rhythms—correspond to both our conscious soul life and our metabolic and organ activity. Eurythmy was often described by Rudolf Steiner as “visible speech.” In the same way that we have repertoire of sounds, there is a similar kind of vocabulary of eurythmic practice, that through consciously engaging the body and the limbs, works right down into our daily bodily functions. Eurythmy, as a pedagogical and developmental tool, has been taught in Waldorf schools for almost a century because of the way it can consciously support and stimulate the most important development aspects of a particular age—both academically and physically. Think of how comforting the resonance is when you are trying to sing a note, and another voice joins you. You feel grounded, supported, and better able to sing the note yourself that you did when you were singing alone. Eurythmy brings the possibility for that resonance to of conscious movement to come down into the “speech” of the body’s activities.

Eurythmy as a performance art, as an educational tool, and as a therapeutic activity works with a literal language of movements, which correspond in consistent and predictable ways with our own physiologic activity. Movements for the vowels sounds bring more formative activity; those for the consonants more activating. Eurythmy is also done with specific geometric forms or rhythmic patterns. It can also be done in accompaniment to pure tones, to music, to speech or poetry.

As archetypal movements and processes, eurythmy has a broad range of application. It can be used for very specific medical issues, such as constipation, scoliosis, migraines, or cancer. It also has therapeutic potency with more rhythmic or functional issues, like insomnia, anxiety, or premenstrual syndrome. And then it can also be used to address what we might term soul issues—indeed there are a whole series of “soul gestures” which help strengthen and balance our relationship to the world—whether is learning when to say “yes” and when to say “no”, to open ourselves to spiritual inspiration and then to bring it down into our own being, to practice openness to the world without losing sense of oneself.

As a therapy, eurythmy is also built out of the understanding that illness and health is a dynamic process, and that illness really represents a weakening of the proper process in a particular organ, or a displaced or dominating process going to the wrong part of the body. Healing comes through supporting and stimulating the proper balance and guiding the body in its own innate healing process. When we are able to do this successfully, then therapy becomes not just a moderating or suppressing of symptoms, but a true rebalancing. It can be striking because the patient experiences changes on both a conscious and physiologic level. A four-year prospective cohort study on eurythmy therapy and chronic disease showed that patients experienced not just

long-term improvement in their chronic disease symptoms, but also an improved quality of life.⁵ We naturally can experience life more fully and with more joy when we are physically feeling better, but many people have experienced that eurythmy therapy is special because it has this resonance, working on several levels at once. Indeed, it must be carefully prescribed and guided because it is always working on more than one level, as transformative work on a physical or physiological level must also resonate on a soul and spiritual level as well.

Perhaps the greatest gift, and sometimes one of the most poignant challenges, is that eurythmy calls for individual, conscious participation. It offers, and expects, that we are a partner in the whole process—indeed no one can do eurythmy for you, or can expect you to participate in eurythmy without the whole person being called forth. But this is what makes it so different from today's highly technological medical attitudes, in which both the patient and the medical practitioner rely on third party tools—pharmaceutical drugs, hi-tech diagnostic equipment, robotic surgery—eurythmy is taught and guided person to person. It is a profoundly human activity.

Footnotes

1 Tan G, Dao TK, Farmer L, Sutherland RJ, Gevirtz R. Heart Rate Variability (HRV) and Posttraumatic Stress Disorder (PTSD): A Pilot Study. *Appl Psychophysiol Biofeedback*. 2010 August 3.

2 Mativo P, et al. Study of cardiac autonomic function in drug-naïve, newly diagnosed epilepsy patients. *Epileptic Disord*. 2010 September 12(3): 212-6.

3 Tran BW, et al. Effect of itch, scratching and mental stress on autonomic nervous system function in atopic dermatitis. *Acta Derm Venereol*. 2010 July 90(4):354-61.

4 Seifert G et al. Effects of complementary eurythmy therapy on heart rate variability. *Complement Ther Med*. 2009 June 17(3):161-7. Epub 2008 Nov 20.

5 Hamre HJ et al. Eurythmy therapy in chronic disease: a four-year prospective cohort study. *BMC Public Health*. 2007 April 23;7:61

ABOUT THE AUTHORS

Glenda Monasch is a therapeutic eurythmist in private practice in Boulder, Colorado (Certification: Goetheanum, Dornach, Switzerland). She is the resident eurythmy trainer for IPMT (International Post-Graduate Medical Training in Anthroposophical Medicine) and works in consultation with referring physicians from around the country. She is co-director of Sound Circle Eurythmy, a training college for eurythmists, and has many years' experience teaching and working with ages from infants to the elderly. She lives with her husband and son in Boulder, CO.

Adam Blanning MD practices anthroposophic medicine and works as developmental consultant for several Waldorf schools in the Denver/Boulder area. He sits on the board of the Physicians' Association for Anthroposophic Medicine (PAAM) and teaches in its annual doctor's training week (IPMT), as well as several training courses for eurythmy, therapeutic painting, and remedial work in early childhood education. He lives with his wife and two daughters in Denver, CO.

THE GRADUATION OF THE THERAPEUTIC EURYTHMY TRAINING

On the cold, crisp evening of Thursday, February 24, 2011, in Fountain Hall of Camphill Village in Copake, New York, twelve graduates of the Therapeutic Eurythmy Training in North America received their diplomas amid music, song, and words of inspiration.

Dr. Gerald Karnow, representing the Medical Section in Dornach, began by reminding us all that we need to think daily with gratitude about Rudolf Steiner. He encouraged the graduates to consciously grasp the magnitude of the possibilities of therapeutic eurythmy. The forces that form the human embryo in the womb are the very same forces, the very same beings which are called upon in therapeutic eurythmy. We are continuing the work of the gods! We are called upon to spare no effort to nurture and cherish that which is truly human as we move into the future.

Angelika Jaschke, the International Coordinator for Therapeutic Eurythmy, first brought heartfelt greetings from Michaela Gloeckler, leader of the Medical Section in Dornach. She then reiterated words Rudolf Steiner had brought to the young Waldorf teachers as they were being launched into their new vocations, speaking of the importance of devotion for what you are doing, the warmth of enthusiasm, ongoing interest in the affairs of the world and "elasticity of spirit"! She added that it is necessary to consider therapeutic eurythmy as a spiritual medicine. To keep this spirit alive, one must continuously study the being of the sounds, try to understand evermore the essence of each illness and of the individual patient. As we work, the Courage and Will to Heal of the Helping Spirit Archangel Raphael can be active.

Anna Reé and Seth Morrison expressed their deep thanks to the Camphill Community for hosting the training throughout all these years, as well as to all of the doctors, artists and therapeutic eurythmists who served as faculty.

The evening was rounded off beautifully with a warm reception in the Village Café, full to bursting with delicious contributions from the houses, a dazzling cake (which was cut by all twelve graduates at once!), lively conversation and music to soothe the soul.

The entire event was elevated, or deepened in a way, through the death earlier in the week of Susanne Phlock, a weaver and Camphill villager for over 45 years. She passed

the threshold just minutes after a conversation took place between Anna Reé, Seth Morrison, and Angelika Jaschke in which first steps were made toward mutual recognition between the Therapeutic Eurythmy Training in North America and AnthroMed. AnthroMed is the internationally recognized name for the spiritual wellspring from which everyone working in the field of anthroposophic medicine draws knowledge and inspiration and out which we can gauge the quality of our work. Right before the graduation ceremony, the students gathered in the crypt below Fountain Hall, where Susanne's body was laid out, and performed the Halleluiah together for her.

During this week, ATHENA representatives also met with the students to welcome them into the profession, to tell them about ATHENA, and to assist them in ways both practical and inspirational. Coming from eight different countries, this diverse group of individuals had spent the week sharing the work they'd done on their research theme over the past year.

Andrea Marquardt-Preiss held her talk on "The Metamorphosis of Eurythmy into Eurythmy Therapy". Originally from Germany, with a background in Feldenkrais, Andrea has settled in the Seattle area where she will continue her eurythmic activity.

Mikio Shioya, from Japan originally, spoke about "How Can Therapeutic Eurythmy Help Learning Difficulties Due to Weak Memory Forces among Children?" He will continue his work as eurythmist at the San Francisco Waldorf School.

Martine Leicher's presentation was entitled "Depression and the Contribution of Therapeutic Eurythmy". She will be returning to her native Belgium to continue her work at the Waldorf School in Antwerpen.

Brigida Baldszun presents "The Activity of the 'I' in Laughing and Crying: The Exercise H A in Therapeutic Eurythmy". She will be teaching a block of high school eurythmy at the Chapel Hill Waldorf School.

Nobumi Yokoyama spoke on "Therapeutic Eurythmy for People with Autistic Spectrum Disorder". Her future is open, as of yet. She is searching for work in her native Japan or in English-speaking regions.

Enita Nurkic presented the theme of "Eating Disorders and Therapeutic Eurythmy". A native of Croatia, she will be looking for opportunities to further her eurythmic studies.

Hilary Hafner Alexanian shared her work on "The Inner Zodiac". She is currently living in Massachusetts and will also be continuing her studies.

Diipali Ding had "Finding the Inner Center through Therapeutic Eurythmy" as her topic. She will be returning to her native Taiwan, where she is a eurythmy teacher.

Alla Bicchurina, originally from Russia, presented her work on the "Soul Exercises". She will continue teaching eurythmy at the Chicago Waldorf School.

Liaat Zehavi spoke on "Kidney Radiation". She will be returning to her work at the Waldorf School in Lexington, Massachusetts. Israel is her country of origin.

Mari Yamaguchi presented "Accompanying the Journey toward the Threshold: Tone Eurythmy Therapy's Unique Offering". Originally from Japan, she will continue as the eurythmy teacher at the Cape Ann Waldorf School in Massachusetts.

Maria Ver Eecke had as her theme "Therapeutic Eurythmy Developed for the Constitutional Types". Maria is the editor of both the EANA and ATHENA Newsletters.

Wishing them all the Best!

Maria Ebersole

TETNA Graduates, 2011

Back row from left to right: *Enita Nurkic, Martine Leicher, Hilary Hafner Alexanian, Alla Bicchurina, Mari Yamaguchi, Maria Ver Eecke*

Front row (L. to R.): *Andrea Marquardt-Preiss, Nobumi Yokoyama, Brigida Baldszun, Liaat Zehavi, and Diipali Ding*

Kneeling: *Mikio Shioya*



The following two documents were presented as Research Projects within TETNA; all footnotes and sources are documented. The TETNA graduation projects are intended to inspire ongoing education among the members of the class. Please read with that understanding. Seth Morrison

THE EXERCISE H A – EURYTHMIC LAUGHTER AND THE ACTIVITY OF THE I DURING LAUGHING AND WEeping BRIGIDA BALDSZUN

In December 2010, I finished a thesis on this theme during my six-month internship with eurhythmy therapy at the “Gemeinschaftskrankenhaus Havelhoehe” in Berlin, Germany. As we celebrate the 100th birthday of the art of eurhythmy, the theme became very significant, and a summary of the thesis shall be given here.

Rudolf Steiner gave two lectures on “Laughing and Weeping” in Berlin (April 27, 1909 and February 3, 1910). He shows that these activities are most common for every human being and also most divine. *“Laughing and weeping we might call in the highest sense the physiognomy of the divine in Man.”* and *“Laughing and weeping is nothing else but an intimate expression of the presence of an I within a body.”* These are two statements from the lecture in 1909. In the lecture from 1910 Steiner describes in great detail how the I moves, oscillating back and forth, to find harmonious connections to the world. The human I has to be able to move so it can develop and grow. Jaques Lusseyran shows in his lecture on *The Pollution of the I* the same condition and says: *“The I has peculiar conditions for growth. It feeds itself only on those movements it performs itself.”* The I would be fettered, impoverished, and strangled if the swinging, oscillating movement would be limited.

The harmonious connection between the I and the world is of course never stable or fixed, but in constant transition and can be easily disturbed. If lower elements try to pull the I and seize it, the I will want to free itself from this bond and loosen the tie – this process will show itself as laughter. If, on the other hand, the I experiences a loss it will try to seek the missing element and try to follow it – this process will be noticed as sadness, grief, and crying. It happens very often that the flowing tears are actually building a new bridge between the I and the world and thereby calming the feeling of loss. Many samples can be found in literature to elaborate on this simple model.

In the precious book, *The Birth and Development of Eurhythmy* is shown that Clara Smits heard the lecture on Feb.3, 1910 and was very stimulated by its content. Twenty-two months later, when she had a private conversation with Rudolf Steiner, she gave words to her questions: could there be some rhythmical movements to stimulate and strengthen the physical body? Her question and her daughter’s wish to

study some form of rhythmical gymnastics led to the impulse to start a new approach to movement. Rudolf Steiner gave the first instructions to the daughter Lory Smits. On September 17, 1912, he said, *“If you really are threatened and attacked, then you should defend yourself with an energetic gesture of pushing away – with an ‘H’ movement.”* During the course of *Eurhythmy Therapy*, nine years later on April 16, 1921, he gave indications how to do a movement for “H” using only the shoulders, followed immediately by the movement for “Ah”, which he called “eurhythmic laughter”. This movement he said will have a very beneficial effect on the person, much more intensely than ordinary laughter. The exercises “H-A” and “A-H” are described as the last two exercises in the sequence of twelve “soul exercises”.

I became aware of the similarity of the description of laughter (1910) and the first instruction regarding the movement for “H” (1912) and the instruction from 1921. The thesis shows in detail the development of the gestures for “H” and “Ah” and is available in German <brigida.b@mail.com>.

PROJECT RESEARCH PAPER FOR THERAPEUTIC EURYTHMY TRAINING NORTH AMERICA

THEME: HOW CAN THERAPEUTIC EURYTHMY HELP LEARNING DIFFICULTIES DUE TO WEAK MEMORY FORCES AMONG CHILDREN?

MIKIO SHIOYA

I. Introduction

Nowadays, nationwide, there are so many students with learning difficulties. I have been teaching eurhythmy at Waldorf Schools for over ten years, and during this period, the number of children with academic challenges has increased. As an active member of the Care Group of the San Francisco Waldorf School, I have been studying and pondering why and how learning difficulties happen and how we can help these children. After I started the therapeutic eurhythmy training, I became convinced I should try to help these children through therapeutic eurhythmy.

The field of learning difficulties is very broad. ADD, ADHD, dyslexia, and dysgraphia are the more common causes of learning difficulties among children. In this project, I would like to focus on one of the less commonly studied causes: difficulties due to weak memory forces.

Memory is critical to academic learning. When it fails, we need to consider why. Memory expert Daniel Schacter¹ of Harvard University posits seven reasons why memories fail us:

1. Transience ~ memory erosion over time
2. Absent-mindedness ~ we weren’t really paying attention
3. Blocking ~ it’s on the tip of our tongue

4. Misattribution ~ we're confused by similar memories
5. Suggestibility ~ alternative thoughts unintentionally contaminate memories
6. Bias ~ existing prejudices influence our memories
7. Persistence ~ a negative memory becomes pervasive

These are very well-elaborated and understandable reasons generally, especially for adults, but as for the cause of learning difficulties among children, these seven cannot explain everything. Among these seven reasons, absent-mindedness is well documented among children who have learning difficulties due to weak memory forces; however, there are children who cannot remember the instructions or lessons from school although they are very attentive.

For this project, I explored the possibilities of therapeutic eurythmy for the children who have learning difficulties due to weak memory forces: Zoe, Sam, and Ben.

II. Case Study ~ Therapeutic Eurythmy for Children who have Learning Difficulties Due to Weak Memory Forces

1. Zoe (Currently in the third grade)

She completed 14 sessions of Therapeutic Eurythmy

From September 16 to November 11, 2010

Description of Zoe: Her Initial Presentation

1. Constitution and Overall Picture of Zoe

Zoe is very small and slender. She always looks very pale, although her mother says that is her normal skin color. According to her parents, Zoe has a very good diet, eats very well, and they don't have any concerns about Zoe's digestion; however, both I and my mentor, Ms. Maria Helland-Hansen, wonder if Zoe is not sufficiently anchored in her metabolic-limb system since she tends to get sick easily and does not seem fully in herself.

Zoe had several severe ear infections in the first and second grades and missed many school days. She tends to get sick during the winter every year.

She is very quiet at school and doesn't speak much. When I ask questions, she will answer very briefly, but she never initiates conversation. Although she is quiet, she is very energetic in her movements. She likes to move, dance, and have fun; she plays very actively with her friends. According to her mother, Zoe can almost lose herself when she plays so energetically at home. She has a lot of energy and she can be easily excited by many things. She also likes to draw and displays a very good imagination.

2. Schoolwork and Tendency of Learning Difficulties

Although Zoe likes to dance and move, she doesn't have good spatial sense. She tends to confuse the direction she is supposed to move during regular eurythmy lessons; her great difficulty is the mirror walking. Related to that, she is greatly confused in form drawing, especially in mirror drawing. The result of her second-grade screening shows that she has difficulty crossing the vertical midline.

Zoe also has challenges in auditory and visual processing. She often needs to have instructions repeated. This might be related to a weakness in her short-term memory. Since the beginning of this school year, although she was reciting the same morning verse every day with other students, after three weeks, Zoe still didn't know the verse. She could recite it with other students, but she could not recall the verse on her own. I suspect an overall weakness in her memory forces.

According to her class teacher, Zoe's auditory and visual processing difficulties don't cause her trouble in class. Since she is very observant, she naturally gets most of the instructions by observing or feeling others. She is very quiet and a little bit shy and blends in with others. She is very good at flowing with others but finds it difficult to do things on her own.

Zoe can read, but only very slowly. Her math is also slow, especially because she hasn't mastered her times tables yet. She can write well. Our greatest concern is her weak memory forces.

Therapeutic Eurythmy Session Plans, Reviews, and Findings

Session plan: September 16 and 20, 2010

Shake hands / Play catch

Balance ~ standing with one foot ~ eyes open / eyes closed
Warm up ~ at first, making a "ladder" on floor with copper rods

1. Walking "ladder" as a princess who is wearing a beautiful crown
2. Running "ladder"
3. Hopping "ladder" with one foot / hopping with feet together
4. Hopping "ladder" alternating with feet open and feet together
5. Hopping "ladder" same as #4, but also clapping hands when feet are open, arms open when feet are closed
6. Skipping around the "ladder"
"I" – "A" – "O"
"Dexterity E" in standing
Moving a geometrical form consisting of a straight line and curve
"Evolutionary Sequence" in standing with a verse
"I" – "A" – "O"

The reasons for choosing these exercises

At the beginning of the session, I did various movements not only to let Zoe warm up, but also to assess her balance, coordination, and overall movement character and ability. "Dexterity E" was included for Zoe to help feel her body and to become more grounded. Moving a geometrical form consisting of a straight line and curve was suggested to help strengthen Zoe's etheric body. I also wanted to see how she would move in that form. The "Evolutionary Sequence" in

standing with a verse was done not only because of Rudolf Steiner's indication of "Consonantal eurythmy in standing for memory poor children,"ⁱⁱ but also because I wanted to see and feel which sound gesture would be needed for Zoe.

Review and findings: September 16, 20, 2010

Zoe's handshake was weak and loose. Her hand was a little bit wet.

Zoe walked the "ladder" very carefully and displayed a very good imagination. She ran, hopped, and skipped the "ladder" very nimbly and skillfully. When she jumped into closed feet from open feet, her feet tended to be slightly open.

The hopping "ladder" exercise, alternating between open feet and closed feet with clapping hands when feet are open and with arms open when feet are closed, was very difficult for Zoe. She constantly got confused and reversed the gestures. During the exercise of "Dexterity E," her fingers tended to be curled in. Overall, Zoe could do the eurythmy gestures very well.

Among the sound gestures of the "Evolutionary Sequence," Zoe had great difficulty with "M" and "R". These gestures are both done with moving the arms or the arms and body forward and backward. When we were doing "M" facing each other and I pushed my right hand gently down while pulling my left hand gently up, Zoe became greatly confused and turned both her hands several times back and forth and had difficulty with the gesture. When we were doing "R" and I pulled my arms behind my back at the beginning of the "R" gesture, Zoe pushed her arms and hands forward. And when my arms and hands moved forwards above my head, she pulled her arms and hands behind her back. In short, Zoe tends to move as though she is pulled in the same direction.

This explains her difficulty in mirror walking and mirror drawing very well. As I mentioned above, she is a very good follower in a group, carried or even drawn by others. In that tendency, I can see the weakness of her Ego integration. She seems not fully in herself.

Session plan: September 23 ~ October 14, 2010

Shake hands / Play catch with different size balls

Warm up ~ same as before ~

Mirror Walking ~ having an imaginary mirror across the room in the center; I will move freely on the left side of the room and Zoe will move mirror copying my movements on the right side of the room.

"I" - "A" - "O"

"Dexterity E" 1. Standing / 2. Going forward / 3. Going backward

"Love - E"

"M" with locked knees

(Moving a geometrical form consisting of a straight line and curve)

"I" - "A" - "O"

The reason for choosing additional exercises above

Since Zoe has great difficulty with mirror walking, she should work on that challenge. Through the mirror walking exercise, she might be able to strengthen her center and Ego integration.

For Zoe's circulation and warmth, we will do "Love - E". As "M" is a difficult sound gesture for her, she needs to work on that. "M" with locked knees will help her coordination and breathing.

Review and findings: September 23 ~ October 14, 2010

Hopping "ladder" exercise, alternating between open feet and closed feet with clapping hands when feet are open and with arms open when feet are closed, was still difficult for Zoe, although she improved.

Mirror Walking was very challenging for her. She was easily drawn towards me. I could see that she needed to be constantly self-correcting in order to continue the movement.

Session plan: October 18 ~ November 11, 2010

Shake hands / Play catch with different sized balls

Warm up ~ same as before ~

Switch and give a ball to each other with an anapest rhythm

Mirror Walking ~ same as before ~

"I" - "A" - "O"

"Dexterity E" 1. Standing / 2. Going forward and backward / 3. Going forward and backward with jumping

"A" - "E" - "A" - "Close" ~ with arms and feet, with jumping

"M" with locked knees

"Digestion B"

"S" with "O-shape legs jump"

"Large E exercise"

"I" - "A" - "O"

The reason for choosing additional exercises above

Switching and giving a ball with an anapest rhythm will help Zoe to be fully present and strengthen her rhythmic system.

"A" - "E" - "A" - "Close" jumping with arms and feet following "Dexterity E" would be beneficial for Zoe to bring her in.

"Digestion B" would be beneficial for her weak digestion. The gesture "B" itself would help her to take hold of herself.

"S" with "O-shape legs jump" was for warming Zoe's digestion and helping her anchor herself better. The gesture "S" itself would help her strengthen the integration of her Ego.

I would like to do "Large E exercise" for strengthen her digestion and for having her Ego more imprinted into her etheric body.

Review and findings: October 18 ~ November 11, 2010

Switching and giving a ball to each other with an anapest rhythm was a little bit confusing for Zoe at the beginning, but once we got going, she did the exercise without making a mistake for a while. This is Zoe's typical tendency in learning certain movements. When she learned the sound gestures of

“M”, “R”, and “Mirror Walking”, she was confused at first. With practice, she mastered these exercises very well. Then, the following week, she again was a little bit confused; and then again she did these exercises without making a mistake.

“S” with “O-shape legs jump” made it difficult for Zoe to keep her balance. I needed to encourage her to do a strong “S” gesture continuously since her “S” tended to be very weak. Here, I could see her weak integration of her Ego. I confirmed that “S” with “O-shape legs jump” would be very beneficial for Zoe.

In the same way of learning, Zoe mastered the “Large E exercise” in several weeks.

Improvement of Zoe

Towards the end of the series, Zoe became more and more capable with each exercise and finally could do them all by herself. Her “Mirror Walking” also greatly improved. She became more present in herself. During the last sessions, when we played catch at the beginning of the session, she sometimes threw a ball slightly too high on purpose mischievously, which revealed she was much more in herself. Zoe’s class teacher also noticed that Zoe was much more present and that her schoolwork involving memory was improving.

Overall Findings: Therapeutic Eurythmy for Learning Difficulties Due to Weak Memory Forces in the Case of Zoe

Zoe is often carried by other students when she learns in a group. She learns and gets instruction through observing others. She also tends to be drawn in by others; this causes her difficulty in “Mirror Drawing”, “Mirror Walking”, and in doing the sound gestures of “M” and “R”. These tendencies and difficulties seem to come from Zoe’s weak Ego integration. She is not fully present in herself, so she has difficulty with these exercises. I can also imagine she cannot retain well what she learned since she is not fully present in herself.

I found that switching and giving a ball with an anapest rhythm and “Dexterity E” would be beneficial for Zoe to strengthen her Ego integration and to help her to be fully present.

Zoe’s weak Ego is likely related to her weak digestion and lack of warmth. Ego works in warmth. Good diet is the base of warmth and work of Ego. I found “S” with “O-shape legs jump” to be very beneficial for Zoe to help anchor her metabolism. “Large E exercise” was also very helpful for overcoming her weak digestion and for having her Ego more imprinted into her etheric body.

Through Therapeutic Eurythmy, Zoe improved her memory capacity.

2. Sam (Currently in the third grade)

He completed 14 sessions of Therapeutic Eurythmy From September 30 to November 18, 2010

Description of Sam: His Initial Presentation

1. Constitution and Overall Picture of Sam

Sam gives the impression of roundness. He has a short neck and a slightly chubby body. When he moves, he looks a little bit heavy. He has very low muscle tone and doesn’t have much strength. During the morning circle in main lesson time, he tends to lean on or hold the desk in order to support himself. In regular eurythmy class, Sam barely raises his arms above his head; his “A” tends to be with his elbows bent. Handwriting is another challenge for him. When he writes with his right hand, as he is right handed, he sometimes uses his left hand too for holding the pencil and wants to write with both hands together! Sam also has very poor coordination; he cannot run, jump, and skip as well as other third graders can. He is very clumsy; he has great difficulties with nimble movements. In a regular eurythmy lesson, he often confuses the direction he is supposed to go, such as right or left. He also experiences challenges with speaking and moving at the same time.

Sam has a thick-skinned quality. He often bumps into others, and he sometimes doesn’t even notice this has happened.

Sam is near-sighted and wears the glasses all the time. Sam has very good diet; he looks very healthy with rosy cheeks and bright eyes.

2. Schoolwork, Tendency of Learning Difficulties

Sam likes to draw, although his drawings are often very simple and not filled with colors. He tends to draw the things he likes over and over.

Sam often misses the teacher’s instructions and, in a group setting, even more so. He relies on others to get help or to be told what to do. The result of his second-grade screening shows that Sam has difficulty with both auditory and visual processing. He often needs instructions repeated. This might be related to his weakness with short-term memory.

Last year, a new student joined the second-grade class. Sam didn’t remember her name for a long time; he kept referring to the student as “the new girl.” Since the beginning of this school year, the class teacher said the date every morning, but Sam couldn’t tell what month it was after two weeks. It seems that it is hard for him to take in things that are abstract or that he is not interested in. There are so many things Sam cannot retain as a memory; however, he remembers what he is interested in very well.

According to his class teacher, although Sam tends to get lost in the group, he can learn very well in “one-on-one” settings, especially in the presence of an adult with a strong Ego. After Sam worked on math through the summer with his parents, his ability in math improved.

Therapeutic Eurythmy Session Plans, Reviews and Findings

Session plan: September 30 and October 4, 2010

Shake hands / Play catch

Balance ~ standing with one foot~ eyes open / eyes closed

Warm up ~ at first, making a “ladder” on floor with copper rods

1. Walking “ladder” as a prince who is wearing a beautiful crown
2. Running “ladder”
3. Hopping “ladder” with one foot / hopping with feet together
4. Hopping “ladder” alternating with feet open and feet together
5. Hopping “ladder” same as #4, but also clapping hands when feet are open, arms open when feet are closed
6. Skipping around the “ladder”
“I”– “A”– “O”
“Dexterity E” in standing
Moving a geometrical form consisting of a straight line and curve
“Evolutionary Sequence” with a verse
“I”– “A”– “O”

The reason for choosing these exercises

Various movements at the beginning of the session were for letting Sam warm up and for observing his balance, coordination, and overall movement character and ability. “Dexterity E” was chosen because it would be helpful for Sam to feel his body and to become more grounded. Moving a geometrical form consisting of a straight line and curve would strengthen Sam’s etheric body. I also wanted to see how he would move that form. In order to see and feel which sound gestures would be needed for Sam, I would like to do the “Evolutionary Sequence” with a verse.

Review and findings: September 30 and October 4, 2010

When Sam walked “the ladder,” he really tried to be like a prince bearing a crown, which showed he has good imagination; however, overall, his walking looked a little bit stiff.

To my surprise, Sam struggled greatly with hopping on one foot. The very beginning was all right, but quickly after three or four steps, he experienced difficulty continuing. The “ladder” is only six or seven steps long, but he sometimes could not complete hopping through or barely finished, nearly falling.

Hopping the “ladder” with alternating open feet and closed feet with clapping hands or opening arms was very difficult for Sam.

At the beginning of “I”– “A”– “O,” when we bent our body forward down and relaxed, Sam’s body remained straight and he bent only his neck. This echoes the result of his second-grade screening; he seems not to want to cross the

horizontal midline. He looks a little bit stiff when he walks, like his body has to struggle to carry around his big head. It seems that his thinking is remaining in his head and not connecting with his rhythmic system very well.

Rudolf Steiner mentions in his lecture *Supersensible Physiology in Education*,ⁱⁱⁱ that “All *comprehension* is transmitted through our rhythmic system, not through the nerve-sense system, which transmits only *perception*.” Sam can perceive well in his head ~ nerve-sense system, but he might not be able to transmit what he perceives into his rhythmic system very well.

Most of Sam’s eurythmy gestures were unclear and loose. His fingers tended to be curled in. Through these two sessions, Sam’s immobility, inflexibility, and thick-skinned quality led me to perceive Sam as an image of a bubble. It is as if he is living in or is stuck inside of this bubble. We have noted that Sam has challenges taking things in. This might be because he is stuck inside of himself, living in his own world. In order to help Sam, I need to let him move and let him be flexible and come out of this bubble.

Throughout the sessions, Sam followed my instructions very well.

Session plan: October 7 ~ 21, 2010

Shake hands / Play catch with different sized balls

Warm up ~ same as before ~

“I”– “A”– “O”

“Dexterity E” 1. Standing/ 2. Going forward and backward/

3. Going forward and backward with jumping

Stepping anapest rhythm with my flute playing ~ I change the tempo of flute randomly; Sam is supposed to continue stepping according to the tempo.

(Moving a geometrical form consisting of a straight line and curve)

“S”– “R”– “L”– “M” with a verse

“I”– “A”– “O”

The reason for choosing additional exercises

We continued starting the session with a lot of jumping, running, and skipping for Sam to experience movement. We did “Dexterity E” with jumping, too. To help Sam be flexible, we did stepping anapest rhythm with my flute playing. This was good for his thick-skinned quality.

We also did the sequence of “S”– “R”– “L”– “M” with a verse for overcoming Sam’s thick-skinned quality. The gesture “R” itself would be beneficial for him to be more mobile.

Review and findings: October 7 ~ 21, 2010

Sam still struggled with the hopping “ladder” exercise with either one foot or with alternating open feet and closed feet with clapping hands or opening arms, although he improved.

Stepping anapest rhythm with my flute playing ~ I changed the tempo of the flute randomly. Sam was supposed

to continue stepping according to the tempo ~ this was very challenging for him. He tended to delay adjusting to the tempo change and his stepping was generally inconsistent. Sam needs to keep working on this exercise.

When we did the sequence of “S”– “R”– “L” – “M”, I noticed that these gestures were the most difficult ones for Sam to do, especially the sound gesture of “R”. It makes sense that Sam, who is stuck in his own world and cannot move well, has challenges with “R”, which is the most mobile sound. For Sam’s mobility and flexibility, he really needs to work on the gesture “R”.

The overall quality of his eurythmy gestures is improving with my constant encouragement.

Session plan: October 25 ~ November 18, 2010

Shake hands / Play catch with different sized balls

Warm up ~ same as before

Switch and give a ball to each other with an anapest rhythm
“I”– “A”– “O”

“Dexterity E” 1. Standing/ 2. Going forward and backward/
3. Going forward and backward with jumping

Stepping anapest rhythm with my flute playing

“S”– “R”– “L” – “M” with a verse

“I”– “A”– “O”

The reason for choosing these additional exercises

We continued starting the session with much jumping, running, and skipping for Sam to engage in movement. We did “Dexterity E” with jumping, too.

Switching and giving a ball with an anapest rhythm might help Sam to be fully present and strengthen his rhythmic system.

Review and findings: October 25 ~ November 18, 2010

Stepping anapest rhythm with my flute playing was still challenging for him; however, he did improve.

At this point Sam could remember the sequence of “S”– “R”– “L” – “M,” and do these gestures by himself, although I still needed to remind and encourage him that he has to complete each gesture fully.

Improvement of Sam

Towards the end of this series, Sam’s class teacher noticed that Sam had become more present in himself, and was more interested in the world outside himself.

Overall Findings: Therapeutic Eurythmy for Learning Difficulties Due to Weak Memory Forces in the Case of Sam

Sam has difficulty with both auditory and visual processing. He seems to have a weakness in his short-term memory. He has challenges with taking things in. He has a tendency to be in his own world and not interested in the outer world. Related to that, he has a thick-skinned quality.

In order for him to be open and to be interested in the outer world, he needs help to loosen his overly strong boundary between him and the world, to be more mobile and flexible. I found that the sequence of “S”– “R”– “L” – “M”, especially the sound gesture of “R” was very helpful for this issue.

With Therapeutic Eurythmy, we can help Sam to breathe better with the world and become more mobile and flexible. When he is not just staying in his own world, learning will be easier.

3. Ben (Currently in the first grade)

He started his Therapeutic Eurythmy session on November 29, 2010

He will complete 14 sessions on January 27, 2011

Description of Ben: His Initial Presentation

1. Constitution and Overall Picture of Ben

Ben is relatively thin and small compared with the other children in his class. He has blond straight hair and fair and pale skin color. He seems to be very dense and is surprisingly heavy for his little body and his appearance.

When I see the constitution of Ben, the most revealing quality is his Sulphur-Rich quality; fair hair, forgetfulness, absent mindedness, inner agitation or nervousness, and outward placidness. Rudolf Steiner describes the “sulphurous child” in his book *Education for Special Needs*^{iv}, as a “volcano of this kind,” on the “one hand with inner excitement and on the other hand outwardly with a certain apathy”.

Ben likes to play with a string, tying his fingers tight. It seems he could be stimulating his own proprioception; wanting to feel himself. He loves the exercise “Burrito Wrapping” where his whole body is tightly wrapped with thick cloth.

Ben seems to have a good diet.

2. Schoolwork, Tendency of Learning Difficulties

According to his class teacher, it is very hard for Ben to hold himself in the morning circle. He can become very hyperactive. He is highly distractible, and is also easily distracted. He sometimes looks as if he is outside of his body. Ben is also very mischievous; he plans and carries out his misbehaviors cunningly.

Ben has difficulty in auditory processing. He often needs instructions repeated. He seems to have a weakness in his short-term memory.

This could also be explained by Ben’s Sulphur-Rich quality. Rudolf Steiner describes the Sulphur-Rich condition in his book, *Education for Special Needs*,^{iv} as “The impressions are, as it were, sucked in—and consequently disappear... For the disappearance of the impressions in the sulphurousness of the metabolism-and-limbs system induces a highly unsatisfactory condition of soul; it has a disturbing, exciting effect. The whole organism is a little agitated, a slight

tremor runs through it.”

Ben’s movements tend to be overly exaggerated. He sometimes moves as if he doesn’t have any center or anchor. Ben tends to get lost in the group, and he could probably learn better in a “one-on-one” setting. He needs adults with a strong Ego-presence.

Therapeutic Eurythmy Session Plans, Reviews and Findings

Session plan: November 29 and December 2, 2010

Shake hands / Play catch

Balance ~ standing with one foot ~ eyes open / eyes closed

Warm up ~ at first, making a “ladder” on floor with copper rods

1. Walking “ladder” as a prince who is wearing a beautiful crown
2. Running “ladder”
3. Hopping “ladder” with one foot / hopping with feet together
4. Hopping “ladder” alternating with feet open and feet together
5. Skipping around the “ladder”
“I”- “A”- “O”
“Dexterity E” in standing
“M”- “N”- “B”- “P”- “A”- “U” with a short story verse
“D”- “F”- “G”- “K”- “H” with a verse
“I”- “A”- “O”

The reason for choosing these exercises

Various movements at the beginning of the session were for letting Ben warm up and for observing his balance, coordination, and overall movement character and ability.

“Dexterity E” was included for Ben to feel his body and to become more grounded. I chose the sound sequence of “M”- “N”- “B”- “P”- “A”- “U” for helping Ben to overcome his hyperactive tendency. I also included the sequence of “D”- “F”- “G”- “K”- “H” expecting a calming effect for Ben. I did these sound sequences also for seeing and feeling which sound gesture would be needed for Ben.

Review and findings: November 29 and December 2, 2010

Since I have taught Ben regular eurythmy lessons for the past two years, we know each other well and have a good relationship, which was very helpful. As his class teacher mentioned, Ben was very much looking forward to having a session with me. He was very happy and joyful.

Ben was calm and quiet, yet was easily distracted. He was drawn by anything that fascinated him at that moment, and sometimes started to walk towards that thing even in the middle of the exercise.

Playing catch at the beginning of the session was not so good for Ben since he tended to become too excited. He was not so good at catching. When he was supposed to catch a ball, he almost tried to grab the ball instead of receiving.

This looks similar to how he sends his senses outside to the world. He is so outside of himself, and it appears that his keen senses are constantly grabbing sensations from outside and that he cannot filter out all sensations.

Ben could stand still only for a short amount of the time; it was hard for him to do any exercises with his feet together. He got tired easily.

Ben struggled greatly with hopping on one foot. His hopping was quite heavy; he stamped each hop so strongly that he couldn’t continue after several hops and fell. Ben liked to go onto the floor; he often fell or slid onto the floor at any opportunity he could find. This might be related to his heaviness and density. Ben’s skipping looked slightly heavy. In his overall movement, I did not see the levity a child has naturally.

Most of Ben’s eurythmy gestures were unclear and loose even for his age. Throughout the session, I had to make an extra effort to keep Ben fully engaged in whatever we were doing. As long as I was present with Ben, he followed my instructions very well.

Session Plan: December 6 ~ 16, 2010

Shake hands

Warm up ~ same as before ~

Switch and give a ball to each other with an anapest rhythm

“I”- “A”- “O”

“Dexterity E” in standing

“R” starting with small gesture, and getting bigger and bigger with an image

“M”- “N”- “B”- “P”- “A”- “U” with a short story verse

“D”- “F”- “G”- “K”- “H” with a verse

“Iambic A”

“I”- “A”- “O”

The reason for choosing additional exercises

In order to keep him calm, I decided not to play catch. Instead, I chose to do switching and giving a ball with an anapest rhythm for helping Ben to be fully present and strengthen his rhythmic system.

Rudolf Steiner recommends rhythmical repetition for the Sulphur-Rich child in his book, *Education for Special Needs*,^{iv} and states that, “What matters is that it comes to him rhythmically. When something of this kind is brought to the child rhythmically, approaching him as it were from outside, then all the sulphurous element in him is unburdened, it becomes freer... And particularly in the case of a child in whom impressions tend to disappear will it be important to induce certain impressions by means of such rhythmical repetition.”

For helping Ben to overcome his heaviness and density, I chose to do the sound gesture of “R”. His density could be part of the reason why it is hard for him to penetrate and be in his body.

I included “Iambic A” for his nervous and hyperactive

tendency. This exercise is especially good for him because it is very simple and concise.

Review and findings: December 6 ~ 16, 2010

Switching and giving a ball with an anapest rhythm was very helpful for Ben; the exercise required him to concentrate and he managed to complete the exercise.

He remembered the sequence of gestures “M”- “N”- “B”- “P”- “A”- “U” by remembering the story. He seems to like that story and that is helping him to complete the exercise each time. Since he is easily distracted, having imagination in the exercises is very important.

The overall quality of his eurythmy gestures is improving with my constant encouragement.

Improvement of Ben

Ben has had therapeutic eurythmy sessions for three weeks so far and will resume after the winter break for four more weeks. While it is hard to see improvements at this point, I can feel Ben seems to be slightly calmer than before.

I am sure he will improve his memory forces, which are currently hindered by his overly Sulphur-Rich quality and density. I will report after I complete four more weeks.

Overall Findings: Therapeutic Eurythmy for Learning

Difficulties Due to Poor Memory Force in the Case of Ben

Ben’s weakness of short-term memory seems to be coming mainly from his Sulphur-Rich quality and density. For helping Ben to overcome this challenge, I found rhythmical exercises with a ball to be very helpful. “Iambic A” was also helpful for his nervous and hyperactive tendency.

The sound sequence of “M”- “N”- “B”- “P”- “A”- “U” and “D”- “F”- “G”- “K”- “H” were helpful for calming Ben as long as they were done with imagination.

The sound gesture of “R” was very helpful for Ben to loosen his density and to integrate him into his body.

III. Conclusion

Weak memory forces in children have various causes. “Doing consonantal eurythmy gestures in standing for the children who have weak memory forces”ⁱⁱ is a very good advice since consonants have a strong effect that brings forces from outside world in. Nevertheless, we, therapeutic eurythmists, cannot do just this exercise for all the children who have weak memory forces as we must take individual needs into account and complement it with other exercises.

Rudolf Steiner mentions in his lecture, “Supersensible Physiology in Education”,ⁱⁱⁱ that there are three distinctly different inner activities in us:

1. *Perception*, which takes place within the sense organs ~ nerve-sense system (related to our thinking)
2. *Comprehension*, which is transmitted through our rhythmic system (related to our feeling)
3. *Remembering*, which is the result of an inward

working over of what we have understood. ~ This is linked with the metabolic-limb system (related to our willing)

According to Steiner, the capacity of remembering is connected with inner metabolic processes. In the case of Zoe, one possible reason she had weak memory forces was that she is not sufficiently integrated into her metabolic-limb system.

In the case of Sam, he likely had a blockage between the head and metabolic-limb system as he had difficulty with crossing the horizontal midline and holding up his head. This means he had weakness in his rhythmic system. This blockage between the head and metabolic-limb system and weakness in his rhythmic system might have caused him difficulty in his memory.

In the case of Ben, the reason for his weak memory forces is likely to be his strong Sulphur-Rich quality and density.

I chose and did several different therapeutic eurythmy exercises for these three students according to their causes of difficulties. I could see improvement in the overcoming of their challenges through their therapeutic eurythmy activities.

Through this project, I learned that there was no specific exercise for the children who have weak memory forces. Among such children, the cause of the challenges really varies depending on the child, so, of course, they need to be helped by different exercises depending on the causes of the challenges.

I also learned that when I do therapeutic eurythmy with a child, I really need to see, feel, and meditate on the child thoroughly in order to determine what is really needed to support the overcoming of their challenges.

Literature:

i Schacter, D. L. *The Seven Sins of Memory* (New York: Houghton Mifflin, 2001).

ii Rudolf Steiner mentions “the consonants (eurythmy) for phlegmatic children who find it difficult to recall mental pictures” in the lecture given in Stuttgart on June 15, 1921 (GA302). This lecture is part of the lecture cycle given in June 1921 at the opening of the upper or high school, and the lecture cycle is now in the book titled *Education for Adolescents* (Anthroposophic Press, 1996).

iii This lecture was given in Stuttgart on September 21, 1920 (GA302a) and can be found in the book *Balance in Teaching* (Anthroposophic Press, 2007).

iv *Education for Special Needs* (Rudolf Steiner Press, 1998), previously published as *Curative Education* (first edition, 1972) and is the collection of lectures given in Dornach between June 25 and July 7 1924 (GA317). Description about a “Sulphur-Rich quality” can be found in the lecture 5, June 30, 1924.

CONSIDERATIONS OF SULFUR-RICH CONSTITUTIONS

The theme of this issue inspired me to read more about the substances of sulfur and iron. Many studies on sulfur (available online) have to do with the use of isotopes of sulfur in soil-plant studies, which have to do with the earth's sulfur cycle. One study suggests that the disturbance of the sulfur cycle due to modern farming and gardening methods, may have a direct effect of the health of human beings. It is informative to research the role of sulfur and iron in the human being specifically, as they are both essential to life, and both are found in every cell of the human body.

Recently I worked with five-year-old twins with pale whitish-blond hair, often called 'tow-headed' after the color of flax. Although this was the second year that the children were in kindergarten, the younger twin had never been able to imitate the teacher's gestures. The mother said that he was very active at home, but self-directed, not following directions well. In relation to this type of sulfur-rich child, I considered the following text by Dr. Steiner in *Education for Special Needs*, where he states, "Now, let us take a little volcano of this kind, a sulfurous child, who sucks down impressions into the region of the will, where they stiffen and cannot get out." This description of a sulfurous child influenced my image of both of the twins and was confirmed by their mother. Both boys played 'volcano' at home, smashing bottles on the driveway and spraying the water hose for the lava! When we did the L gesture, the younger twin made explosive noises with the uplifting gesture. Once, when I asked him to create the L he exclaimed, "Excavation!" When I spoke of the light of the sun, he chatted away about the moon being closer to the earth than the sun, and that he had seen the moon through his father's telescope. The factual concepts that he expressed were deeply embedded, as though he were burdened by too many facts too early. As he was gravity bound in his movement, he also was extremely resistant to doing any eurythmy. He would engage in rhythmic exercises as long as a felted ball or other object was used. Often he would yawn and look for a place to sit in between exercises. I began with the exercise for children who cannot imitate: Ah-E-Ah; I-I-Ah, but it was the consonants that brought about an inner change. The R with a long wooden pole got him stimulated and the S, which I thought might penetrate his 'thick skin', was soothing for him. It was the S that seemed to ignite him so that he could move with me. After six weeks watching me do Ah-E-Ah; I-I-Ah, one day he jumped up and did it on his own. After seven weeks of therapeutic eurythmy, he began to imitate the gestures of the teacher and to participate in the circle activities.

The case study on the sulfur-rich constitution in *Education for Special Needs* is one of a process. Firstly Rudolf Steiner, together with the teachers, created an image of these children through their observations. It is important to note that these albino children were so sulfurous that the eye processes

extended throughout their entire bodies. Secondly, Dr. Steiner indicated the organic condition: "*The system of metabolism and limbs may be so constituted that it is too strongly attracted to sulfur. The albumen will then be too rich in sulfur. It will have in it carbon, oxygen, nitrogen, hydrogen, and — in proportion — too much sulfur. In a metabolism-and-limbs system of this kind — for the system is influenced in its manifestations by the particular combination of the substances within it — there will not be, as before, the urge to push everything back; but, on the contrary, in consequence of the albumen being too rich in sulfur, the impressions will be absorbed too powerfully, they will nest themselves in too strongly.*" (Here also, he developed the sulfur-poor condition: "*When metabolism and limbs are too weakly developed, the albumen substance in the human organism is prevented from containing the right amount of sulfur.*") The word albumen is a translation of the word, "Eiweiss", and it is thanks to Dr. von Zabern, who explained that the meaning of albumen in this context is protein.

The human serum albumin (spelling with an i) is defined as the most abundant protein in human blood plasma. Albumin is produced in the liver and comprises about half of the blood serum protein. Albinism is 'deficient pigmentation' due to a defect of melanin production that results in little or no pigment-color in the skin, hair, and eyes. Albinism occurs when one of several genetic defects makes the body unable to produce or distribute melanin, a natural substance that gives color to the hair, skin, and iris of the eye. Such persons have symptoms of hypersensitivity to sunlight. While there is no known cure for albinism, Rudolf Steiner did recommend therapy to help young children (before the age of nine) assimilate iron.

As a third step in the case study, Dr. Steiner looked to the environment where the albino children lived. It was discovered that the area was rich in iron sulfide, a combination of iron and sulfur which form 'beautiful pyrites' (iron sulfide). Gypsum and calcium sulfate were also in that region. As an opportunity for study, he encouraged the curative educators to learn to ask questions creatively. Finally, he directed their attention to the birth horoscope of the elder sister.

The next day Rudolf Steiner gave the cosmic influence. Mars and Venus were in opposition to the moon, so that Mars, bearer of iron, became independent to the moon's forces of propagation and forces of growth, thus departing from the true mission of Mars to come to humanity through the Venus principle connected to love. Rudolf Steiner stated, "*Consequently we find that in the growth process that takes place within the child iron will be lacking, whereas everything that tends to be in conflict with iron, notably sulfur, will be present to excess. We have therefore here to do with an extraordinarily strong predestination of the will, and our first concern must be to see that we treat the nerves-and-senses organization of these two children with the utmost care and delicacy.*" Then Dr. Steiner gave the practical application of

therapy, which is described in detail in Lecture Eleven of *Education for Special Needs*.

The sulfur-process unfolds within the human being as an experience of the soul force of willing. The following passage from “Salt, Mercury, Sulfur” gives a lofty imagination of the being of sulfur. *“And so in those ancient times man knew that within him the universe is reborn in varied forms; he experienced an inner world. Out of his inner vital fluids the whole universe arose as an etheric structure. That was ancient clairvoyance. Man experienced a real process, an actual happening. And in modern man the process is there just the same, only he cannot inwardly experience it.”*

Now those spiritual Beings with whom the ancient sages could have real intercourse did not enlighten them only in regard to the vital fluids from which this micro-cosmic universe was born but also in regard to the life-giving air, to the air which man takes in with his breath and which then spreads through his whole organism. This air which spreads itself over the whole of the microcosm, renders the shapes therein indistinct. The wonderful etheric universe in miniature begins, directly the breath contacts it, to become indefinite, That which formerly consisted of a myriad forms, is unified, because the ‘astral’ man lives in the airy element, just as the etheric man lives in the fluids. The astral being of man lives in this airy element and by the breaking up of the etheric thoughts, by the metamorphosis of etheric thoughts into a force, the will is born from the working of the ‘astral man’ in the ‘air man.’ And together with the will there arise the forces of growth which are connected with the will.

This knowledge again expressed a great deal more than is suggested nowadays by the abstract word ‘will.’ It is a concrete process. The astral lays hold of the airy element and spreads over that which is etheric and fluidic. And thereby a real process is set up which appears in outer nature at a different stage, when something is burnt. This process was conceived by the ancients as the sulfur-process. And from the sulfur-process there unfolded that which was then experienced in the soul as will.”

CONSIDERATIONS OF IRON

Iron is an important mineral that the body needs to help red blood cells deliver oxygen to the rest of the body. The human body needs iron to make the oxygen-carrying proteins hemoglobin and myoglobin. Hemoglobin is found in red blood cells and myoglobin is found in muscles. Iron also helps our immune and central nervous systems and also, assists in producing energy and nutrient diffusion in our cells.

I was fortunate to hear a talk by Seth Morrison on “Iron, Mystery of Darkness and Light” given at the Rudolf Steiner Fellowship Community in Chestnut Ridge, New York, on September 9, 2010. Seth had a sample of meteoric iron, which we passed from person to person in the audience during his talk. We learned that the only pure iron is from meteorites,

which were once considered gods; that the male element of meteors actually fructifies the earth and the smiths who worked with iron were also priests in the service of this spiritual element. Seth quoted from *Fundamentals of Anthroposophical Medicine*: *“The iron in the blood continually plays the role of remedy, protecting us from our innate tendency to become ill.”* Seth encouraged the audience to come to know the being of Iron.

Reading further in *Fundamentals of Anthroposophical Medicine*, one can gain a better understanding of the breathing activity of the blood. *“Now, if we live with our soul-being in a force of buoyancy, just think what having more or less of these iron-bearing blood corpuscles must mean for the whole life of feeling, indeed for the whole life of the human organism. In other words, if in a given case there is an irregularity in what is going on in the blood simply as a result of the buoyancy of the iron-bearing corpuscles, we know that iron must be introduced in some way, but in such a way, of course, that makes it possible for the iron to unfold its proper activity in the blood and not elsewhere.”*

In terms of spiritual science, this means that the relationship of the etheric organism to the astral organism of the human being is bound up with the iron content of the blood. And if you understand how the heart-lung activity leads over into everything that is taken up in the human being in the vitalizing process, and how the kidney activity in turn leads what has been vitalized over into the astral organism, you will not be far from the insight that balance must prevail here. If balance does not prevail, if either the etheric or the astral activity becomes too intense, the whole organism is bound to fall into disorder. You can provide the means, however, of calling forth the appropriate balance, of enabling the organism to lead the necessary amount of food into the domain of the kidney activity, by regulating the iron content in the blood. And by imbuing the actual dynamic element in the blood either with weight or with buoyancy — according to how you regulate the iron content — you regulate the general circulation of blood, which in turn reacts upon the kidney activity. In adding to or decreasing the iron content you bring about an essential regularization of the blood circulation, that is, of the relation between the etheric and astral organisms of the human being.”

Iron gives us vitality, protecting us from illness through maintaining the balance between the etheric and astral organisms. The up-building process within us is continually re-enlivening our forces. Blood, as fluid life, is the bearer of the ego. Both the development of the blood and the I are intimately connected. This vital strength of iron sustains us, gifted by Mars. From *Theosophy of the Rosicrucian*: *“The lecture entitled “Blood is a very special fluid” will have shown you how intimately the “I” is connected with the blood. This blood was not within the human body before the embodiment of an Ego, so that this red human blood is connected with the evolution of the Earth as such. It could not*

have been formed at all if the Earth, in its evolutionary course, had not come together with another planet, namely, with Mars. Before this contact of the Earth with Mars, the Earth had no iron; there was no iron in the blood; the blood upon which the human being is dependent today, did not exist. In the first half of Earth existence, the influence of the planet Mars is the ruling factor, and the influence of the planet Mercury in the second half."

The western window of the Goetheanum is red, depicting the steady straight-forward gaze of Michael. In the Michael Inspiration, Rudolf Steiner honors the being of Iron, in the following verse:

*Thou moulded it to thy service,
Thou revealest it according to the value of its substance
In many of thy works.
Yet it will only bring thee healing
When to thee is revealed
The lofty power of its Spirit.*

Since the Mystery of Golgatha, the healing force of the Christ is to be attained by humanity to re-enliven the dying earth existence. This healing force lives within us as human beings.

Therapeutic eurythmy helps one achieve and maintain a state of balance. As therapists, we hold the question as to how eurythmy therapy may support the sulfur-rich child, whose outer impressions are too deeply absorbed, and the sulfur-poor child, whose constitution rejects outer impressions, leading to fixed thoughts.

Maria Ver Eecke

Literature Cited:

Rudolf Steiner, *Education for Special Needs (Curative Education)*, Lectures Five, Ten, and Eleven, Dornach, Switzerland, June 30, 1924, GA 317

Rudolf Steiner, "Salt, Mercury, Sulfur", Dornach, January 13, 1923, GA 220

Rudolf Steiner, *Theosophy of the Rosicrucian*, Lecture VII, "The Technique of Karma", Berlin, GA99

Rudolf Steiner, *Fundamentals of Anthroposophical Medicine*, Lecture VI, October 28, 1922, GA 0314

Rudolf Steiner, "The Michael Inspiration," October 15, 1923, Stuttgart, GA 0229

CIRCULAR LETTER TO THE CO-WORKERS OF THE ANTHROPOSOPHICAL MEDICAL MOVEMENT

March 2011

Two 100-year old impulses from "Occult Physiology" by Rudolf Steiner/Prague, 1911

In reference to Self-knowledge:

Man, with all that he has evolved into, is not here for his own sake: he is here for the revelation of the Divine Spirit, of the whole World. He is a revelation of the Godhead of the World...and for one who wishes to reflect, in the occult sense,

upon the life of man, upon the essential quality of man's being, this reverence before the nature of man is an absolute necessity, for the simple reason that it is the only thing capable... of awakening those forces which permit us to penetrate into the spiritual foundation of man's nature. (*Occult Physiology*, lecture 1, p.11)

In reference to the connection of Spiritual-and Natural Science:

...that the tendency of modern science is leading toward a confirmation, in the course of the next few decades, of those things which we are able to bring forward at the present time, though, to be sure, only through occult observation. If I could hold lectures for half a year, instead of this short series, it would be possible out of the findings of modern science alone to bring forward all that is necessary for external proof of what must be only briefly intimated today. (*Occult Physiology*, London 1951, lecture 7, March 27th, 1911, p. 144)

The Worldwide Celebration of Rudolf Steiner's 150th birthday in a time of greatest concern for the healthy, continued development of humankind and earth

Dear Friends,

The reports that presently rule the media contain words like insecurity, helplessness, lack of orientation, hopelessness, when referring to the consequences of the earthquake catastrophe in Japan. In this special place of ancient Asian culture, one people representative of humankind, suffers the consequences of unhealthy thinking and working. With this Circular Letter the hope is connected that this suffering will awaken a sufficiently large number of individuals and inspire them to rethink and to work differently – in the sense as it happened this week-end in the elections in Baden-Wuerttemberg, where for the first time the "Green Party" received 24% of the votes and 9 direct mandates. Following some points are gathered for working therapeutically with radio activity. This is connected with the request that you may add especially concrete experiences from the years after the reactor melt-down of Tschernobyl, so that we may offer these to our Japanese friends for their web-page.

On the Physical Level:

Here there is no protection except prophylaxes and the greatest possible avoidance of direct contact with contaminated soil, water, foods, and air. If this is not possible, there are some things that can serve as a counter-balance and strengthening via the higher members of the human being. For iodine preparations as a protection of the thyroid gland a physician should be consulted. At present, the over-the-counter-preparations are sold out in many places.

On the Etheric Level:

Here the means of strengthening need to be considered individually, according to where the weak points of the

organism are and to its ability to compensate. This needs individual consultation. In general the immune forces can be strengthened through good rhythm, healthy foods, not too rich, and sufficient sleep; and in spite of all challenges, joy in life, in other people, and in work. Walter Cloos recommended as a treatment for the consequences of heightened radiation medicines for bone protection: Apatit D6, Conchae D6, Nontronit D 20, and Stibium D6 as powder mix/Trituration: Take a tip of a teaspoon daily for 4 weeks. Many pediatricians also worked with substances like Argentum, Prunus spinosa summit, Kalium jodatatum, Plumbum silicicum, Silicea, Echinacea, Phosphorus and others, following the Tschernobyl catastrophe. It would be very helpful, if we could hear of concrete experiences with these medicines or with others. For chronic cases good results were also achieved with mistletoe. Sulfur-baths and applications of Solum uliginosum were used too. The latter were also helpful when applied in alternation: in the evenings on the back, in the mornings on arms and legs. For Therapeutic Eurythmy especially the co-called soul exercises are used – the “A – veneration” and “eurythmic laughter” but also “steadfast I’ll stand in the world”, “I think speech”, and vocalizing, for instance, the weekly verse from the Calendar of the Soul.

On the Astral Level:

Artistic exercises, especially singing, where the etheric body is stimulated by the astral body. Care of human relationships, through honesty, interest and respectful social connections.

On the level of the I-Organization:

Especially mantras and content connected with the great aims of human evolution, as for instance, the Foundation Stone Meditation of the General Anthroposophical Society and the verse by Rudolf Steiner that takes hold of the will:

“Victorious Spirit

Flame through the impotence of irresolute souls

Burn out the egoism

Ignite the compassion

That selflessness

The life-stream of humankind

Well up as the source of spirit-rebirth.”

I am writing this Circular Letter in Prague at the end of a Conference dedicated to the 100th anniversary of the lectures: “Occult Physiology”, http://www.medsektion-goetheanum.org/EYED2/files/file/pdf/060_Spiritu%C3%A1n%C3%AD%20medic%C3%ADna_mail.pdf

These lectures given by Rudolf Steiner before a large audience of 400 to 500 people were delivered in the same year 1911 as the lectures: “The Spiritual Guidance of Man and Humanity”, and as the publication of the atomic-model. The transformation of substance is the mystery of the “I” and of the Earth. To manage these processes in a balanced measure

within human arbitrariness, that is the task. In the Conference 2011, Volker Fintelmann gave the main lectures, and in addition we had the contributions of Martin-Guenther Sterner, Eckehard Fiedler, Michaela Glöckler and Thomas Zdrzil. There was also much time given for work groups. The participants, approx. 170, experienced the contemporary validity of the occult physiology for an ego-directed understanding of substance and evolution. The mood of enthusiasm permeated the proceedings like a new beginning.

Now some important information:

– For the victims of the earthquake in New Zealand a fund was established. <http://www.anthroposophy.org.nz>

– The purchase of the hospital property in Havelhoehe is moving ever closer. Everyone is asked to participate, if at all possible, in the action “10 Euros for Havelhoehe”: <https://ssl.webpack.de/gag-havelhoehe.de/spenden.html>

– The manifesto of a medical a medical revolution: No more taboos in the battle against cancer (FAZ) <http://www.faz.net/s/Rub117C535CDF414415BB243B181B8B60AE/Doc~EC5454969C7B24F71B6FCAAD2EOF14477~ATpl~Ecommon~Scontent.html>

– March 31-April 3 in Bologna 1911: Searching for the “I” – 100 year IV. International Philosopher congress. <http://www.allaricercadellio.com/de/home.aspx>

-February 4, 2011 Petronella (Nel) Lievegoed-Schatborn, physician, former co-worker and director of the Zonne huize, Veldheim-Stenia, the widow of Bernard C. J. Lievegoed crossed the threshold at the age of 101.

– An international honorary committee has taken on the umbrella organization of the Rudolf Steiner Year 2011: http://www.rudolf-steiner2011.com/index.php?set_language=de&ccpage=meldungen_detail&set_zaktuelles=20

– The alliance ELIANT will hand over its successful signature collection on May 13, 2011, to a representative of the commission in Brussels. Concerning the further activities of the alliance see: www.eliant.eu

We want to extend our heartfelt thanks to all of you who have helped and continue to help to ameliorate the still present deficit. We still have to manage approx. 85, 000 Euros.

With best wishes and warm greetings from Prague!

Yours,
Michaela Glöckler

It Is A Spring Afternoon
Anne Sexton

Everything here is yellow and green.

Listen to its throat, its earthskin,
the bone dry voices of the peepers
as they throb like advertisements.

The small animals of the woods
are carrying their deathmasks
into a narrow winter cave.

The scarecrow has plucked out
his two eyes like diamonds
and walked into the village.

The general and the postman
have taken off their packs.

This has all happened before
but nothing here is obsolete.

Everything here is possible.

Because of this

perhaps a young girl has laid down
her winter clothes and has casually
placed herself upon a tree limb
that hangs over a pool in the river.

She has been poured out onto the limb,
low above the houses of the fishes
as they swim in and out of her reflection
and up and down the stairs of her legs.

Her body carries clouds all the way home.

She is overlooking her watery face
in the river where blind men
come to bathe at midday.

Because of this

the ground, that winter nightmare,
has cured its sores and burst
with green birds and vitamins.

Because of this

the trees turn in their trenches
and hold up little rain cups
by their slender fingers.

Because of this

a woman stands by her stove
singing and cooking flowers.

Everything here is yellow and green.

Surely spring will allow

a girl without a stitch on
to turn softly in her sunlight
and not be afraid of her bed.

She has already counted seven
blossoms in her green green mirror.

Two rivers combine beneath her.

The face of the child wrinkles
in the water and is gone forever.

The woman is all that can be seen
in her animal loveliness.

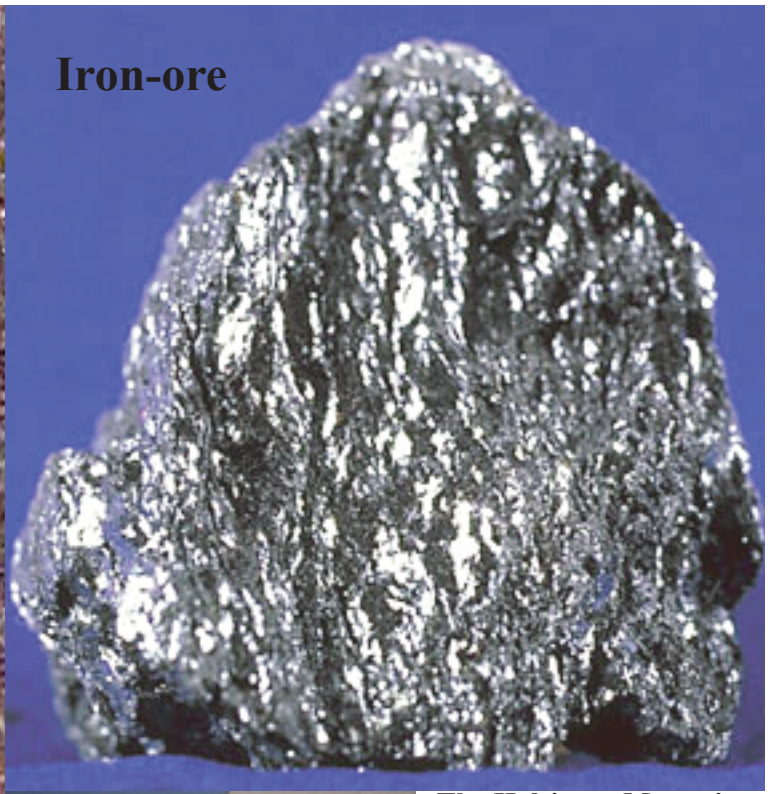
Her cherished and obstinate skin
lies deeply under the watery tree.

Everything is altogether possible
and the blind men can also see.



**Specimen of volcanic rock containing dark grey grains of native iron (pictured above)
This locality is one of the very few known localities for terrestrial native iron.
Location : Disko Island, Greenland**

Iron-ore

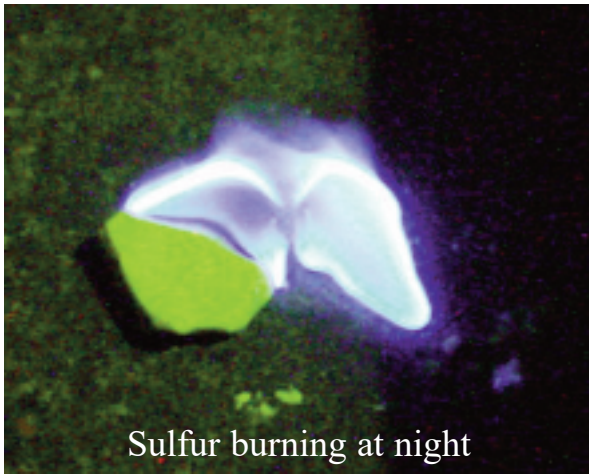


The Holsinger Meteorite (pictured to the left) is the largest discovered fragment of the 150-foot (45-meter) meteor that created Meteor Crater in Winslow, Arizona.



Sample of meteorite

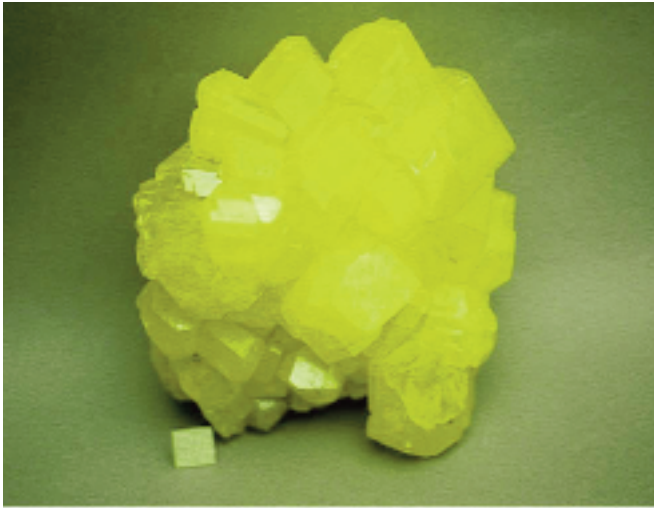
ATHENA



Sulfur burning at night



Miners at work in hazardous conditions at the Kawah Ijen (green crater) Volcano in Eastern Java, Indonesia (photo above).



Sulfur sample, courtesy of the Smithsonian Institution



Volcanic Sulfur, Pacific Rim known as the "Ring of Fire"