



LEARNING BIODYNAMICS
AS A PATH OF SELF-DISCOVERY

Biodynamic Trainer and Teacher Handbook

CONTENTS

INTRODUCTION	5	ENCOUNTERING WITH ALL SENSES - THE GROUND, THE PLANT, THE FOOD, THE BEINGS AND THE COSMOS	84
EXPERIENCING BIODYNAMICS:		Meeting Silica, Lime, and Clay, <i>by Kai Lange</i>	85
EXERCISES FROM TRAINERS TO TRAINERS FROM AROUND THE WORLD	9	Empathic Food Tasting, <i>by Jens Uwe Geier</i>	86
EXERCISES TO AWAKEN THE SENSES & TO CONNECT WITH NATURE	9	Plant Meeting, <i>by Lucy Voelcker and Kai Lange</i>	88
Awakening the Senses, <i>by Chin Tiong Teoh</i>	10	The Tree, <i>by Jean-Michel Florin</i>	89
Water Coloring; Giving the Earth an Impulse -		The Archetypal Plant Through Clay Modelling, <i>by Pedro Otero</i>	91
Getting an Impulse from Biodynamics, <i>by Simone Helmle</i>	11	Biodynamic Food and Farming <i>by Ambra Sedlmayr</i>	94
Connecting with your Surroundings, <i>by Helen Van Zyl</i>	14	The Biodynamic Calendar, <i>by Jakes Jayakaran</i>	97
An Encounter with the Kingdoms of Nature, <i>by Simone Helmle</i>	16	Encountering Elemental Beings, <i>by Anthony Mecca</i>	100
The Three Spatial Directions, <i>by Jean-Michel Florin</i>	18	THE FARM ORGANISM - EXERCISES TO STRENGTHEN ITS INDIVIDUALITY AND DEVELOPMENT	104
EXERCISES TO TRAIN PERCEPTION ON THE RICHNESS OF FORMS, THE ELEMENTS, AND THE FORCES	20	What is the Heart of my Farm? <i>by Simone Helmle</i>	105
Re-learning to Perceive, <i>by Sebastian Julio Iriberry</i>	21	Composing an Agri Sculpture, <i>by Walter Siegfried-Hahn</i>	107
Earthly and Cosmic Formative Forces, <i>by Liron Israel</i>	25	The Farm Organism, <i>by Jean-Michel Florin</i>	111
Contraction and Expansion, <i>by Belen Freiria</i>	27	Working with Polarities Towards Self-Knowledge and	
Goethean Approach of the Four Elements, <i>by Martin Quantin</i>	29	Our Relationship to the Farm, <i>by Anthony Mecca</i>	114
Emphatic Perception as a Path for Inner Quality in Plants, <i>by Joke Bloksma</i>	38	The Quintessence of the Farm Individuality, <i>by Hans Supenkaemper</i>	116
Perceiving Soils' Inner Life, <i>by Walter Goldstein</i>	41	Gratitude - <i>Hallelujah for Farmers</i> , <i>by Ruth Tschannen</i>	119
FROM PERCEPTION TO IMAGINATION - EXERCISES FOR DEEPER ENCOUNTERS	44	DESIGNING MEANINGFUL LEARNING PROCESSES FOR ADULTS	
Building Capacities to Live into the Becoming of the Plant, <i>by Anthony Mecca</i>	46	BY AMBRA SEDLMAYR	122
Plant Meditation for Holistic Gardening, <i>by Chik Ying Chai</i>	50	Core Aims of Adult Education based on Anthroposophy	123
Fragrance and Aroma Painting, <i>by Torsten Arncken and Jasmin Peschke</i>	54	Creating a Learning Container	124
Meet the Animal, <i>by Jean-Michel Florin</i>	66	Creating a Meaningful Learning Process	126
Imaginative Exercise with Carrot Seeds, <i>by Maja Kolar</i>	70	Seven Life Forces as Adult Learning Processes	127
Enhancing Perceptual Capacities to Deepen Our Connection with the Natural World, <i>by Craig Holdrege</i>	72	Conscious Endings	129
		EPILOGUE & ACKNOWLEDGEMENTS	133

Once upon a time, I took a course in 'holistic nutrition' which started with 'What is farming'? I heard about 'biodynamics', raising my eyebrows, and not knowing much about the term at all. The teacher, who was well-known in biodynamics in the Netherlands, was able to open my heart to new ideas such as the four kingdoms, the farm organism, the elemental beings and more. I knew that I had found something that I did not know I was looking for. Since then I have met many people for whom learning about biodynamic agriculture was a life-changing event. That is not just because of the all-encompassing and spiritual content. It was also about the way it arrived.

We usually associate learning with the mind. This manual rightly questions that view. Instead, learning needs to deeply touch the person as a whole. It seems logical that holistic content is 'delivered' in an integrated way. However, that is not straightforward. Rather, it is at the forefront of searching how to create spaces for being touched as an entire human being. That's the reason why this manual is about exercises. Thanks to the positive responses of many trainers around the world, generously sharing their discoveries, the manual has become a rich and colorful pearl of inspiration for working with emerging heart consciousness. Thanks to you, the reader, for your courage to start trying it out!

PETRA DERKZEN

Biodynamic Federation Demeter International

Trainers around the world have taken the time to write down exercises. At the end of 2022, train-the-trainer conferences were held in South America, Africa, Europe and Asia. These inspired the manual in an incredible way, I would say in a way of trust, mutual inspiration and respect. It became clear how we can inspire each other and how strong the self-understanding of biodynamic trainers is around the globe. Biodynamic training makes people feel that they are between heaven and earth, moving, exploring and creatively turning to the natural realms of soil, plants, animals and the cosmos.

In training sessions these encounters allow us to have primal experiences. It is an experience of man and nature that is very tender, that has something initial about it, in which a childlike curiosity and impartiality are allowed to exist. That is why in the exercises in this manual, we tend to move less in the information space or in the transfer of knowledge. Of course, there is also a need for practical “how to” questions, such as “How do I use the preparations?” or “How do I choose seeds?” or “How do I make compost”? It is good to know about these questions because they are often the reason for inviting people to a training course. Beyond this, this manual is an invitation to turn to the spiritual and sentient side of our being. We have compiled this manual for trainers based on practical training experience. Feel free to be inspired by the exercises, to modify them and, above all, to try them out and practice them. Perhaps you will rediscover something that has been forgotten in your own practice and can now be brought back to life.

We hope you enjoy reading and trying them out.

SIMONE HELMLE
Biodynamic Trainer

INTRODUCTION



“I hear and I forget, I see and I remember, I do and I understand.”
Kong Qiu (Confucius)

If we as biodynamic trainers go a step further and introduce the words “I experienced it”, we will be able to enliven the path of learning in the same way that we try to do with the Earth through Biodynamic Agriculture. To experience learning from our souls should be the path.

Sebastian Iriberry, Argentina

BIODYNAMIC TRAINERS AND TEACHERS TODAY

Engaging new generations of biodynamic farmers is a growing challenge for the movement in all regions of the world. This gap does not necessarily respond to an absence of people interested in learning more about biodynamics. Today there are many people searching to discover new and more meaningful paths in farming. For many, the principles of biodynamics resonate closely with their interests and values. However, as human beings become increasingly disconnected from themselves and nature, one of the greatest challenges facing biodynamic trainers and teachers is how to facilitate learning processes that can awaken the will of people to embrace this holistic way of farming in a conscious and committed way.

Inspired by insightful knowledge emerging from Anthroposophy and Andragogy, experienced trainers are carrying on meaningful adult education processes in biodynamics in different places around the world. As the movement continues to spread and as demand for good quality training opportunities increases around the world, there is a growing need to train young trainers and teachers in adult education. The deepening of these foundations is essential to develop the educational skills to bridge the gap with students and awaken, through inspiring training courses, their will to continue their individual search for more knowledge and experience in biodynamics.

For more than ten years the Section for Agriculture at the Goetheanum, and more recently in collaboration with the Biodynamic Federation Demeter International

BFDI, has been making efforts to facilitate the exchange of experiences and knowledge among educators. Trainers and teachers’ conferences, funding support for local train-the-trainers initiatives, diversity of online sessions and workshops are some of the initiatives periodically organized to support networking and capacity building of biodynamic trainers and teachers within the movement.

Supporting the ongoing training of trainers who can provide better training opportunities in biodynamics is essential for the fruitful development of the movement. We know that the conscious involvement of the farmer in the practice of the biodynamic method is essential. A meaningful learning process that provides the right foundations and encourages real commitment to high-quality practice could not only promote the practice of Biodynamics among more and more farmers. Demonstrating the impact of Biodynamics is ultimately the most effective tool to inspire farmers to implement its practices in a committed way.

Meaningful training opportunities also represent the seeds from which biodynamics could grow to become a unique path for individual development. As one of our core visions at Federation stated, we want to promote an agriculture that “*impels and enables people to unfold their individual potential and develop their full consciousness*”. While the ongoing practice of Biodynamics holds the potential for this vision, it is at the beginning of this learning path, on how students are trained in biodynamics, where their *will* to embark on this path of self-discovery can be awakened.

THE AWAKENING OF THE WILL

Biodynamic training today has the potential to be much more than an act of giving and receiving knowledge. It can be a learning path that enables people to reconnect with their soul and spiritual nature, while supporting the unfolding of their individual development. To facilitate a meaningful learning process that can permeate the souls of learners in such a way that the inner *enthusiasm imprints* on them awakening their independent *will forces*. This is an essential step in this transformative path.

It is through a full engagement of the *three-fold* human being (*thinking, feeling, willing*) into the learning experience that *enthusiasm* can be awakened, and that training can become a true avenue for the development of new faculties. Steiner describes in the Theory of Knowledge, that *embodied experiences* enrich and expand our understanding and ability to relate to the world. He details how, from our sensory experiences, our “I” constructs mental images or representations, which are given meaning in the form of *concepts*. Each time we illuminate the observed phenomenon through thinking, we also develop the connection to the *concept* that gives meaning to that sensorily perceived *experience*. Since thoughts ultimately carry the will within them like a seed of our intention toward developing our individuality, simulating thinking through appropriate content, images, and reflection will encourage the student’s independent *will forces* to continue their own learning paths. **Feelings are essential for authentic learning experiences as they act as a mediating force between thinking and willing. They allow enthusiasm to develop in the whole human being, strongly awakening students’ independent will forces.**

Awakening the *will* is fundamental to adult education because it is our way of being free and able to perceive the world for its true authenticity and essence. Through continuous practice, inspired by our independent will, we expand our memory by creating new concepts, forming new skills, abilities and understanding. This leads to a recognition and deepening of our perception of the world, which means that our representations, or what we know of the world, can expand into an ever more complete and more meaningful whole. It is from this perception, the way we manage to represent and relate what is external to us, that we can freely express ourselves in search of new individual and significant paths.

THE MANUAL

This Manual seeks to provide, through different means, inspiration, and knowledge for trainers to accompany the design of meaningful adult education courses in biodynamics. Courses that offer people the opportunity to experience biodynamics in its fullness, with head, heart, and hands, while sowing the seeds of deep motivation to embark on this holistic way of farming. In pursuit of this goal, this Manual is also intended to be a guide for trainers to accompany their own learning and development paths.

In the chapter “**Experiencing Biodynamics**” we have compiled a variety of thoughtful experiential exercises developed by biodynamic trainers and teachers around the world. These exercises aim to engage the threefold human being in deep experiences of encounter with nature and the various dimensions of biodynamics. Based on a variety of methods and training approaches, they seek to awaken the student’s inner enthusiasm for the learning experience, while offering insightful ways to awaken new faculties and skills.

Inspired by Steiner’s words in *How to know Higher Worlds*: “*The teacher can confer upon the students no powers which are not already latent within him. His sole role is to support in the awakening of slumbering faculties. But what he imparts out of his own experience is a pillar of strength for the one wishing to penetrate through darkness to light*”. The invitation to trainers is to experience and master these exercises before leading their students through them. As you practice them, we encourage you to deepen understanding of the underlying foundations and training approaches used by your colleagues in these exercises. As teaching is an art that is unique to each teacher, we invite you to be creative in integrating and adapting these best practice examples to your training reality. These exercises offer trainers an opportunity to learn from the experiences of their peers, to discover new educational tools, to develop new abilities and to deepen their own understanding of biodynamics.

In the final chapter, biodynamic trainer Ambra Sedlmayr presents the basics of “**Designing Meaningful Learning Processes for Adults**”. In this insightful and very didactic chapter, she guides the reader through the key aspects to consider when planning a learning process for adults. This includes practical tips on how to create a good learning atmosphere and a conscious ending. The foundations of adult learning

8 INTRODUCTION

from an anthroposophical perspective, including Coenraad van Houten's work on the "Seven Life Forces as adult Learning Process", are described in detail in this chapter. Insights from trainer Simone Helmle on how to strengthen the learning process by encouraging a "Culture of Learning Dialogue" during training, and suggestions on how to collect "Feedback and Harvest" throughout the process, enrich this knowledgeable chapter.

We encourage trainers to master adult education processes by continuing to deepen foundational knowledge and by incorporating the practical tips given in this chapter when planning their own courses or workshops in biodynamics. Awakening the students will for biodynamics is an art that needs to be conquered by trainers and teachers through self-learning, dedication and creativity.

The knowledge shared in this manual is a seed to germinate deeper knowledge and practices that can be shared within the international community of biodynamic trainers and teachers around the world. We invite all readers of the Manual to get in touch with your colleagues around the world and strengthen networks of mutual learning and collaboration, enriching and expanding each other's approaches to biodynamic education.

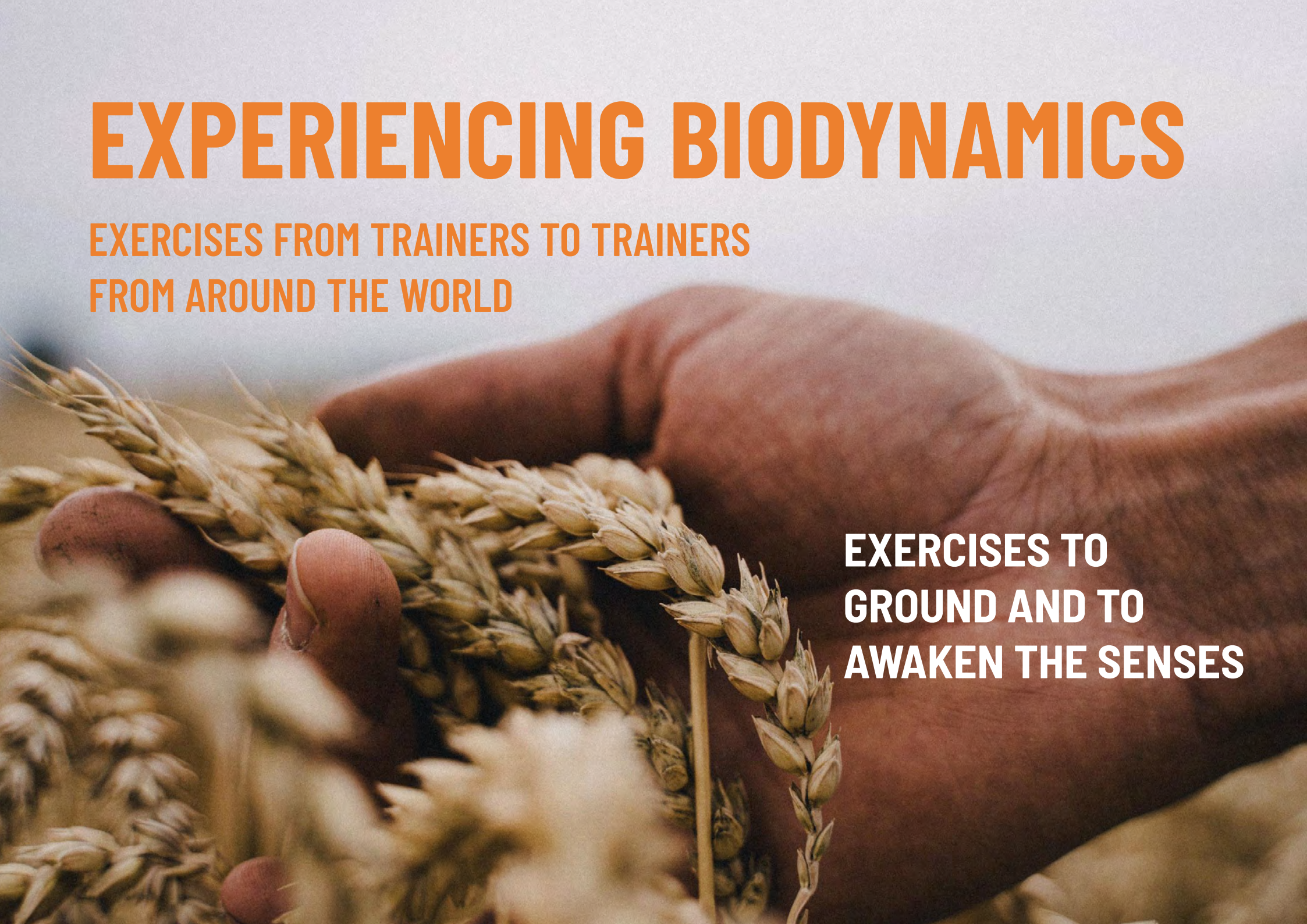
Enjoy the reading, the practice, and the learning!

Maria Paz Bernaschina

EXPERIENCING BIODYNAMICS

EXERCISES FROM TRAINERS TO TRAINERS
FROM AROUND THE WORLD

EXERCISES TO
GROUND AND TO
AWAKEN THE SENSES



AWAKENING THE SENSES

by ChinTiong Teoh, Malaysia

The **GOAL** of this exercise is to strengthen inner calmness and to awaken our senses to our natural surroundings. Some call it a way of meditation.

THE EXERCISE

- Before a training session, find a spot where you instinctively feel very comfortable. Sit or stand, barefoot if possible, and look around in detail.
- Close your eyes and take a few deep breaths until you find relaxation inside yourself.
- Feel the surroundings with your senses. Listen first: hear the birds singing, the insects, the wind, etc. Feel and enjoy the sounds for a while, gradually extending your hearing further and further. Focus. You will be able to listen much more sensitively with this practice.
- Smell whatever is in the air, freshness or maybe the opposite, fragrances of herbs, flowers or fruit. Try to feel where the smells come from, focus, and smell further and further.
- Sensing with your skin: feel the breeze, the warmth or coolness, notice the slightest changes. Widen your palm with all fingers spread to interact with the surrounding air, release or receive energy from the atmosphere. Raise your arms if you like.
- Stay relaxed during the whole process, open up all your senses and enjoy them totally. Perceive the environment and yourself as one organism.
- Finally, take a few deep breaths and slowly open your eyes. See and feel the surroundings which you looked at before you closed your eyes earlier, observe the changes. Share your experience with others.



ChinTiong's first encounter with Biodynamic Agriculture was in November 2018 at the age of 59. He deepened his biodynamic knowledge through the years under the guidance and support of biodynamic trainer Jakes Jayakaran. ChinTiong initiated the training of the Malaysia Demeter Association in mid-2019. In 2021, he formed the MY BD Academy with a few BD enthusiasts. In 2022, they formed the Harmony BD Farm School in the historical Melaka province. With the support of his wife and many others, ChinTiong is determined and confident to further promote Biodynamics in the Far East region, especially Southeast Asia.

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WATER COLORING: GIVING THE EARTH AN IMPULSE – GETTING AN IMPULSE FROM BIODYNAMICS

By Simone Helmle, Germany

In my work with conversion farmers, I encounter a longing to work with the earth. People often tell me that they are rediscovering the joy of agricultural work. Interrupting habitual thought patterns and routines is one of the challenges of conversion. I like to do an exercise on letting go and trusting on the first day of conversion courses.

The **GOAL** of the exercise is to accept that we set impulses with our agricultural work, but then entrust them to nature. We can continue to accompany the unfolding of the impulse, but we have to realize that we cannot control everything. The exercise helps to get in touch with nature and to get involved with each other. Receiving and giving is not a barter transaction, but the beginning of a relationship whose quality only reveals itself in time. In the exercise, we put a few blobs of color into a very wet piece of paper. The impulse of the color mixes with the water. Since a lot of water is used, the drying takes so long that we can watch it happen.

THE EXERCISE

The exercise is at the beginning of a course, so maybe we've gotten to know a farm beforehand and there has been a round of introductions of the participants. The questions "Who am I?", "Where do I come from?", "What do I hope for?" are in the room.

Introduce what biodynamic means to you personally. At this point I like to tell how I had to learn to understand what I had completely forgotten in my time as a scientist.

I had seen the earth as a thing. But now I have gained the experience that the earth is something alive, that I am allowed to be part of it and that we can try to be together. This brings me to the question of what suggestions I give to the earth through my agricultural activity and in what attitude I approach the earth.

Transferred to the exercise, this means that I give the water on the sheet of paper an impulse with the color that is here in front of me. Since the paper is flooded and the brushes are coarse, I cannot paint. Everything is blurred. But if I entrust the paint to the water, I can watch the paths it takes. I can add a little more color and so this becomes an encounter between color and water, between earth and me.

MATERIALS:

- Small glasses for red, yellow and blue watercolor paint; Two brushes for each color; Water, sponges and pads; Watercolor paper
- Prepare the tables so that four participants at a time can use brushes and paint together.



Simone lives with her family in Stuttgart, Germany. She teaches the subjects Leadership, Socio-culture and Anthroposophy. She developed the master's programme for resilient entrepreneurship in biodynamics at the Freie Landbauschule Bodensee e.V. in Überlingen, Germany and she led the educational programmes of the Demeter Academy of the Demeter Association in Germany for several years. She designed many exercises for working with biodynamic farmers in conversion. Originally, she is scientifically qualified in methods of adult education and client-centred counselling work. She has a doctorate in agricultural sociology. It is a matter close to her heart to accompany people in the development of their individual potential.

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12 EXPERIENCING BIODYNAMICS

STAGE I: EXPERIENCING THE MATERIAL

Two pictures will be painted by each participant. Firstly, invite the participants to familiarize themselves with the paper, water, brushes and then paint freely. Most of the time they will try to paint.

STAGE II: ENCOUNTERS, PATIENCE AND TRUST

- Each participant gets a new sheet, now the exercise takes place with guidance:
- Ask the participants to do the exercise in silence and follow your guidance. You yourself hold the space through your presence and your voice.
- With small sponges or cloths, wet both sides of the white paper. The surface may shine, the water may be seen.
- Now look at the three colors. Choose the color that appeals to you in the moment.
- Now take a brush, fill it up with paint and let the paint drip onto the wet paper. The brush does not touch the paper. Try it. If you shake it a little, small or large drops will fall onto the paper.
- Look at the drops of paint.
- If you would like a little more of the color, just let more paint drop onto the paper.
- Now take a second color. Also drip this from the brush.
- Where is the space for the second color? How do the colors meet and mingle? Look at the play of colors.
- A third color is not used, it remains with two colors.
- The exercise can be closed with a small gong, a poem or with the words from Rudolf Steiner's Sould Calendar.



STAGE III: COMING TO ONESELF, ENGAGING WITH EACH OTHER

As the pictures are very wet, simply let them dry on the tables. Invite the participants to talk in pairs. The guiding questions can be:

- How was it for you?
- What experience have you just had?
- What does this exercise tell you about your work in agriculture?

In the past, I often did a round in the plenary after the talks in pairs. Today, I tend to pause after the two-to-one talks and take what people want to share from the exercise into the day's review. It is also touching what participants report from this exercise when the next day begins, following a night review.

Try it out on a small scale so that your own experience can grow. I especially like it when the pictures are dry and we then hang them on the wall. This way, the colors from the initial exercise accompany us throughout. On the last day of the course, we take the pictures off the wall and whoever would like to can write a letter to themselves on the back of the sheet before we have a closing discussion in plenary.



CONNECTING WITH YOUR SURROUNDINGS

by Helen Van Zyl, South Africa.

I am passionate about Goethean practices, and the following exercise serves well as an introduction for any learning that needs to follow. The main **GOAL** is to help everyone to set aside the multitude of distracting thoughts and assist to connect and engage with one's senses while connecting with the surrounding nature.

THE EXERCISE

In this exercise I ask the participants to pay attention to their senses throughout 4 stages:

STAGE I: TEXTURE UNDERFOOT

Walking towards the site to be observed, place your attention towards everything that is under your feet. Sense the texture of the floor (cement, wood, tiles, etc.) and on stepping out of the building, note the change from the floor covering to gravel, grass, sand, or clay. How is the texture different? Continue walking as if there were no goal while only being aware of the changing textures beneath your feet.

After a while stop (close your eyes if it helps) and reflect on your experiences of the changing nature of the textures beneath your feet. Take a quiet moment to note your breath and allow your reflection to arrive. Then take time to contemplate that reflection.

STAGE II: SMELL

Continue walking slowly with purpose but no real goal yet. Focus on smell. There can be radical shifts from one smell to another (of flowers you brush against or freshly cut grass), or it can be very subtle & delicate. Sometimes it can be challenging to find a shift from one smell to another. Trust your sense of smell as you progress. After approximately 5 minutes, stop walking and reflect as you did for the texture exercise. Be aware of your breath. Take a moment to let your reflections settle, then contemplate those reflections.



Helen has been actively involved in guiding and facilitating an understanding of the principles and practices of Biodynamics for over 10 years in various communities in Southern Africa. Working in this space has challenged her to be aware that she is bringing concepts to diverse cultures, and that she has to be aware that the principles are received very differently based on a multitude of factors. Language, race, socio-economic circumstances and of course the generosity of the land, regional conditions and local climate all play a pivotal role and deeply reflect a rich tradition that demands openness, interest & respect. In the field of Biodynamics, Helen believes that trainers are always learning from different contexts in multiple ways.

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15 EXPERIENCING BIODYNAMICS

STAGE III: SIGHT

There is a lot to see. Now, in a slightly different way allow the colors to meet, merge, and move like clouds. Note the overall color and tone. Again, reflect as above. If using this as a warm up exercise, then three senses are enough. However, one could add more senses e.g., sound or touch.

FINAL STAGE

Lastly, when the participants return, ensure you create time for them to give feedback. Encourage the importance of listening to each other. Once feedback is complete, facilitate an open conversation. At this important final stage, deeper learning can be experienced and shared as together you discover and create new insights.



AN ENCOUNTER WITH THE KINGDOMS OF NATURE

by Simone Helmle, Germany

Every day we live our lives are in the midst of the natural kingdoms. Even when we as farmers take care of the soil, animal or plants, the natural realms tend to fade into the background in our perception. In trainings, we have the opportunity to intensify our encounter with the natural kingdoms. For some people this is familiar, and the exercise renews awareness. For other people the exercise may be completely new or long desired. It is simple; every person can participate and experience nature in its present facet.

THE EXERCISE

- Gather the course group and walk together at a brisk pace to a quiet place about 10 to 15 minutes from the course room. Only when everyone is gathered in the quiet place, introduce the exercise.
- To start, form four groups. Each of which will be given a focus. It helps if you have written small cards with the pair of terms for each person ahead of time. The four focus of attention are:
 - **Focus 1:** Light and atmosphere
 - **Focus 2:** Air and Water
 - **Focus 3:** Plant and mineral
 - **Focus 4:** Animals and sounds
- At this stage, You can inspire your students by reading a poem or a small passage from the 2nd or the 7th lecture of the Agricultural Course.



17 EXPERIENCING BIODYNAMICS

- Now everyone is invited to walk back to the classroom at their own pace, keeping quiet and not talking, while paying attention to experiencing their focus words. It helps many participants if you extend the task and everyone collects an object (leaf, branch, flower, feather, stone, root, etc.) to help their own focus along the way.
- Once everyone is back in the course room, the harvesting of the exercise begins in the plenary. If the room has a large blackboard, you can keep keywords on the board. Be surprised by the abundance. Invite participants to say something about their own focus and to show the object they have collected. The object can be placed in the center of the room, and a keyword goes on the exercise board. Be aware of your breath. Take a moment to let your reflections settle. Then contemplate that reflection.
- At the very end, when everyone has shared something, summarize again. In this way, highlight what makes up each realm, where they touch, and how they complement each other. Using the words of the participants and the items collected, stay fully engaged in the experience.



MY PERSONAL EXPERIENCE

Most participants are relieved when they get the term “plant and mineral”. Participants are even happier when they realize that it is possible to have an experience connected to light, air or sound as soon as they get involved. Participants are amazed by the tranquility and power of this exercise and by the aesthetics with which the natural realms reveal themselves. They are surprised by the diversity of their focus elements, knowing that it is only one of four. Participants find it relieving that we go into perception in a division of labor, and they are given guidance on how to follow one at a time. I was touched by the comment of one participant who said, “At first I was puzzled, but then I noticed how the focus helps me. I felt as if I were going through a gate, leaving behind the confusing and great abundance of nature. I enter into a realm and am gifted with a great abundance from that realm that would have remained hidden from me without the focus.”

VARIATIONS OF THE EXERCISE

For courses lasting several days, you can repeat the exercise many times. For example, go to the same place but at a different time or in different weather.

- You can use the exercise with an observation focus, such as looking at an animal, a field or a plant. For example, stand with the group under a large tree and distribute each group a specific focus: focus 1: the wood; focus 2: the leaves; focus 3: the flowers, fruits or seed heads; and focus 4: the sounds.
- The exercise can also be used very well in online courses. You lead the exercise; each participant is given the observation focus via chat or a list you share on screen. Then each person goes outside in their own place, walks around slowly, or engages in the experience while standing. After 20 minutes, everyone comes back. Online, it is a good idea to send participants into small groups to share the experience. Divide them into small groups of 4 people for each of the four focus words, with one person per focus word participating in each small group.

THE THREE SPATIAL DIRECTIONS

by Jean-Michel Florin, France

The **GOAL** is to approach the three spatial directions (polarity of highs and lows with the circumference as an interspace) qualitatively through one's own experience by simply dedicating oneself intensively to these three directions, meditatively outside in nature. This exercise can help to introduce the basic polarity of biodynamic farming: earth and cosmic forces. At the end of the exercise discuss the different experiences together to qualitatively develop these terms.

THE EXERCISE

To begin, find a good place outside where you can see the natural soil, the sky and some landscape around you. Be open and ready to be surprised by the phenomena of nature, even if it's a grey day. The exercise has three main steps, or moments of observation, and for each of them pay attention to:

- *What do I perceive? How does this part of the world express itself?*
- *Then let the perceptions go and wait with the question: which inner impression, inner gesture do I get?*

STAGE I: THE BLUE SKY

Look for 3-5 minutes at the sky.

It is important that you consciously experience the different qualities of the sky. A great expanse, unlimited, no palpable world, just a picture world. A great differentiated unity. The color of the sky is darker at the top and brightens towards the horizon. Exhale and dissolve into the sky. Lose yourself in meditation.

This experience of the blue sky was for the ancient Greek the experience of the ether: something holistic, coherent, pure qualitative; that is, image without substance. Steiner mostly calls this quality cosmic (from cosmos: beauty, shine, order, jewelry of the world). A second complementary aspect of the cosmic is experienced at night in the stars.



Jean Michel was born in 1961 in France. He studied agriculture and nature protection in France, and Goethean science studies at the research Institute at the Goetheanum, CH Dornach. He was the coordinator for the Biodynamic Association in France from 1988 until 2014. He was also the editor of the French biodynamic magazine *Biodynamics* (1990-2005), cofounder of the French biodynamic 2 year training (BPREA biodynamie), and trainer and teacher for the French Biodynamic Association "Movement de l'Agriculture Bio Dynamique" since 2010.

Jean Michel is a coleader of the Section for Agriculture at the Goetheanum. He runs international courses and lectures about biodynamic agriculture, plants, landscape, nutrition, and medicinal herbs with the Goethean method. He is a board member of several networks, including the BFDI (International Biodynamic Federation), and Petrarca (Academy for the Culture of European Landscapes).

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19 EXPERIENCING BIODYNAMICS

STAGE II: THE GROUND

Look for 3- 5 minutes at the ground (preferably a natural ground with vegetation).

If one tries to dedicate oneself the ground immediately after stage I, one encounters a limited space that offers resistance.

Everything is not only visible but tangible. Not a unit, but a variety of details that could be explored further and further. Now the tendency is towards analysis instead of context. I take an aspect of the whole and lose myself in it. The legs are strengthened by the resistance and heaviness of the earth and the hands grasp, want to do something. One immediately wants to touch and move. One can call this experience “earthly”.

STAGE III: THE HORIZON

Look for 3 - 5 minutes around you.

This look into the horizon opens up other qualities. Now you can breathe between dissolving and condensing. It is our known human world, with objects, beings (plants, animals, humans) and something open (environment or atmosphere) in between.

FINAL STAGE

Close with a thank you and a feeling of gratitude, then write your observations in your notebook.



A close-up photograph of a field of purple thistles. Several butterflies are visible, including a prominent white butterfly with brown markings on its wings perched on a purple flower head. The background is a soft-focus green field. The text is overlaid in white, bold, sans-serif font.

**EXERCISES TO TRAIN
PERCEPTION
ON THE RICHNESS OF FORMS
THE ELEMENTS AND THE FORCES**

RE-LEARNING TO PERCEIVE

by Sebastian Julio Iriberry, Argentina

The main **GOALS** of this series of four exercises are:

- To perceive and differentiate the different forces that shape matter and to recognize how these forces bring implicit qualities that remain in the forms: (Stage I)
 - **The sphere:** *the living realm, movement, warmth, without thinking too much (perceiving-doing), use of the whole palm of the hand (unconscious movement), joy, “We do”, etc.*
 - **The cube:** *the mineral realm, structural qualities, pressure-compression, movements conditioned to the form, colder process, more mental (concentration), using more fingertips (very conscious movements), “We think”, etc.*
- To introduce the three-folded human being (thinking, feeling and willing), as an introduction to the image of Three-folding in Nature (Stage II).
- To re-encounter these forms and its underlying forces in all kingdoms of nature (Stage III).
- To recognize in the sphere and its metamorphosis (ovoid) the archetype of the form where the principle of life is manifested (seeds, grains, eggs, yolks, etc.). To discover this principle in a living soil (spherical soil particles) and to re-discover in the Sphere its relationship with the *Caloric* and the *Vital* principles (Stage IV).

THE EXERCISE

The exercise consists of four stages. Whoever would like to teach this exercise must have first experienced them, and only when they have “individualized” them, they will be able to guide the learning process in a living form, modeling the *earthly substance* and approaching the *Divine essence that underlies it*.

STAGE I

- Equal amounts of clay are given to each participant (approximate volume of a large walnut).
- Each participant must make with their hands a sphere as regular as possible.
- After one minute ask the students some questions that invite them to consciously perceive the experience:
 - How do their hands manage to form the sphere?*
 - What is the pressure or forces they exert? What is the movement of their hands? What does that movement look like? What caloric sensation does it generate in the hand? What degree of awareness are they bringing to it? You can also observe the rest of the group.*
- Each participant places the sphere in front of them as they complete it. Everyone silently observes the round of spheres.



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He is a trainer, a farmer, a processor and a Biodynamic advisor in Argentina. Sebastian has coordinated the training area of the AABDA (Association for Biodynamic Agriculture of Argentina) for 15 years. He is currently also a teacher at a secondary Waldorf School. He was the former vice-president and president of AABDA.

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22 EXPERIENCING BIODYNAMICS

- Ask them to write in their notebook the experience of the exercise, keeping in mind the questions asked.
- Invite groups of 7 participants (approximately) to play and interact freely with each other with the spheres, without deforming them (approximately 3 minutes). At the end of the time, give each participant a glass sphere to play and interact with again in the same groups (only with these spheres) in the same way they did with the clay spheres.
- Each participant returns to the initial place, takes a sphere of clay and disassembles the created form. Once this is achieved, ask them to return to silence and make with their hands a cube as regular and perfect as possible.
- Once again, after one minute, ask the students some questions that invite them to consciously perceive the experience:

How do their hands manage to form the cube? What is the pressure or forces they exert? What is the movement of their hands? What does that movement look like? What caloric sensation does it generate in the hand? What degree of awareness are they bringing to it? You can also observe the rest of the group.

- Each participant places the cube in front of them as they complete it. Everyone silently observes the round of cubes.
- Ask them to write in their notebook the experience of the exercise, keeping in mind the questions asked.
- Ask them the question: *What was or were the emotional sensation(s) you had during the making of the sphere and which one(s) during the making of the cube?* And write down in your notebook three sensations for each of the shapes.



- In the same groups previously formed, invite them to play and interact freely with each other with the cubes, without deforming them (approximate duration: 3 minutes). At the end of the time, give each participant a wooden cube to play and interact with again (only with these) in the same groups.
- In groups of three participants, exchange their experiences during the exercises. First in



individual, and then in group exercises, relating them to the realm of the dead (mineral) and to the living realms (plant, animal and human) from the scope of the forms and forces that act in each one of them. *What did they rediscover?*

- In plenary, a spokesperson from each trio shares with the whole group what they rediscovered and what they learnt. (approximate duration 15 minutes).
- Finally, each participant takes their notebook and writes freely what they need to write about the internal experience that the whole exercise generated in themselves.

23 EXPERIENCING BIODYNAMICS

STAGE II

- Keeping in mind the previous exercise, participants should make an observation of the hand, perceiving palm and fingers, trying to re-discover where the spherical-ovoid shape is more clearly manifested and where it is cubic-rectangular.
- Once they have been recognized, invite students to reflect in groups of three on the following guiding questions:

When we made the sphere, which part of the hand was most important? And when we made the cube, which other part? How would we relate thinking and doing in these observations? What correspondences do we find? Can we relate the conformation of the hand as part and image of the conformation of the whole human body?

- Share experiences in a plenary round.

STAGE III

- Invite all participants to walk through the surrounding landscape, recognizing and drawing 3 elements of nature with cubic-prismatic shapes and 3 spherical-ovoid shapes, perceiving the qualities hidden in each one and writing them down next to the drawings.
- Gathered in groups of three participants, they should make an exchange of what they recognize and perceive.
- Individually, each person writes in their notebook what most enriched them during the exercise and subsequent exchange.





STAGE IV

- Introduce the principle of life to students.
- Make a clay sphere again and then transform it into an ovoid shape. Search in nature for these forms, to draw the elements where we recognize them. Collect them.
- Meditate on these forms. *What qualities do they contain? What principle unites all the elements recognized in nature? What elementary element or force is indispensable for this principle to manifest? Physically, what does it manifest, or will it manifest?* Write in your notebook what you consider most important.
- In a round, each participant reads what they have written and shares it with the whole group. No discussion, just listening attentively and reading.

PROSPECTS OF THE EXERCISE

This series of proposed exercises has an infinite number of possibilities to use the images behind, or rather “above”: to experience archetypal processes such as Evolution and Composting; practical issues such as the transformation of a mineral soil (“cubic”- dead) to an organic soil (“lumpy”- alive); to re-discover forms and forces in beekeeping that respect the needs of the Bee Being; or to uncover deep aspects of the essence of the Human Being.

EARTHLY AND COSMIC FORMATIVE FORCES

by Liron Israeli, Israel

The **GOAL** of this exercise is to enable people to experience the polarity of Earthly and Cosmic Formative Forces.

THE EXERCISE

The exercise has three main stages and is usually given at the beginning of biodynamic training as a base for all other elements to follow in the training. The essence of the first stage is perceiving (1) and relating (2) in the Van Houten framework for learning. The essence of the second stage is digesting (3) and individualization (4) in the Van Houten module (see Seven Life Forces as Adult Learning Processes in the last chapter).

STAGE I

Students go through a process of conscious observation of two objects: a PAPRIKA from the round shape varieties and a DRY THORN. Students are asked to consciously and comprehensively approach these two objects: to observe, touch, smell, etc. the objects as if they have never seen them before (first the paprika and then the thorn). They are asked to leave aside any previous knowledge, judgments, appreciations or feelings, etc. and to describe the observable qualities, for example, weight, texture, color, visual patterns, etc.

The main objective of this process is to allow students to experience the physical qualities coming out of an archetypical object influenced by formative forces.

Discovering the meaning of the formative force out of the object itself gives a much deeper connection to shape-giving quality, in contrast to learning abstract terminology. I always add: “if you get lost in the terminology of ‘earthly & cosmic’, come back to the physical sensation coming out of these archetypical forms.”

How would you describe their qualities? What patterns appears when you close your eyes and touch it? How do you perceive the object? What form in space does it create?

STAGE II

Students are asked to express through clay one quality that they have experienced in the paprika and one quality on the thorn. They are not to model the paprika nor the thorn, but to model one of their perceived qualities. At the end of the modeling, we will have a model that gives a “paprika quality” feeling and a second one that gives a “thorn quality” feeling. Students have one hour to undertake this process of transformation of the clay. Afterwards, students are asked to arrange the artwork so that one area feels “thorniest” and another area feels most “paprika-ish”. A reflection process is carried on with the students with the aim to try to build up the terminologies of Cosmic and Earthly forces.



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Since his youth in the Kibbutz, and throughout his life, he has been involved in training and capacity building. 10 years ago, he founded the annual biodynamic vocational training program, aimed at making biodynamics accessible to every farmer in Israel.

Liron's farming, academic research and training skills ensures that the training modules he develops are grounded in practice and phenome, not logical observation, thus making the formative forces a tangible reality.

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Which shapes can communicate what qualities and what is missing to make an object even more exact? What part of the hand is needed to create each form? Does the clay “agree” to take the shape of a thorn or of a paprika? What tools do you need in order to move the clay into any one of the forms? (Hint: The clay moves to a Paprika form using water and full hand gesture. The thorn shape come into being in the clay only via sharp tools and drying).

This process is supported by showing, in a more intellectual way, other contrasting images of Earthly & Cosmic expression in nature, such as the quartz & limestone, and/or leafy sequences (more examples in the summary table of Earthly and Cosmic forces in Koepf’s Practical Biodynamic Book). It is key to ask students at this stage if they can relate to these images by feeling with their hands, the gesture, they would have to make with the clay to develop their form. Students may be able to develop an integral image of the formative forces by associating abstract images with the rich sensing experiences they perceived previously through their hands when expressing formative forces through the clay.

This exercise forms a whole different way of perceiving the world from what students are used too. Therefore, the artwork at the beginning and directly relating the feeling of the fingers to the “Terminology” being developed is crucial. If, at this stage, students can truly experience the formative forces and they are aware of this new insight, this could be the crucial moment of



inner transformation, of INDIVIDUALIZATION: the key moment of learning when something is experienced as new, as if born from within and truly one’s own. In the following biodynamic training, we will build on this exercise. Repeating the same stages whenever we meet a new “sensory impression”, and if there is confusion with “biodynamic terminologies” (earthly, cosmic and so on), we will come back to the finger sensation that is creating each formative force.

STAGE III

Students are encouraged to practice their new understanding in order to develop new skills further and transform them into new impulses. Students are asked to go out in pairs to the farm or garden and look at different agricultural practices and attempt to describe them in Cosmic & Earthly gestures. Tell them



that whenever they are not sure about the underlying formative force, to remember with their fingers how they experience these forces when working with clay. Here are some examples of what to send students to look for: the ranking of beans\ tomatoes\ cucumbers on a wire (What gesture of form does the ranking bring? How does it relate to the form of the vegetable?); looking at a garden bed of straw barriers lying on straw (What form do the barriers and straw make?); observing agricultural machines such as disc harrows and rippers (What gestures do they bring to the soil? What formative forces do healthy soil have?).

A round to reflect on formative forces and their multiple expression in agriculture practices and nature is undertaken at the end of the training exercise. The trainer should try and see if new understandings are emerging to see from a new perspective the way we work on the farm and with plants.

CONTRACTION & EXPANSION

by Belén Freiria, Argentina

The main **GOAL** of this exercise is to experience through *Eurythmy* the different polarities between which life develops. By practicing a contraction-expansion sequence, you will be able to experience the polarities of the earth and the sky within yourself, the microcosm and the macrocosm, center-periphery, inhalation-exhalation. This interaction, which manifests itself in the rhythms of the heart and breath, constantly pulsates between the inner and the outer world.

In the physical body, the substances of the world of matter are gathered in a sacred and complex matrix. This body, with all the wisdom it contains, is a microcosm embodied in the macrocosm of the whole physical-spiritual world. Our whole body is permeable to the forces of the macrocosm.

THE EXERCISE

To experience the forces of polarity, follow these series of steps:

- Start by stretching your body, loosening the muscles and tendons in your arms and eliminating tension. Next, clear your mind of distractions and try to be present; no need to close your eyes. Keep them open, but only gently, introspectively. Fill your whole body with the feeling of light. When you are ready, bring your feet together, align your body so that the center of gravity is at the solar plexus, and your heart is open.
- Now, with your hands in front of your heart, imagine a seed resting there, in the core of your being. Tilt your head, but only very slightly, so that you can listen to your heart with your inner ear. Feel the power of the seed and the spirit within you. Seeds rest in the ground during the cold winter months, but when spring comes, the earth warms, and the hard seed casings soften and dissolve. Imagine spring stirring in your own heart, and how it would make your seed grow.



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28 EXPERIENCING BIODYNAMICS

- Movement begins to stir within you, as you respond to the inner call of life, love and the warmth of the sun. Imagine how the strength of the seed within you begins to swell, sprout and grow. Let your arms begin to lift away from your chest, weightless. Start with the upper arms, feeling the expansion begin there. Let your first movements be as smooth as the first leaves coming out of the seed.
- The arms move away from the chest and the elbows unfold. The arms open wider and wider, rising toward the light, through the elbows, wrists, and down to the fingertips. The stem of your plant grows upward, and you grow straighter. Begin to feel like the calyx of a flower, expanding widely in space, attracted by the light of the universe.
- Open yourself completely to the macrocosm and let your arms drink in that light which is your sustenance. Keep looking straight ahead, with an open gaze, feeling the light all around you, even in the back of your neck. When autumn comes, life returns to the seed. Imagine now that its petals fall behind it, and its leaves begin to drop. Bend your arms inward toward your chest. Start at your fingertips and continue with your lower arms, elbows and upper arms. As you do so, draw in the energy of the stars and the sun.
- When your seed becomes small and intimate again, place it back into the intimate space of your heart. Place your hands gently there, one on top of the other, and tilt your head very slightly, keeping your eyes open, but introspective.
- This first experience was slow and reflective. Do it a second time, with a little more fluidity. Move into your heart and awaken to the power of the seed within you. Try not to think it from your head, but feel it from the



inside, letting your arms unfold like a life force. Remember that the seed that grows also takes root downward. As the life force grows and grows, let it unfold like a balloon, expanding up and down, back and forth, in all directions.

- In a second instance you can do this by moving in space. Walk 4 slow steps forward and return in that same straight line. Start with your hands on your heart, expanding as you go forward and returning to your inner self.
- This exercise can also be practiced in a circle with several people at the same time, walking in and out. Looking for a joint breathing, listening and flowing.
- At the end of the exercise allow students to deepen into the experience by reflecting and exchanging on the following questions:

What were your experiences during the process?

Did you feel more in tune with contraction or expansion?

Have you been able to connect with the seed image?

Has any other image, or shape of any plant emerged?

Have you experienced any internal process that is a reflection of nature?

GOETHEAN APPROACH OF THE FOUR ELEMENTS

by Martin Quantin, France

THE NATURE OF THE ELEMENTS

The four elements earth, water, air and fire are the basis of anthroposophical knowledge of the human being, nature and the cosmos. Through their study and understanding, we can develop a profound awareness and understanding of the intimate processes of the world. They offer a privileged entry point for the study of the kingdoms of nature (mineral, plant, animal, human) and for a concrete experience of the different realms of the living world (physical, etheric, astral, spiritual) as well as the modes of knowledge described by Rudolf Steiner (Rational Thinking, Imagination, Inspiration, Intuition). To me, the study of the four elements represents a very good way to get initiated into the Goethean (or phenomenological) approach to nature (For further insights read the box “Living Thinking and The Goethean Path” at the end of this exercise). Finally, they provide a solid experiential basis for a good practice of biodynamic agriculture.

Depending on the time I have available during the trainings, I develop more or less the historical and theoretical aspects of the Goethean approach, but it is not useful to go too far.

I start from the following premise: the human being is capable, through his sensory perceptions, of knowing

the world. However, he must be careful to remain as close as possible to the phenomenon in order not to fall into the trap of elucubration. It is thus a question of finding, as Goethe did with the plant or with the phenomenon of the colors, the primordial phenomenon (Ur phenomena), the idea, the principle which governs, which is expressed and which lives in the observable phenomenon. For this we try to characterize rather than to explain, with the simplest of concepts. Sympathies and antipathies must also remain outside the observation: If emotions arise during the experience, which often occurs, then I can note them and put them aside before continuing.

Before beginning the exercises, it is necessary to clarify that the four elements do not exist as such in nature. What we observe is the action or manifestation of these principles within the kingdoms of nature. The elements are akin to principles, laws, qualities, ways of being and thinking. They are super sensible realities. For example, the EARTH element is not similar to the arable land in which we plant seeds and grow our crops. The EARTH element is not perceptible as such by our five senses. In all the things we observe here on earth, we find the four elements intermingled in different proportions. A typical example is soil: in order to have a good fertile soil to grow our crops, we need a balance of the four



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elements. Of course we need physical soil, but we also need it to be moist, to be impregnated with water, but not excessively so. It also needs to breathe and have air flowing through it. Finally, it needs a certain amount of warmth so that life can develop. All living processes require the four elements in specific proportions. But then, how can we observe the EARTH element?

We can find in nature certain phenomena that express more the qualities of an element. For instance, if we observe a rock, we will find the qualities of EARTH predominating, although the elements water, air and warmth are also there. The rock is made up of all four elements, but EARTH predominates. And in the mineral world, we can play around with specimens that will manifest more strongly, at the margin, qualities belonging to the elements water (soft stones or metals), air (porous rocks, translucent and colored crystals) or fire (I leave it to you to find).

Therefore, one should not mistake the element as a principle with the earthly support of its manifestation (the matter or the substance).

THE EXERCISE

In the courses I teach, I particularly emphasize the importance of having a personal experience with concepts and ideas under lying biodynamic farming. It is possible to start with a theoretical or intellectual approach of anthroposophical concepts, but it is not satisfactory if we stay there, as dogmatic approaches are no longer compatible with the spirit of our time. We need to check the phenomena by means of experience.

The **GOAL** of the perceptive approach of the four elements is to allow us to meet four radically different worlds, whose qualities and properties are at the basis of earthly phenomena. All that we have learned, we have drawn directly from the observation of phenomena. There is no theory here. The Goethean approach gives us access to the thoughts and concepts belonging to nature and as soon as we have a doubt or a question, we can go back to observation and find what we need to progress in knowledge.

Each element will take us into its own sphere and reveal a whole range of coherent properties. Hence, we will observe very simple things: earth, water, air and fire. This may seem boring and familiar, and this is precisely the difficulty of the exercise: being able to observe without prejudice a phenomenon that seems to be very commonplace.

The danger for the trainer, as well as for the author of this article, is to get lost in endless explanations and justifications of the exercise, when the important thing is to go out and observe. But before that, the following pedagogical sequence of four exercises is usually carried out during a 2 day workshop. It can be done in one day if the introduction is quick and without the longer exercises of modeling (water element) and smell drawing (water element) and smell drawing (air element).

STAGE I: OBSERVING THE EARTH ELEMENT

- **First part:** You go outside, and everyone finds an object that represents the EARTH element, ideally a stone or something dead. Avoid manufactured objects. Individually, each person observes their object through all the senses and describes it as precisely as possible, noting the qualities observed, for 15 minutes. At this stage, I do not give examples of what can be observed (for instance, shape, colors, textures, etc.) because it is precisely the objective of the exercise to discover it. However, I insist that people look for the simplest qualifiers they can (primary qualities) and use only positive terms. For instance, I will describe the qualities of a piece of quartz without using the concept of “crystal” which is already a form of theory or meta concept. Similarly, I will not say that it is “immobile” because that means that it is NOT mobile. What we are interested in is finding out what the thing IS, not what it IS NOT. So I would rather use the concept “fixed” or “stable”. This latter point is not always easy to respect. Next, I call for people to pair up for the second part of the exercise.
- **Second part:** One person from each pair describes to the other the object they have observed, without showing it, taking care to speak only about their own perceptions. Everything said must come from an observation. No analysis, no questions, no interpretation. During this time, the other person forms a representation of the object. Eventually, at the end, we can try to guess, then show the object. After 5 minutes, the roles are changed. The objective of this step is to practice describing an object only on the basis of our own observation.
- **Third part:** After the observation and sharing in pairs, everyone gathers, and I ask three or four people to present their object again to the whole group. This step allows us to refine the concepts used, to point out elements that do not strictly correspond to sensitive observations, the use of meta concepts or negative expressions. For instance, we are quickly inclined, when we observe a stone and even more so with a leaf or a piece of wood, to extrapolate or speculate on its origin or its becoming, but with perceptions related only to the EARTH element, we are forced to stick to what is right here and now. Our perceptions do not tell us anything more.

Following this, I make a chart with the group that synthesizes the general characteristics of the EARTH element. Here is an example of such a synthesis.



EARTH

Solid, hard, fixed, stable, dense, ± heavy. Down.

Formed in SPACE, delineated, expanded in the 3 dimensions (3D)

Impenetrable, I always remain outside. Surfaces. Separation. Distinction. View always partial.

Carrier of a color , a texture

Composite (formed of multiple elements), number, weight, measure. I can break it, separate it.

Eternal (no change without external cause)

Security, firmness. Support, backing. Darkness.

Synthesis: The earth element allows us to experience matter in SPACE. In itself, it is timeless, eternal. It gives things the possibility to exist in the world as a finished, fixed, stable form. It creates a support on which other phenomena can occur (through the intermediary of other elements). It also allows me to become aware of myself as a being separate from others.

When I think with the EARTH element, I can give an infinity of details, I can count and measure. I cut and dissect. It is the discursive, analytical and reductionist thinking that corresponds well to this element, in its external manifestation. Inwardly, it gives a feeling of security and firmness, of verticality. Although it seems to be the simplest element and the most familiar to us, it still holds a great deal of mystery in its profound nature (for me).

STAGE II: MEETING WITH THE WATER ELEMENT

- **First part:** Take a 1-2 hour walk with the group to observe water in nature, through different manifestations. The ideal is to start with puddles, then to go through streams or small torrents, or a river, and also to have a spot with a pond, a pool or a lake. This way you can observe the different qualities of water

I generally recommend making the observations in silence, initially everyone for themselves, and then to share together when the situation is appropriate. It is necessary to keep the group focused to avoid diluting the attention. The quality of consciousness of the EARTH element must remain present or at least come back from time to time. It is interesting to pay attention to these changes in the group dynamics when moving from one element to another. It is also possible to make multiple experiments with water in the classroom (see Theodore Schwenk's Sensible Chaos). With water, it is again possible to clarify the difference between substance and element. With water, it is really the "fluid principle" that we are trying to grasp, and not the substance H₂O which can appear in different states (solid, liquid, gas). Frozen water is indeed EARTH, and we will see later that water vapor is AIR. The WATER element is indeed the fluid principle.

Back in the classroom, we can gather our observations in a chart:

WATER

Fluid, always in motion. Flowing downwards.

Transparent

Spherical drop, rounded shapes, sinusoidal waves, meanders, vortices

Forms flat surfaces (2 dimensions; 2D), planes that slide over each other (laminar flow).

Reflection, mirror, image, IMAGINATION, dream...

Dissolves, welcomes, receives and transforms. Metamorphosis in TIME.

Connects, carries

Rhythm, sound, lapping, music,

Life, metabolism, biochemical transformations (we move away from the pure observation of the element...)



Synthesis: with water, we enter the world of life, time and movement, encounters and relationships. Water carries and transports, it transmits and transforms in a succession of rounded and spiral forms. With water, we lose our grounding, space is no longer fixed, and we fundamentally experience the continuous flow of TIME and change. To think with water, thinking must become fluid and able to use images and relationships, to move from one manifestation to the following one without losing the thread. Thinking becomes IMAGINATION. Through water, we experience what Rudolf Steiner calls the ETHERIC world or the formative forces.

- **Second part:** A modeling session at this stage will help to experience what the water element can achieve when combined with the earth. To start give each person 5 balls of clay about the size of an apple. Then, take the first ball and begin to shape it arbitrarily without any preconceived ideas, giving a form impulse. For instance, I flatten it on one side, squeeze it here, and so on. Then I place the ball in front of me without going too far into the forming process. Then I take the second ball and do exactly the same gestures to get the same shape, and then I continue the metamorphosis one step further. I do the same thing with the three remaining balls. The idea is to go through exactly the same steps, and to take the modelling one step further each time. Now everyone has a series of five shapes flowing from one to the other.
- To finish, I suggest that participants close their eyes and visualize the five steps inwardly, first in one direction, then backward (returning to the initial sphere). One can try to go back and forth two or three times in imagination, the objective being to get the most exact representation possible of the succession of forms as well as the forces that generated these transformations. This exercise (difficult at first) allows one to become familiar with Imaginative Thinking (see Living Thinking and The Goethean Path).

STAGE III: MEETING WITH THE AIR ELEMENT

- **First part:** Observation of the air element outside seems easy: we go outside and observe the air. In fact, it's not so obvious, because the more you go away from the earth, the more subtle the phenomenon is. Each time we look at a new element, it is important to remember the difference between elementary principle and substance. Again, when we look at physical air, we are dealing with the four elements together. The point here, in observing the atmosphere around us, is to grasp what really belongs to the AIR element, while identifying the earthly qualities of air (for instance, I feel the pressure of the wind on my skin: it is its dense and material side that I am feeling) or its fluid qualities (swirling movements, everything that reminds us of water, etc.). What is specific to the AIR element that was not at all manifested with EARTH and WATER?

Back in the classroom, we can gather our observations in a chart:

AIR

Omnipresent, everywhere, expanded. Unity.

ONE. PRESENT moment. Global.

Carrier of qualities: sound, light,

colors, smells...

(invisible in itself, impalpable... = negative qualities)

I am constantly inside it. We all share the same air.

I perceive everything in an instant: what is on the periphery is in me, and conversely.

Symbol, inspiration

34 EXPERIENCING BIODYNAMICS

Synthesis: With air, we experience qualities such as sound, colors and smells. Air instantaneously makes available everywhere and for everyone a qualitative dimension of life. A smell is here. It is perceptible there in an instant. The same goes for color and sounds. What is revealed through air is a carrier of a wholeness and a qualitative richness. It is above all a quality of soul that is revealed. Through air we experience what Rudolf Steiner calls the ASTRAL or psychic world. The corresponding quality of thought is that of INSPIRATION.

- **Second part Scent Drawing:** In order to enter into a more controlled experience of the air element, we can propose to draw smells. The idea is simple: we impregnate strips of paper with an essential oil (preferably an unknown and not easily recognizable essence) and we ask the participants to draw this smell on a piece of paper with colored pencils or pastel chalks. During the workshops, I usually propose 2 different smells to be drawn in a row (10 min each time) and then we put the drawings in the center of the room, and we exchange on the experience.

STAGE IV: MEETING WITH THE FIRE ELEMENT

In the same way, we can observe fire and explore the qualities it reveals to us. For me, fire is more difficult to grasp, and it takes us into a much more intimate, inner sphere. Through fire, we touch the truly spiritual element of existence.

I only give here a few indications, not exhaustive. I leave you to work on this element by yourself.

Synthesis: With fire, we leave the earthly and manifested world to enter a transcendent dimension which is outside of space, time and even the current moment. Just as fire is not a state of matter (solid, liquid or gas), it originates in the spiritual world and penetrates these three spheres with its creative force, allowing action and evolution in the world. It allows us to meet what Rudolf Steiner calls the force of the "I" in connection with the spiritual world.



FIRE

Goes through the 4 elements, radiates from a source, can be generated spontaneously (latent heat)

Burns, destroys, consumes, purifies = fire is at the end of earthly life

Warms up, animates, initiates, generates = fire is at the beginning of processes

Feeds, maintains... = it is also there during...

Inner warmth, intimacy, friendship, love, will, impulse, action, sacred fire...

Spiritual world, free will, thought, "I"

THE KINGDOMS

In the previous steps, I have strictly abstained from observing and talking about the more complex phenomena that are plants and animals. Minerals are inevitably observed when one works on the element EARTH, and the human being also appears necessarily with the FIRE element, but for the rest, I confine myself as much as possible to basic observations, because these observations can be of an incredible value.

THE PLANT = EARTH + WATER

Now we can go one step further. It is quite clear that the mineral world is shaped by the element EARTH. But what happens when the forces of WATER combine and penetrate the forces of EARTH? We then have the plant, the vegetal world. A plant is EARTH + WATER.

Water starts to flow into the earth to create a plant. In the mineral world, water is always outside, and the shaping and formative forces of water must act from the outside to grow a crystal for instance. The process of growth is then much longer, and the diversity of forms so created is less. However, when water penetrates inside an organism, as is the case in plants' vascular system, then it can express its own qualities. We find in the plant all the qualities that we have previously listed for the water element: "flow" (growth) in time, movement, transformation, metamorphosis, the leaf surface which reflects in an image (the shape of the leaf) the qualities of the environment. The plant is a manifestation of the WATER element, or rather of the etheric forces acting through the water

Mineral: physical body only.

Plant: physical body + etheric body.

This is true insofar as we observe the plant in its vegetative phase, when the plant is a leaf, because the whole plant is shaped by all 4 elements. A final step can be taken by considering the development of the plant and observing its manifestation through the root, leaf, flower and fruit processes. The qualities of the four elements are strikingly present in these four processes of the plant world.

THE ANIMAL = EARTH + WATER + AIR

In the same way, we can observe what happens in nature when the air element expresses itself and penetrates organisms. We now come to the animal world which has, in addition to a solid body and a metabolic system based on water, incorporated air into its own organism via the respiratory system. What happens when AIR penetrates the living world? We find all the qualities previously mentioned for the element AIR: everything is gathered in a unified totality, the animal, which is the center of an intense psychic life. The qualities transmitted by the air (sounds, colors, smells) are lived internally in the soul of the animal which has become an individual, in contrast to the plant. Indeed, the plant flows and is transformed. It can be cut to pieces, and each part can regenerate the entire plant. The animal, on the other hand, is an "indivisible" individual. Once it is born, the organism is already integrally formed, and it will live for an instant, compared to the immortality of the plant which is leaf. With the animal world, we encounter in another way what is made possible by the AIR element and the ASTRAL forces.

THE HUMAN BEING

While it is true that warmth penetrates all living organisms, especially warm blooded animals which have already developed a personal relationship with the forces of FIRE, these forces are expressed in a particularly remarkable way in human consciousness and thought.

This fundamental difference between man and animals is always very interesting to discuss nowadays in training, as confusion prevails on this subject. I notice that it is difficult for many to grasp what is fundamentally human in nature, namely free will and self determination, as well as specific thinking faculties.

MY PERSONAL EXPERIENCE

My experience of this training module is that it allows for a deep and concrete understanding of the four elements and their multiple manifestations, through a phenomenological experience. It allows us to anchor in reality some notions that are often difficult to grasp, such as the concepts of etheric, astral and spiritual in anthroposophical terminology, and to develop a fundamental knowledge of the nature of the mineral, plant, animal and human worlds. The progression from the four elements, through the kingdoms of nature, to the elements in the plant, gives depth and consistency to the approach.

Of course, it is up to each one to appropriate it as he or she wishes!

LIVING THINKING AND THE GOETHEAN PATH

As human beings, we find ourselves before the fabric of the manifest world; we are a part of it, and yet also it's observer. As we observe this world, which we can call the sensible world - since we see and experience it through our senses - this rich world appears on the horizon of our perception as objects of the most varied forms. If I remain a mere observer, the abundance of objects I perceive will never reveal anything other than their presence since the senses alone are incapable of grasping the unified content of the world. The intellect is incapable of transcending this separation; to achieve this, we must access a more living thought. Appearance is given by the senses while essence is captured by the mind. It is through living thought that we can penetrate the essence of reality and allow the true nature of things to express themselves to us.

Through the continuous development of our living thought over time, we can cultivate our capacity for independent judgement. By thinking for oneself in a more living way, we are able to bring our own individual will into the world, leading us to learning paths or decisions that are relevant to developing our own individuality. Gradually, over time, this will bring us into an intimate relationship with the earth and the consciousnesses that live within it. If we begin with simple things, we can become capable of embracing more complex questions and inquiries. Little by little, this relationship will grow until you truly recognize that you do not work alone, and you will become more conscious of all the beings working with you.

The Goethean Path seeks to awaken those inner capacities that enable human beings to distinguish clearly between what is appearance and what is

essence. It is a path of learning and development towards living thought. The different stages of this path of development are closely related to the adult learning process developed by Coenraad Van Houten (see Seven Life Forces as Adult Learning Processes in the last chapter). These stages are briefly presented in this chapter.

The Goethean path begins by developing a connection, curiosity or interest for an object or phenomenon. The plant was foundational for Goethe's research path, but it is not an exclusive path. Close observation of animals, humans or landscapes is also possible.

EXACT SENSORY PERCEPTION

In the first approach to the objective or phenomenon, we seek to perceive it as if it had never been seen before. Key in this path of encountering the essence of that being is to let the facts speak to you through your senses and try as much as possible to put aside all your preconceptions, theories, or previously acquired thoughts.

Recording everything you perceive with your senses (sight, touch, smell, taste, etc.) is fundamental and of vital importance. Writing or using different artistic techniques is an excellent way to record your perceptions in detail. As Goethe said: "He to whom nature begins to reveal its secrets feels an irresistible longing for its most worthy interpreter, art". Drawing from memory with your eyes closed, for example, imagining the object as you have perceived it, is an excellent way to build the bridge between the phenomenon and the human being as a scientific instrument.

Exchanging observations among peers is also a good way to see new relationships in the observed phenomenon. Seeking to describe it by ignoring pre-existing knowledge or assumptions, such as names or commonly used qualifications, can be an efficient way to seek to discover, for example, previously unseen qualities.

At this stage, however detailed you may have been able to describe the appearance of a phenomenon, you can only capture what it is showing you in a singular moment of its present. Such a precise sensory perception is the beginning of an encounter that reaches beyond the external phenomena. We become more and more able, to grasp the world beyond our senses and to encounter what we name the inner being or the essence of the being.

See Craig Holredge's contributions on page 72 or Jean-Michel Florin's exercise "The Tree" on page 89 for some thoughtful examples of sensory observation exercises.

EXACT SENSORY IMAGINATION

At this stage, utilizing all that has been perceived through the senses and imprinted in the soul, we seek to recreate as detailed as possible the image of the object in our imagination. The objective of this stage is to discipline our imagination in order to experience the plant, or any other living entity, as a dynamic process of life, as opposed to perceiving only its visual form through exact sensory perception. This is accomplished by imaginatively constructing the object through its changing forms.

Imaginatively following the various stages of a plant's development is one of the ways to strengthen our exact sensory imagination. For example, you can

experience the metamorphosis of a plant by taking it in your imagination from its initial stages of growth to flowering, or you can imagine how a plant metamorphoses through the seasons. The more detailed the images you can construct for yourself, the more you will get into the essence of the plant.

It is through imagination that we awaken those qualities of our thinking that will enable us to perceive the transformation of nature. It is through imagination that we can become deeply involved in nature's living formative processes and slowly approach the archetype, or essential idea, of that being in our soul.

Before continuing with the next stage, we should be able to feel that we carry something of that being in our soul.

See Anthony Mecca's exercise "Building capacities to live into the becoming of the plant" on page 46, or Craig Holredge's exercises for insightful examples of sensory imagination.

FURTHER STAGES...

In the following stages of the Goethean path we seek to make the phenomenon present itself as it is, as a living whole, and to achieve a state of being-one-with the object, which allows us to experience and understand it in its total expression, its essence, and as an idea.

Retaining the thought, seeking inner calm and abstracting from the apparent are essential steps to reach the inner disposition, in which the phenomenon

manifests itself in our soul. Continued practice of these traits results in greater access to living thoughts. These thoughts that we can now access or begin to create are beyond the knowledge of the everyday self. It is as if some wiser being is thinking of you. Artistic expressions that work from inspiration, such as poetry, singing or painting, can help in this path to capture and perceive the inner gesture, or what the being wants to express.

In this encounter, our soul meets the being of this being. As a result of this encounter, our inner enthusiasm awakens. Our capacities of thought and will forces are awakened to act in the world in service of the inner impulse of the other being. The Goethean path assists us to begin to act in harmony, guided by higher impulses. It is a path to self-development and authentic knowledge of the world.

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“EMPHATIC PERCEPTION” AS A PATH FOR VITALITY IN PLANTS

by Joke Bloksma, The Netherlands

The main **GOAL** of practicing “emphatic perception” is to perceive in your own body the inner expression of life processes to examine vitality of plants. The aim is to strengthen your own soul as the organ of perception, so you can actively find the optimal middle ground to produce vital products.

In emphatic perception we work mainly with the sense of movement, the sense of balance and the sense of life. The challenge is to gain a clear idea of whether you are observing yourself or the state of the plant or how you hope the plant will fare. This distinction requires practice.

THE METHOD

The steps in emphatic perception are:

- First you make sure that you feel at ease with yourself as an observer: a quiet deep breathing, a good connection to the earth, and a peaceful mind. Examine if you have expectations about the observation. If so, bid them farewell. You should not favor any particular outcome of the observation.
- We start out by moving as if we were a plant that is germinating and starting to grow. Make the gesture of growing, of taking space upwards and sideways with your arms. Just like real plants do in the field, find the space for yourself to stretch

and spread, to grow. This movement emerges from below in the earth (for the sake of simplicity, we leave out the movement of the roots). When you are on your way to your maximum size, touch the refining countermovement from the cosmos. This motion leads to differentiation (refining, specific form, color, smell, etc.). The differentiation gesture is a bit tricky to do; I open my fingers and allow the formative forces to flow from above into my own center. *Do you feel that growth and differentiation do not exist side by side, but permeate each other? Can you feel that growth comes from the earth and differentiation from the cosmos?*

- We already know how growth and differentiation feel in our own body. We use these basic two feelings to examine three cabbages with emphatic perception. These cabbages are the same variety, same field and planted on the same day. Their growth is different due to local differences in the soil. 1 is large, 2 is small and 3 is in the middle.
- Connect with cabbage number 1. Imitate its inner movement without thinking whether it is right or not. Feel how the growth overshoots, you are giving yourself away, maybe even standing on your toes, you are losing your power. Flabby, lush growth. The differentiation cannot take hold and only slightly refines. Disconnect with plant 1 and reconnect with yourself.



Joke was born 1956 in the Netherlands. She is a biologist, an agronomist and a coach. She worked as a scientist at the Louis Bolk Institute (the knowledge institute for sustainable agriculture, nutrition and health), as a teacher at the Warmonderhof (practical education in bd-agriculture) and as a freelance designer and coach for farm organisms.

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39 EXPERIENCING BIODYNAMICS

- Now look at the second small cabbage plant and connect and imitate the inner movement. Feel that you are not reaching your full size. Your true potential is not reached. You do not have the power to grow. You are in survival mode, drizzling. Disconnect with plant 2 and reconnect with yourself.
- Now look at the 3rd medium-sized cabbage plant, connect and imitate the inner movement. Feel how you are moving into a middle position here. You are taking up your full space. You receive the refinement. You stand in your power. You have truly become what belongs to you. Disconnect with plant 3 and reconnect with yourself. Sit down.
- Now try to perceive these gestures in your body. Remain seated and move internally without arms one more time like cabbage 1, 2 and 3, in order not to forget the feeling. Do it at your own pace and don't forget to disconnect between each plant. Note that moving your arms helps but is not absolutely necessary to catch the gesture. For example: *Are you in motion or at rest? Do you feel lifted up or pushed down? Are you aiming explosively outwards or towards your center? Is there balance or imbalance? Do you feel energetic or sluggish?*
- Finally, you are encouraged to search for words, symbols or make a drawing to express what lives in the plant and therefore also what just lived in you during the emphatic perception.



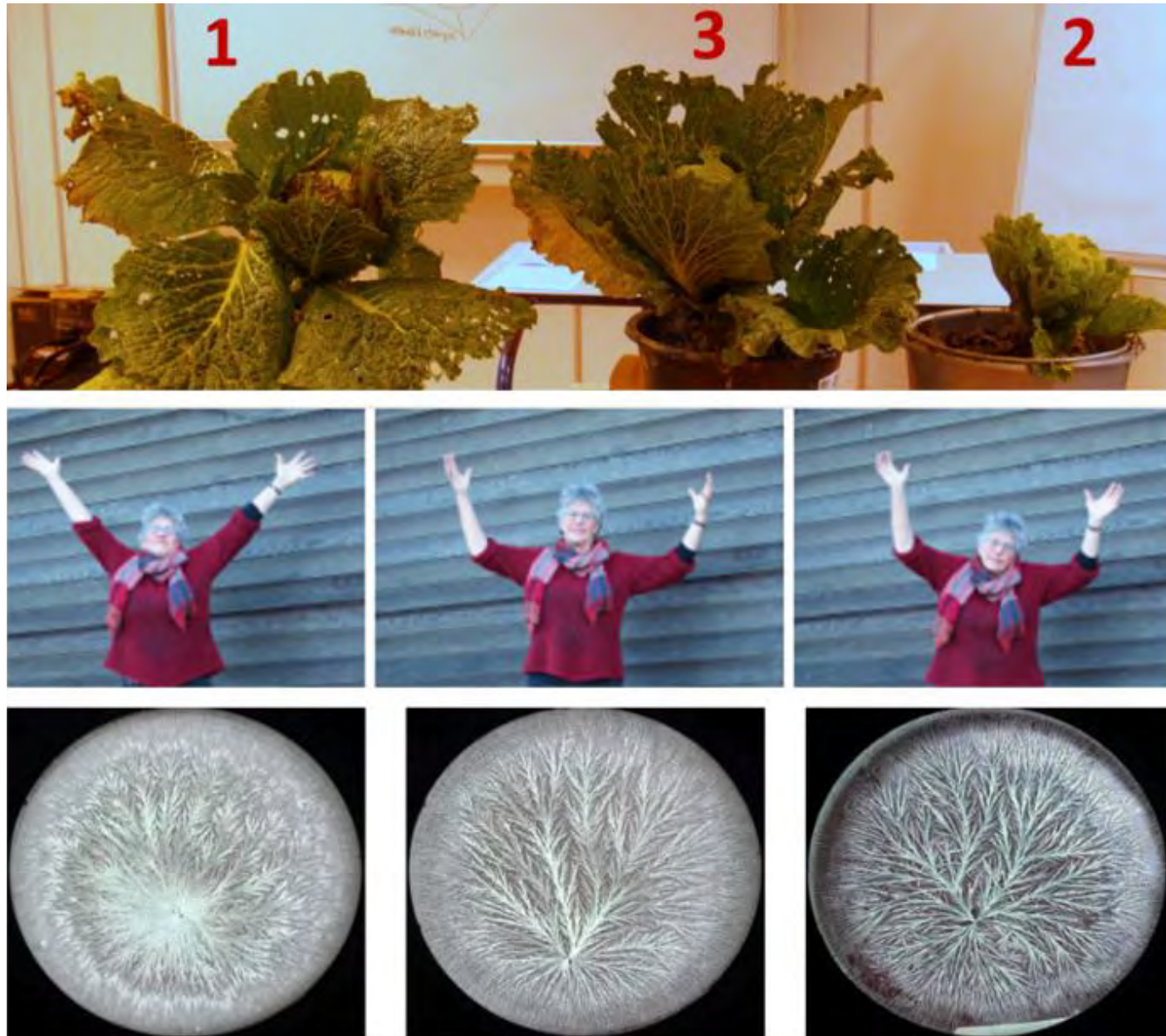
Students exploring the optimal balance in the crop.

MY PERSONAL EXPERIENCE

Emphatic perception is a method that allows you to become a tool to find the optimal balance between growth and differentiation that reaches full potential of the plant. The similarity between the gesture of the crop during cultivation and the gesture of the final product in picture forming methods is interesting. When I emphatically observe these crystallization images of a product after harvesting, I experience the same gesture as when I emphatically participate in the movement of the crop during the growth of the product.

Emphatic perceiving of the crop is much more practical for a grower than sending the end product to a crystallization lab, as it is also earlier in time, allowing a fine-tuning in the crop development. This experiential method for inner quality can support a gentle cultivation so that the differentiation can properly take hold and be integrated into the growth process.

So, I'll finish with the call 'Slow grow for vitality!'



Emphatic perception of the crop during the growth and in picture forming method.

PERCEIVING SOILS' INNER LIFE

by Walter Goldstein, USA

Soils exist in a living and dying dynamic. People can have qualitative, intimate experiences of that life in the soil, and they can find language for it. A reading and language for soil can be developed between humans.

The **GOAL** of this training methodology is to develop people's capacity to understand and perceive the life quality of the soil base on qualitative experiences.

THE METHOD

- A soil sample should be taken from the same site through the growing season. The sample should be taken on a monthly, or at least bi-monthly basis, starting in the spring (taking a pause in the winter for frozen ground) and ending with sampling early the next spring. Ideally it will be a uniformly managed site where you are growing a heavy feeding crop.

Every month extract 2 blocks of soil (30x30x20cm). You should dig by inserting the shovel around the sample on all four corners and gently lifting the soil out to preserve it in as intact a form as possible. After the soil block is extracted, you may work your way into it by opening up the sample, breaking off clods and observing them.

- It is crucial that you make sure that the content you entertain is based on what arises in you from the soil in your immediate experience with it. Knowledge

about soils from before should only be used to clothe the immediate content before you in the object of attention. Speculation should be strongly limited and attention should be paid to the fact that the soil is the final authority for understanding it. The intent is to grow inner experiences and capacities by selflessly paying attention to it and marrying soil with soul. We ask for you to abstain from referring to information from externally thought-out tests such as soil quality lab testing or dowsing while doing the exercise. Quality speaks not just to our ability to conceptualize but also to our feelings and deeper levels of what it means to be alive. We must gain the capacity for magnifying and obtaining clarity for what soil quality speaks to us on those levels.

- Each time you observe the soil, three aspects of the exercise will be apparent and need to be described:
 - **OUTER APPEARANCES.** Please jot down an analysis of the outer aspects of the soil. This means a quick external description of the soil including the organisms in it. What does it look like? Hints for directions for perceiving might include: crumbs, overall architecture and structure, smell, worms, roots, etc. What do you experience when you break the soil apart into its clods and crumbs?



Walter helped to pioneer biodynamic agriculture in the Pacific Northwest, where he is from. He studied biodynamic and organic farming in Switzerland, England, and Sweden. There he began his study of soil life dynamics based on observation of changes in the soil through the year. He received his MSc and PhD in Agronomy at Washington State University in the USA, studying alternative farming systems for the Palouse region. Thereafter, he served as Research Director at Michael Fields Agricultural Institute in Wisconsin for 25 years. In 2011 he founded the Mandaamin Institute (www.mandaamin.org) with friends. His present objectives are to help grow awareness of the life of the soil, to foster plant and microbe driven emergent evolution, and to help others to select better fit cultivars for a changing and vulnerable planet.

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42 EXPERIENCING BIODYNAMICS

- **INNER QUALITIES.** Now please describe the inner experienced quality of the soil associated with its form, substance, composition, and smell. The most important thing is to pay attention to the impressions that the soil makes directly on you, some of which may be apparent on hindsight. You should focus on these impressions and try to identify what they are and how they speak to you as an organism and a human being.

Hints include paying attention to different directions of the overall experience. Quality may speak to us in ways that cannot be quantified so do not be afraid of fostering poetic but accurate descriptive impressions. For example, if apparent to you, you may choose to explore your sense in the soil of: earthiness, wateriness, availability and visibility of inner spaces and forms, animality, formative powers or qualities, and of the roots, which will of necessity, penetrate the soil.

Please describe what you sense of inner qualities. This might include experiences of power, vitality, fertility, and potential, that are associated with the soil. Or on the other hand, of gravity, density, compaction, minerality, and sense of decay associated with organic materials.

The overall goal is to achieve a practical awareness in yourself of the balance of these qualities in the actual soil before you. The idea is that your assessment of where the soil “is” at each sampling time is based purely on your experience.

- **MEMORY AND REVIEWING FEELINGS.** Review your experiences over time. What is your impression of how the soil has changed between examinations? Once again, refrain from lots of externally derived explanations but stick with what is personally experienced.

MY PERSONAL EXPERIENCE

People can experience soils on different levels. Results depend on the calmness, experience and openness of the person. Some get discouraged by not having access to inner experiences, but they just need to keep sensing and describing what the soil is like. Soil life and its changes can be a big surprise! Here I present some of my learnings through the exercise with the soil in my garden. With this example, I do not want to impact your experience but to open your own awareness for exploring what you yourself will find in your soil.



7 April, 2020. Soil after weedy fallow: Rested, vital, aggregated, porous, sculpted. Permeated by forces from the depths. Brain like impression to the soil, curious roots sensing in it.

43 EXPERIENCING BIODYNAMICS



3 May, 2020. Soil after weedy fallow: After rotovating. Topsy turvey 4-inch top layer. Destruction of many air spaces with compaction. Oozy-chaotic, unpleasantly restless, fresh compost feel.

Feel which I recognize in myself as willful impatience. Sense that the subsoil clay is connecting the soil with what is happening deep down, including the waters deep below. *It's all connected!*

Individuality of place connected with the reality of that experience



7 August, 2020. Rapid growth of maize crop associated with soil devitalization. The soil lacked the ability to hold together as a whole. It spontaneously broke upon removal into dense horizontal blocky layers. Little air space. Particles seemed at times to be mineral crystalline with sand standing out. Some gentle life quality, but in general the soil as a whole felt fairly dead.



2 December, 2020. Soil in area with some annual ryegrass. Soil has not frozen yet. It appears well crumbled and crumbly with some blocky regions 8 to 13 cm down. Though the soil appears structured it feels quiet and introverted and not very vital; as if it is sensing more than living

May 5, 2021; cover crop after corn. Two separate depths give split different experiences. Soil has a quiet dynamic, living feel to the top 8 to 10 cm of soil, seems in living harmonious sync with moisture and the atmosphere. A sense of breathing.

Lower levels are hard, cloddy, and seem dry. Sense of being in sync with the power of the mineral depths.

Forces of the depths are titanic, similar to the feel of the depths in a quarry.



**FROM PERCEPTION TO
IMAGINATION
EXERCISES FOR DEEPER ENCOUNTERS**

“While it is true that we have torn ourselves away from nature, we must have retained something of her in our being. This essence of nature within us we must discover; then we shall find the connection once more...We can only find the nature that is outside us, when we have first learnt to know her within us”.

Philosophy of Freedom, Rudolf Steiner

BUILDING CAPACITIES TO LIVE INTO THE BECOMING OF THE PLANT

by Anthony Mecca, USA

EXACT SENSORIAL IMAGINATION

The basic life stages of a plant's growth and development are generally familiar to us and can be quickly listed off – seed, sprout, leafing out, flowering, fruiting, back to seed - but beyond these familiar names, what is going on within each of these stages and in the transitions between? Many farmers and gardeners work with a variety of plants, making it challenging to focus strongly and deeply on any one particular plant. Finding a plant you have an affinity for and getting to know each of its stages deeply is one of the most enlightening activities you can take up in terms of learning to care for them, which can be extended to the overall care of the life of the earth.

Corn/Maize is a crop that has had a lot of research devoted to it in the US, and each stage of its development has been closely researched and laid out to support farmer's practices during its growth and development. Researchers have even found that certain stages correspond to later stages, such as a time before the plant has even shown any signs of flowering that determines how many rows will be on the cob, along with many other corollaries. From this example we can see that meeting the needs of each specific plant at each critical stage of growth, or stage of influence, can have major effects.

To live into the becoming of the plant through each stage, you can develop and work towards what is called imaginative consciousness. Different from the usual understanding of imagination, Rudolf Steiner describes imaginative consciousness as “conscious picture consciousness”. We can work to consciously create and work with pictures inwardly through uniting with the activity that lives behind them.

“Imaginative consciousness begins with our ability to think not in an abstract way, separating our thoughts in the intellectual-dissecting manner, but to think in a unified context: to begin to think in pictures that place thoughts within the larger world of thoughts. Things are related to each other not because of our ability to rationally order our thoughts, but because they belong to the whole. Our capacity for ordered thinking is only a reflection of the organic unity that holds sway in the world of ideas.”¹

As we begin to build capacities in imaginative consciousness in support of supporting healthy plant development and place these pictures in larger contexts, we may find we are more able to work with what is trying to reveal itself in everyday life.



Anthony is working as Farmer Training, Education, and Programs manager for the Biodynamic Demeter Alliance in the US. He also offers other courses, workshops, consulting and mentorship for all ages through Developing the Self - Developing the World, EduCareDo, and on an individual basis.

Through his work as a farmer he experienced an inner need and striving to clarify and deepen his understanding of agriculture and the farm organism, and to progress from materialistic conceptions that are common even in biodynamics, to a living participation in our relationships with the natural world and each other. Finding a way to Goethean science and the path of anthroposophical meditation and inner work has greatly supported his journey.

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A first step towards imaginative consciousness is through Goethe's phenomenological approach. After working to take in the whole of the plant, with detail, through the senses, one recreates the picture of the plant in one's mind's eye as accurately as possible, making use of all the impressions available (see "Living Thinking and The Goethean Path" on page 36).

Goethe termed this method 'exact sensorial imagination': from what has been taken in through the senses and impressed upon the soul, one creates living inner pictures of the plant. As one practices observation and inner picturing, each becomes more lively. The morphology of the plant towards the archetype, or essential idea, is slowly revealed over time. As the plant moves from a stage of leafing to that of budding, a major transition occurs. Through this method, one is able to live into the becoming of the plant as it moves through these metamorphoses. Though it may not be possible to put into words, one can have an experience of how to work with the question of "how does the plant move from leaf to flower?," for example. We are moving with the image as it transforms through the mobility of our soul.

The exercise below takes Goethe's exact sensorial imagination and extends it slightly to live through Steiner's indications to work more clearly and directly with the activity that is behind the image, and the beings that live behind this activity.

This exercise bridges between the sensed world and the spiritual world; one strives to participate in the life of the plant and the creative forces and beings that are active in the creation of that life, while working concretely with the sense-perceptible plant to which

these forces are connected. It is a step towards working with sense-free thinking and meditation that allows one to check our inner world against the outer world. This is not necessarily a failsafe, as the sense world and our habits of working with it can also deceive us and muddy up our experience. But the two sides working together – of inner and outer sensing, of the sense-perceptible plant and the living image of the plant – have the potential to clarify and strengthen each other.

THE EXERCISE

Choose one particular plant to work with, ideally one you can continue to work with over weeks or months.

Put aside any past thoughts or feelings you have in relation to the plant. Find a place within where you can give yourself over to the plant as you would in a conversation with a person you wish to care for and support from an objective standpoint.

STAGE I

- With an active will towards participating in the life of the plant, take the plant in with your senses outwardly as well as with an 'inner eye' to your inner life:
- Observe and perceive the plant through the fullness of your senses, in its wholeness as well as in its particulars.
- Reach out with your senses. Just as you reach out with your hand to grasp something willfully, use your sight to reach out, envelop, and really drink in the impressions. Do this with your other senses as well.

- Allow all of these impressions to resound inwardly in all their fullness, weaving together towards creating an experience of the whole plant.
- Stay with these impressions that form a wholeness, allowing the impressions to deepen, carving out landscapes in your soul.
- Extinguish the experience of the impressions; let it go, and sense what remains. Hold this willfully for a minute.

STAGE II

- Step away from the actual living, physical plant you are working with in time and space.
- With your eyes closed, build up inwardly a living image of the plant you worked with in Stage I. Work not from your brain-based memory, but create this image artistically, almost as if you are painting it and trying to express an inner experience as vividly as possible with attention to detail and depth of life.
- Allow this living picture to grow, develop, and deepen. The wholeness may become more whole, details may reveal themselves and fill out, colors become vibrant, the living qualities behind the image become richer.
- It may take working this exercise repeatedly for a long time for these qualities and experiences to come into being.
- Stay with this living image for a few minutes, holding it in your soul.
- Extinguish the image; let it go, and sense what remains as the activity behind the image. Hold this willfully for a minute.

48 EXPERIENCING BIODYNAMICS

- Extinguish this activity towards 'emptiness'. This is a more challenging place to be, but even a short moment here starts to build a capacity to be with the beings that live behind the activity that creates the image of the plant, the same beings that create the actual plant.

STAGE III

- Revisit the actual living, physical plant. What is your impression like now compared to your original impression?
- You may notice something you did not initially; or you may see something outwardly or experience something inwardly that you did not recreate truthfully in the living inner image.
- This can be another opportunity to repeat Stage I and develop the conversation with the plant.

PROSPECTS OF THE EXERCISE

This exercise can be continued throughout the life of the plant. This exercise can be extended to work not with a 'snapshot' in the life of the plant, but with the different development stages of the plant brought together as a living whole. You can bring up inwardly a number of living images, placing them next to each other. Here we can begin to work to experience and enact its metamorphosis in our soul. You may also take the plant backwards through its development to really work this inner 'muscle', to get to know the plants development coming from the other side. This develops a relationship with what has become, and can be applied towards what is to come, in this plant's next steps this year as well as in the next year.

Once this capacity has sufficient grounding in working with plants, it can also be used to assess other things. We can bring it towards the life of the soil, towards the weather and climate, towards the greater landscape. It can be used in reviewing our life as, for example, in the ruckschau or review of the day, as well as in social situations.

Using this capacity towards imaginative consciousness, we can also bring to mind, for example, interventions, management activities that we may be considering, and ask what they may bring about by placing their living activity and image with this living development of the plant.

Imaginative consciousness, as described by Steiner, allows a relationship to the realm of life, whether it is manifested physically, or not. Imaginative consciousness can be applied similarly methodically to non-physical activity in the etheric, or elemental, realm. This asks us to work much more strongly with other facets of inner work and meditation, to purify and transform our soul life so that we can be in healthy relationships with the non-physical and not confuse it, or lump it into, the physical. See Lisa Romero's introduction in this manual as well as her books, such as *The Inner Work Path*, *Developing the Self*, and *Living Inner Development*.



Painting by Sara Parilli

PLANT MEDITATION FOR HOLISTIC GARDENING

by Chik Ying Chai, Malaysia

It is important for us to learn to look deeply into our perceptions, recognize their source to have clear insights before we take action and manage our farm organism that is interdependent, complex and impactful to the health of our eco environment. It is not enough to simply react based on emotion or farming recipes for decisions and challenges we are facing today. We need to develop harmoniously our thinking, feeling and willing to move into a living, intuitive and generative dimension. When we think in transformations, in metamorphosis we come into a different relationship to the element of time or life, we allow ourselves to see the individuality and potential of our farm and living situations. How does it come into being? When is it the right time for a given intervention? When we widen our soul space in observing our perception, we place ourselves outside of the situation to see the relational, sense the connection and wholeness to unveil its potential to its becoming for healthier development.

How do we cultivate this new gesture? How can we encourage farmers to see themselves and their connection to the farm organism with higher self-consciousness? How can we maintain a living connection with nature through agricultural activities?

Taking art as a bridge from heart to soul, we seek to connect the experiences of sensing qualities to develop our gardening practice in a harmonious way. We can learn to enhance our sensitivity so that feelings become

reliable senses, assisting the faculties of observation and thinking, to better perceive the inner nature of the individual beings and their relations in the garden organism.

THE EXERCISE

- To begin, take a walk around the plant you will observe. Immerse yourself into the atmospheric mood and the elements of its surrounding: the soil, air, warmth, water, lights, other plants, people and any manmade objects surrounding the area. Notice your first impressions, breathing and feeling during this process. Express the mood on paper with pastel or chalk drawing (10 minutes).
- Tune into the plant's scents, form, colors, textures etc. Using pencil, draw the plant from bottom to top very slowly with "blind drawing" (track the edge of the plant with our eyes without looking at the paper and draw in a steady continuous line without lifting the pencil). Observe attentively the outer phenomena of the plant. (10 minutes).
- Notice, too, our instinctive feeling about the plant: Do I like this plant? Does it irritate me? Gently put these feelings aside if they arise. (Our attention, thoughts and feelings have an effect on the garden or farm becoming. By freeing ourselves from prejudice we give space to experience anew the



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Example of mood drawing surrounding the plant.

inner nature of individual beings and open ourselves up to moments of intuition and to essential decisions for our farm organism.)

- Have a break, close your eyes and take some slow breathing in and out. Try to put aside the image and sensations experienced.
- Recreate the sensorial experience of the plant in our imagination (10 minutes).
- Holding this imaginative picture, revisit the plant and its surrounding. Observe what we encounter.
- Exchange with peers what you perceive. We can try working with questions such as: What is a stinging nettle? What is the plant's temperament, essential characteristics and inner qualities of its being (moral qualities)? How can I best support this plant's work? How can I bring the plant into harmony with the seasons and garden organism as a whole? What was most inspiring in this observation? Etc.
- Reflection: What was new to me in this exercise? What was most inspiring in this exercise? What are the challenges faced? What will I do with my findings from this exercise? How can I cultivate regular practice like this?



Example of mood drawing surrounding the plan.



Example of imaginative image from sensorial experience.

FRAGRANCE AND AROMA PAINTING

by *Torsten Arncken and Jasmin Peschke, Switzerland*

INTRODUCTION

Fragrance painting means smelling a part of a plant or any other sample and transforming it into a picture. It is a method of transforming sense perception into imagination with full consciousness, experiencing the etheric qualities of substances by using art as a tool.

In the following paper, Torsten, who developed the method, and Jasmin, who is performing it in workshops, present a practical example of a workshop. The background and theory of the method are described, and it is introduced as an extension of the Aroma Painting method.

In 1920 Rudolf Steiner mentions a method for scientists to enhance their consciousness from sense perception into imagination (see literature at the end of this text). Here we want to outline how to practice this method in research and workshops.

We would always recommend beginning with a short description of the method and of the procedure the participants should follow, and then start doing it step by step. The background and theory can be explained later.



Jasmin Peschke, born in 1963, holds a PhD in nutrition science and has been concerned with quality of food for over 30 years. She is a certified trainer in Empathic Food Testing and after working in quality management and development for the food and cosmetics industry, she has been working at the Section for Agriculture at the Goetheanum since 2016, where she heads the Nutrition Department. Her central concern is to highlight the complex interrelationships in the food system - in lectures, events and projects as well as in her current book "From the Field to the Plate" (not translated into English yet). She wants to encourage people to cultivate their own self-determined diet and thereby contribute to a healthy future.

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Torsten Arncken, born in 1962, studied agriculture in Göttingen, Germany and specialized in plant breeding. He studied a one-year course with Jochen Bockemühl and Georg Maier at the Natural Science Section, Goetheanum. Since 1990, he has been working on projects with plants for Weleda medicinal and cosmetic research. Torsten's main field of research is the inner connection between form (morphology), scent and aroma of plants and their effects on humans. He has been involved in the development of a method to symbolize scent and smell, to get from sense perception to imagination. Since 2012, Torsten has also been experimenting with plants and the planetary metals to experience the forces of the planets and developing a remedy with Lemon Balm and Gold. Since 2020, he has been experimenting with the effect of different lights on plants to distinguish the 4 different ethers.

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THE WORKSHOP

MATERIALS

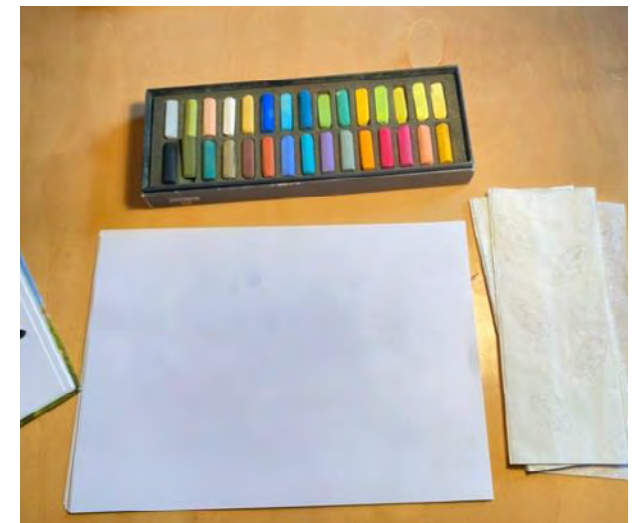
- Samples to smell or taste.
- Colors (we recommend pastel chalks, but others are fine too. Watercolors are too difficult to use in a short period of time).
- Drawing paper (white printer paper is fine).
- Paper towels or cloth for cleaning hands.

PROCEDURE

Prepare the working places. Before the participants arrive, each table should have an open color box, painting paper and paper towels/cloth. It should give the impression of an invitation. When the participants are seated, give a short introduction to the method:

If we look at nature in our normal state of consciousness, we do not only have sense perceptions, but always bring thoughts into the picture of what we see. For example, we look at a plant and immediately start to think: “plant”, “leaves”, “stem”, “rose”. We do not only have pure perceptions but fill our perception with concepts. Rudolf Steiner mentions that we should try to get a pure perception without having concepts. If we let go of our concepts, we clear our view and can see the spiritual world. This is very difficult. So, Rudolf Steiner suggests the tool of “symbolizing the sense perception”. What does he mean with symbolization? In our view this means transforming the pure sense perception into a picture, while you are perceiving/observing.

To train the mind, it is easier to do this with the senses of smell and taste instead of using the sense of sight, because in these fields we do not have so many concepts. So, let’s start with smelling.



First Observation: Anise

You take the first sample in one hand and smell it. You can squeeze the seeds so they give more scent. You breathe in, and while breathing you inhale the scent. Now you experience the qualities of the anise in yourself; try to feel the quality without thinking of it and forming terms. Now try to bring it into a picture, using your fantasy and trying to bring the quality of what you discover into a shade of color that fits and into a form or movement on the paper. If you experience a quality in the scent that has a certain feeling, look for a color that has the same feeling quality. Let the expression come through the color. After painting that, smell the seeds again, experience new qualities and try to paint these as well. And so on. After some minutes, you have created an inner landscape of the scent of anise, and you have symbolized it.

When the participants are smelling, it often takes a minute or more before they start drawing. It is important that they don't talk, so that we come away from the field of words, calm down and become more open to the observations. After 3 to 7 minutes, most of the participants will have finished.



Representation of the scent of anise.



Representation of the scent of carawa.

Second Observation: Caraway

Now ask the participants to take a new sheet of paper and start with the second observation, this time with a caraway seed (*Carum carvi*).

Description: “The scent of caraway is immediately warm, light, round and wrapping; it gains substance over time and is strongly grounded. The caraway substance is much darker and more on the ground than the quality of the anise. The caraway is more concentrated and more moving. It feels more down in the stomach.”

So, with these two scents we have a polarity of qualities: anise is expanding and light and caraway is concentrating and darke

Third Observation: Fennel

Now a new sheet of paper is taken. It is best to wait until everything is prepared for the next round before going onto the next smelling. If the participants first get the sample and then prepare the next sheet of paper, it makes too much noise and creates unrest in the room. Keep the atmosphere calm and concentrated.

Let the participants take their third sample, in this case, fennel seed (*Foeniculum vulgare*). If we take only two samples, we automatically come into a polarity. By taking a third object we come out of the polarity. It becomes more complicated with three observations, but it opens the mind into the real dimension of what we will be observed in the imaginative world.

Description: "At the beginning strongly aromatic, earth-like, warming, wrapping. The fennel is aromatic, light, fresh-smelling and much more moving than the other two. It has no darkness, it is calming, softening, and balancing."

After the third observation, you can ask the remaining participants who have not so far shared their experience to describe their three experiences and show their three pictures.

Doing a session in this way with three samples and twelve participants takes about one hour.



Representation of the scent of fennel.

ADDITIONAL POINTS

Some people like to look at all the pictures afterwards. You can pin them to a wall or lay them on the floor: one person's pictures from left to right in a row and the next under it. In this way you get an overview, and participants like to see similarities between their pictures. Some people like to make three groups with all anise pictures in one spot and the caraway in another, and so on. This is also nice because you see the general color in the three places. Looking at all the pictures this way takes at least 20 to 30 minutes. Do not underestimate this. But it is nice to do if you have the time.

These pictures were drawn without seeing each other's during the process. We think the samples look quite similar, but that is not important. The pictures do not have to be similar: it is more important to go from picture to picture and feel the change and diversity of qualities between them.

Jasmin paints it this way:



Anise



Caraway



Fennel

Torsten paints it this way:



Anise



Caraway



Fennel

TYPES OF OBSERVATIONS

Most people make exact and interesting observations.

Some categories of what can be described:

- Movements, developments. Pairs such as dark and light, warm and cold, up and down, and so on. These are descriptions on the etheric level, and these are the observations we are looking for.
- Some people describe memories such as: “this reminds me of a meadow”, and they have the picture of a meadow in mind. Then you can ask: “What did you experience to think of a meadow? What was the stimulus for remembering a meadow?” If they say something like, “the light fresh quality in the smell”, then you realize that this experience/ observation induced the memory.
- Some describe feelings such as, “this wakes me up” or “this makes me feel sleepy”. These are the observations of the soul, of the astral. With everything you observe there is always a change in mood of the observing people.
- Some people make judgements such as: “I don’t like this” or “I love this”. There again we can ask what quality they observed to come to this judgement. Judging is a quality of the intellect, that is added to the observation and that we try to avoid.

ADDITIONAL DESCRIPTIONS AND OBSERVATIONS OF THE PLANTS

After the observations you can talk about the use of the plants in the kitchen and as remedies. Anise is used for sweet buttery cakes and waffles. Caraway is used as a spice in fatty meals or with cabbage: it activates the digestion. Fennel is a spice and also a remedy against bloating of the stomach. It calms the stomach, aiding the rhythm of digestion.

You can also look at the shapes and flowers of the plants or where they like to grow. This all helps to form an inner picture. But it is not as important as smelling. So, it is hopefully evident that there is an inner connection between the observations of the imagination of the scent and the different digestive effects.

THEORY/BACKGROUND

We recommend presenting the theory or background of the method. The best way to do so is to talk about it in two parts, i.e., before and after the smelling and representation.

WHAT HAPPENS IN THIS PROCESS

Normally, we transform perception into concepts. We smell the seed and identify the anise-scent as anise. In doing so we close the perception and have a result in the form of a word with meaning. If, on the other hand, we try to symbolize it, we dive into the quality of what we experience. We deepen the experience and come to experiences of forces, of movements, of relationships. They appear as feelings that take us into their existence. We then use our fantasy to create a representative color and form to picture the quality that we experience. This means that we activate our intention and our will. If we have a normal sense perception, we only see the given, and are passively receiving. If we try to paint the experienced inner quality, we create something new with our will and we move into the future. In this way we change from passive perception to active creation. In doing so, our will becomes an organ for the qualities of perception. The will, in which we are normally asleep and of which we are unaware, becomes enlightened.

When we perform this process it is good not to think too much and, after becoming accustomed to it, we think less and less and increasingly intuitively choose a color and let ourselves be guided by the smell to create a form with it, through the qualities of the scent. We can say that the scent is painting the picture, and we are the transmitter for it: the witness of a vital activity in ourselves.

SOME IDEAS ABOUT WHAT WE ARE DOING

Rudolf Steiner claims that if we let the pure sense perception stream into us, our “physical organism reacts by creating imaginations”. What are imaginations? If we expect new kinds of physical pictures, we will be wrong. These would be hallucinations. Instead, we experience forces and movements, we experience different qualities of vitality. We are in the world of constant movement without seeing pictures of things. We are in something, a little like being in a river. And in the same moment we can observe this and bring it to consciousness.

What we experience is not only taking place in our physical body and is not perception with a physical sense, though starting from there. We have experiences with the whole etheric body. The scent is the entrance door, but the etheric body becomes an organ to observe the quality. When smelling, some people say, “it is expanding” and make gestures that go far beyond the boundaries of the physical body. We experience something in a new area of ourselves, in the etheric body.

We make observations that are within us but at the same time are also objective. Rudolf Steiner says these are subjective-objective observations, and states that Goethe had a desire for these kinds of experiences. It seems that the experiences come from within our center, from a fountain in the area of our heart. By creating an artistic picture, this method therefore helps us to actively go with our consciousness from a sense perception to imaginations of the qualities.

RUDOLF STEINER POINTS OUT THAT WE HAVE CERTAIN BASIC QUALITIES IN THE IMAGINATIONS AND THAT THESE RELATE TO THREE SENSES.

There is a sense for movement, meaning we can feel the movement of our body and, even if it is dark, we can find our nose with our hand or finger. We then have a sense that allows us to stand upright and orientate towards the earth: our sense for balance. And the third sense is for our own vitality: in the morning we feel fresh and good, but in the evening, we feel tired and weak. These three are what are known as the lower senses. Here in our observation, we find that the substances give us movements, they orientate us to the earth, and they show us vitality or weakness. We experience the quality of the substance through the basic qualities of these senses. Rudolf Steiner says that we see the bare inside of the lower senses. He claims: “When one has penetrated as far as that which lives in the sense of balance, the sense of life, and the sense of movement, one has reached something that one experiences initially as the true inner being of man because of its transparency.” (See literature at the end of the text)

A FEW WORDS ABOUT MEMORIZING

These experiences that we made cannot be remembered. We do not think them with our physical brain. We experience them in the etheric world. They become part of the world ether. This means we must create the experience again if we want to experience it. It helps to keep the pictures. And if we look at them sometime later, we can recreate a slight memory about what we experienced.

WE MUST CREATE THE EXPERIENCES OF THE IMAGINATION, BUT DO WE “MAKE” IT?

Rudolf Steiner claims that these imaginative qualities are always connected with every sense perception. But our mind makes something in the world out of that. It creates the physical world (this makes us free because we do not feel connected to the pictures of the world). But the inner processes are always there. With this method we gain access to this etheric world because we silence that part of the mind that creates the illusion of a “world outside, opposite to us”. In the imagination we experience our inner connection to the living world.

REMARKS

We take substance from the earth, which is holy, and we give it to the participants. If we see the substance in its spiritual quality, we emphasize that we sacrifice the substance. The people take it, sense it, and they resurrect the substance in their pictorial, etheric consciousness by creating new pictures as symbols for their experiences. The laboratory table has become an altar. By performing these kinds of research, we are pioneers in the future of consciousness. We go from the earth and from sense perception to the etheric forces by keeping the connection to both realms. We connect the etheric world and the world of the senses, entering the spiritual world in a combination of science and artistic work.

Use this method to connect to plants and experience their forces. Everyone likes doing this, but will they use it in their work? Encourage them to repeat it with plants and substances they like and are working with. It can even be done with children. It is amazing how expressive their pictures are. But most of all it is a tool for scientists and all those working with quality in nature. They can connect with nature and experience the quality of etheric substance. This is a basis for deciding about the possible use of the plants.

PROSPECTS FOR THE FUTURE

This method can also be applied to tasting. As simple samples that everyone should have at home, we suggest taking sugar, honey and salt. The procedure and the method are in principle the same as those described for smelling. Here the samples are, for example, offered on a spoon; you do not need a big quantity. Encourage the participants to discover what the sample is like and not ask what it is.

The pictures were drawn without seeing each other's while painting. These three tastes are interesting, because the honey is from the realm of animals, sugar is from plants and salt is a mineral.

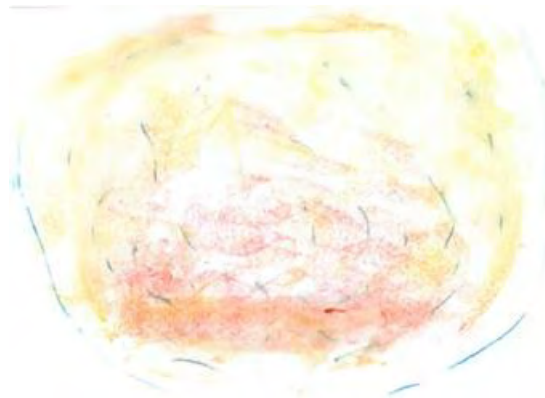
SOME OBSERVATIONS:

Sugar: light, metallic, movements in and out. Expanding. **Honey:** warm, covering, aromatic sprinkles, sticky, heavy ground. Many experiences and a drawn-out development of the flavor. **Salt:** very warm, only one experience, no manifoldness.

Jasmin paints it this way:



Sugar



Honey



Salt

Torsten paints it this way:



Sugar



Honey



Salt

DIFFERENCE BETWEEN TASTING AND SMELLING

Smell, or odor, is something that occurs in the element of air and is all around: there are no spatial limitations. A scent fills the whole room. The plant is expressing its being into the air. We take this in and experience the being with our etheric body and feel this in our soul. The plant touches our soul with its soul.

Taste is more linked to the substance, and transformation into a liquid is needed in order to be able to perceive it as taste. The tasting is a process, and we observe this more with our etheric body and physical body. Tasting is not as soulful as smelling.

CONCLUSIONS

With the Fragrance or Aroma Painting we show a simple method to enter and go beyond sense perception. It is an easy procedure with which to recognize qualities connected with substances. We would like to encourage all those interested to experiment with this method and develop their experience. Dear readers, we would love to read your suggestions or questions on this method!

RUDOLF STEINER CITATION: BOUNDARIES OF NATURAL KNOWLEDGE

GA Nr. 322, Lectures on Oktober 2nd and 3rd, 1920. Given in Dornach, Switzerland.

“In my book, *Knowledge of the Higher Worlds and Its Attainment*, I have described an entirely safe path leading to the super-sensible, but I describe it in such a way that it applies for everybody, above all for those who have not devoted their lives to science. **Today I shall describe a path into the super-sensible that is much more for the scientist.** I will now assume that The Philosophy of Freedom has been worked through already with one’s ordinary consciousness in the way described. Now we are in the right frame of mind for our souls to undertake in a healthy way what I described yesterday, if only very briefly, **as the path leading into Imagination. It is possible to pursue this path in a way consonant with Western life if we attempt to surrender ourselves completely to the world of outer phenomena, so that we allow them to work upon us without thinking about them but still perceiving them.** In ordinary waking life, you will agree, we are constantly perceiving, but actually in the very process of doing so we are continually saturating our percepts with concepts; in scientific thinking we interweave percepts and concepts entirely systematically, building up systems of concepts and so on. By having acquired the capacity for the kind of thinking that gradually emerges from The Philosophy of Freedom, one can become capable of such acute inner activity that one can exclude and suppress conceptual thinking from the process of perception and surrender oneself to bare percepts.”

“But there is something else we can do in order to strengthen the forces of the soul and absorb percepts unelaborated by concepts. One can, moreover, refrain from formulating the judgments that arise when these percepts are joined to concepts and create instead symbolic images, or images of another sort, alongside the images seen by the eye, heard by the ear, and rendered by the senses of warmth, touch,

and so on. If we thus bring our activity of perception into a state of flux, infusing it with life and movement, not as we do when forming concepts but by elaborating perception symbolically or artistically, we will develop much sooner the power of allowing the percepts to permeate us as such. An excellent preparation for this kind of cognition is to school oneself rigorously in what I have characterized as phenomenism, as elaboration of phenomena. If one has really striven not to allow inertia to carry one through the veil of sense perception upon reaching the boundary of the material world, in order to look for all kinds of metaphysical explanations in terms of atoms and molecules, but has instead used concepts to set the phenomena in order and follow them through to the archetypal phenomena, one has already undergone a training that enables one to isolate the phenomena from everything conceptual. And if one still symbolizes the phenomena, turns them into images, one acquires a potent soul for enabling one to absorb the external world free from concepts.”

“If one desires to do real research concerning human physiology, thinking must be excluded and the picture-forming activity sent inward, so that the physical organism reacts by creating Imaginations. This is a path that is only just beginning in the development of Western culture, but it is the path that must be trodden if the influence that streams over from the East, and would lead to decadence if it alone were to prevail, is to be confronted with something capable of opposing it, so that our civilization may take a path of ascent and not of decline. **Generally speaking, however, it can be said that human language itself is not yet sufficiently developed to be able to give full expression to the experiences that one undergoes in the inner recesses of the soul.”**

“In striving for Imagination, however, one wends one’s way through the sensations of smell, taste, and touch, penetrating into the inner realm so that, by

one’s remaining undisturbed by sensations of smell, taste, and touch, the experiences stemming from balance, movement, and life come forth to meet one. It is a great moment when one has penetrated through what I have described as the sense-triad of taste, smell, and touch, and one confronts the naked essence of movement, balance, and life.”

“When one has penetrated as far as that which lives in the sense of balance, the sense of life, and the sense of movement, one has reached something that one experiences initially as the true inner being of man because of its transparency. The very nature of the thing shows us that we cannot penetrate any deeper. But then again one has more than enough at this initial stage, for what we discover is not the stuff of nebulous, mystical dreams. What one finds is a true organology, and above all one finds within oneself the essence of that which is within equilibrium, of that which is in movement, of that which is suffused with life. One finds this within oneself. Obviously, we cannot expect to achieve this quickly. Spiritual research demands of us far more than research in a laboratory or observatory.”

“The whole man experiences something in the act of sense perception. Sense perception, together with its content, passes down into the organism, and the ego with its pure thought content remains, so to speak, hovering above. We exclude thinking inasmuch as we take into and fill ourselves with the whole content of the perception, instead of weakening it with concepts, as we usually do. We train ourselves specially to achieve this by systematically pursuing what came to be practiced in a decadent form by the men of the East. Instead of grasping the content of the perception in pure, strictly logical thought, we grasp it symbolically, in pictures, allowing it to stream into us as a result of a kind of detour around thinking. We steep ourselves in the richness of the colors, the richness of the tone, by learning to experience the images inwardly, not in terms of thought but as pictures, as symbols.”

MEET THE ANIMAL

by Jean-Michel Florin, France

In his course for farmers, Rudolf Steiner repeatedly emphasizes the fundamental importance of the presence of animals in the agricultural domain. First, it indicates the need to create a closed (or almost closed) cycle for the cycle of substances of plant and animal origin on the farm. Ideally, animal feed should be produced on the farm, and manure should come almost exclusively from the manure produced by the animals on the estate. It also specifies that any imported substance should be considered as a temporary “remedy”. But, beyond this first “material” level, it evokes the importance of being attentive to more intimate reciprocal relationships between plants and animals on the estate. In this regard, he gives as an example the intimate links between birds and conifers or mammals and shrub dens, etc. If we take these statements at a first degree, we can be quite surprised because of course conifers are not the only trees that attract birds. To understand these indications, we must realize that R. Steiner is speaking about the spiritual aspect of being, pointing out at the beginning of his course their intimate nature and not only their “external”, physical aspect. Animals bring and disperse astrality throughout the agricultural entity.

What can it be in concrete terms? How to overcome the simplistic representation of an invisible substance? How can we perceive this Astrality specific to each animal based on the concrete experience of our personal encounter with the animal?

The **GOALS** of these series of successive exercises is to broaden our vision of the animal by making us discover that each animal is composed of two halves. A visible half: the material animal; and an invisible half: the animal-soul, which radiates widely in space through the sphere of action it animates. The material animal is like the emerged part of a huge iceberg whose submerged part is the soul of the animal.

THE EXERCISE

STAGE I: FIRST IMPRESSION

The first encounter with an animal is often a surprise, a powerful first impression, but often fleeting and difficult to characterize. I walk around and suddenly a fox crosses the meadow in front of me. I forget the whole surrounding landscape as the fox focuses all my attention on him. And if at the bend in the road I find the cows grazing peacefully in the meadow, the same is true. I forget the sky, the earth, the meadow, and all my attention is on the cows.

STAGE II: THE ANIMAL AS A THING

Then, in a second step, to get to know the animal better, I can observe its anatomy precisely: how is it built? what are its particularities? As far as the cow is concerned, I notice that she has a huge body, fairly short legs, and a big head with thin horns. Surprisingly, she walks

on the tip of her toes, on her nails, as an ungulate. In other words, despite its important weight, it seeks to move away from the earth, to rise as high as possible (see article J.-M. Florin, “Accompany Our Animals to the Future With Dignity”, in *Das Goetheanum*). Just the opposite of the human being who binds to the earth through the entire soles of his feet. It is possible to continue this anatomical observation with comparisons: many surprising discoveries are made by comparing different animals or by comparing with humans. This study allows us to discover the specialty of the animal studied, the field in which it excels. For example, the transformation of grass for the cow or acrobatic flight in the bright air for the swallow.

To better observe, we can draw the animal in pencil, or even draw an animal skeleton to understand the “specialization” of each animal. For the cow, the development of biodynamic compost preparations is a great opportunity to make observations.

STAGE III: THE ANIMAL IN MOVEMENT

This anatomical observation of the animal naturally leads me to a third phase of observation. It is about observing the animal in its movement, which is one of its fundamental differences from the plant. Each animal makes very specific movements that direct it to a specific place or away from a place that frightens him: attraction or escape. To better observe the movement, I can ask myself: what does the animal want? What is his intention? The cow moves around grazing to feed. The flying swallow can hunt insects to feed the young, it can also drink by skimming across the water. And in this observation, it is interesting to observe how the animal “enjoys” its organs, lives totally in connection with them. The cow ruminates with an unspeakable delight. The swallow flies with a celestial elegance that surpasses any pilot, no matter how skillful he may be.

The great Swiss naturalist illustrator Robert Hainard describes this attitude very well:

“For a long time I looked for moments when I could see the animal calmly, but, little by little, I wanted to draw more and more the movement, the sets. I then stopped looking for the copy of the nature line by line. I look closely, as globally as possible, then I draw.... When I see the beast, I become the beast, I perform its movements with it and it is in the memory of my muscles, more often than in my visual memory, that I find the movement”.

To observe the animal movement - and not the animal in movement - an interesting exercise is “blind drawing”. It is a question of observing the animal movement in the environment - the cow in the meadow - and drawing it with a black pencil or a colored pastel chalk by looking at it and identifying with it, grasping the movement within oneself. This is a possible exercise in a second step.



Drawing by ChikYing Chai

STAGE IV: THE ANIMAL IN ITS LIVING ENVIRONMENT

This exercise leads me to observe the animal in its living environment, in the specific space in which he has a character, a soul, through his movement or his cry, his song. The observation of the cow and the swallow shows us that, in a space that seems to us to be the same, different spaces coexist. This coexistence is very noticeable if we observe the movement of different birds. The coal tit (*Periparus ater*) makes me attentive to the half-shade, half-light space of the large branches, quite close to the ground, while the blue tit (*Cyanites caeruleus*) animates the space of the thin branches of the trees, much more luminous and aerial. And the swallow, for its part, reveals the airspace and luminosity. It never lands in the shadow of the branches but on the contrary always in a place totally exposed to the elements, surrounded by light. It always flies over trees and buildings. Thanks to the different birds, a space which may seem undifferentiated at first sight, is increasingly differentiated, becoming richer and richer in specific qualities; here more luminous and windier, there fresher and more shaded..

I can begin to perceive how each animal inhabits a sphere of life, action and movement that it animates. In fact, the animal is not the object I see but it extends into its entire sphere of life. This is what Rudolf Steiner explains (Course for Farmers p. 191): “The winged gentleman distributes astrality appropriately wherever it is needed, on the surface of the earth and in the air. If we eliminate this winged gentleman, astrality will actually escape its normal task, which we will see in a kind of decline of vegetation.” This fact is less easy to

understand than with insects, in which we directly see in a material way, the importance for pollination and therefore the fertility of the plant, but some traditional people say that the song of birds favors the ripening of fruits. Can we feel even more precisely this astrality spread by each animal, can we take one more step to penetrate the animal soul?

STAGE V: THE ANIMAL SOUL WITH FRANZ MARC

The last exercise I propose to you is inspired by a quote from the great German animal painter Franz Marc: “Is there a more mysterious idea for artists than to imagine how nature can be reflected in the animal’s eye? How do a horse or an eagle, a deer or a dog see the world? How poor and insensitive our convention is to place animals in a landscape that belongs to our eyes, rather than immersing ourselves in the souls of animals, to guess their images. The landscape must therefore be deer. How much the artist must have infinitely more subtle meanings, to paint this.” (F. Marc 1911).

So, after having penetrated the movement by identifying with the animal, we can seek to go even further in the encounter with the animal being. To do this exercise, I advise you to bring a box of pastel chalk to evoke by the colors the atmosphere perceived as being that of the animal. A few examples of personal drawings can encourage you to try it yourself, modestly.

PROSPECTS FOR THE FUTURE

What can such observations be used for? How can such observations be pragmatically used? On the one hand, to better understand the animal’s contribution to the biodynamic agricultural organism. On the other hand, it can also help us to become attentive to our environments, to the environments necessary for the different animal species. To promote wild animal diversity on your estate, it is usually sufficient to create the right atmosphere for each species. For example, piles of branches in the shade will attract cave dwellers. Shrubs of different sizes with cavities will attract chickadees and the presence of cows is often enough to attract swallows to the barn.



Drawing by ChikYing Chai

IMAGINATIVE EXERCISE WITH CARROT SEEDS

by Maja Kolar, Slovenia

Imaginative thinking is a skill that we all have and use every day when we notice that someone looks tired and give them tea, or that a plant needs watering, but we need to develop it as a conscious tool or organ of active perception if we are to study the life processes of living things.

If we want to understand plant development less superficially, we have to use within us that which is similar to the growth processes in nature outside of us; similar to the forces or activities of becoming and dying.

THE EXERCISE

- Step one: Try to imagine the exercise as vividly as you can. What we think, we must feel intensely and let it burrow into the soul - a living feeling. Nothing is wrong, everything is right. Sit back, relax and breathe deeply.
- Step two: Put a carrot seed in each participant's open hand. It is also nice if the seeds are in a small bowl and each participant gives a seed to their neighbor. This is done in a silence that opens the space for the following exercise.

- Step three: The following text guides you in the exercise. You can read the text, but you can also be inspired by the text and speak freely.



For the past 10 years, Maja has been actively involved in the Biodynamic movement at local, national and international levels. Maja is an agronomist, consultant, certifier and lecturer in organic and biodynamic agriculture. Studies of Goethean Science have opened her eyes to observe and connect with nature and biodynamic agriculture. It has given her an awareness of the complexity of both the practical and spiritual aspects of biodynamics and a new source of inspiration on how to translate this complexity into a language that students, children and farmers can understand.

"I feel privileged to work in a multicultural environment and I enjoy understanding the challenges of education and advisory in different countries."

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“Imagine placing this seed in warm, soft, nourishing soil. The thick seed coat will swell. Life forces begin to flow through the seed. A germ sprouts from the seed. The warm sun, the light, the rain, the nourishing soil and the forces coming from the cosmos allow the plant to develop. Upwards, towards the light, the stem begins to sprout, turning green when it comes into contact with sunlight. From the stem sprouts the first leaf, then the second leaf, then the third, and so on. Life force flows through the plant, with new leaves developing and growing in the upper part, and the main root thickening in the rich soil at the bottom, where nutrients are stored. The lateral roots reach out in all directions, learning about their surroundings and sensually connecting with the soil.

The plant continues its growth process, the life forces are strong, plant juices flow through it. A new life process begins in the plant; leaf formation begins to change. The first bud appears on the plant. At first this green bud hangs down, but after it has risen to a vertical position, the upright flower opens to reveal numerous small, snow-white umbellar flowers. The inner part of the umbellifer grows upwards to form a convex shape. As the flower opens, this convex shape becomes concave, forming a bowl shape shielded by the outer ring of flowers. Gradually the whole umbellifer closes, forming a spherical shape in which the seeds are formed. Finally, the sphere opens, and the seeds are free to fall and be blown away.”



ENHANCING PERCEPTUAL CAPACITIES TO DEEPEN OUR CONNECTION WITH THE NATURAL WORLD

by Craig Holdrege, USA

In what follows I describe exercises that I have carried out with participants in courses and workshops over the past 20 years. Some of the descriptions are drawn from publications in which I place these kinds of exercises in larger contexts (see bibliography). In the order that I present them, the exercises build on and augment each other in a meaningful way. That said, the sequence is not meant as “first you must do this, before you do that.” All the exercises can be varied and expanded.

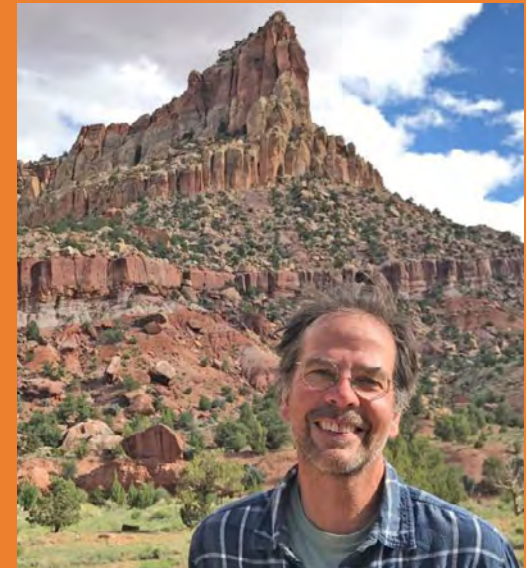
I. PLANT OBSERVATION IN A GROUP - INTO THE PHENOMENA

We go outside and I ask everyone to look at a particular species of plant. I have selected the plant beforehand: it is a wildflower that is flowering and can be easily found in fields or along roadside edges. We walk around and see where it is growing. I ask everyone to take a few minutes, look at the plant and its surroundings, and then pick one specimen. If there are many specimens, we may dig out the plant with some of its roots. We then sit in a circle (inside or outside), each person with their plant. I give some guidelines for our observational process: we will go around the circle and each person will describe an observation of the plant. I request that descriptions be kept fairly brief, so that everyone gets a chance to share observations with the others. I ask that we try not to repeat what others have said, a suggestion that encourages mutual listening. I also request that



those participants who may know botanical terms use them only if everyone else can follow the description. We are not focusing on our personal responses to the plant but want to bring out characteristics of the plant that we can perceive. Finally, I say that we are not concerned here with explanations, causes, or models. We are not asking “why” questions; we simply want to take in and describe what the plant has to offer.

We describe, moving from the bottom to the top of the plant. Here are a few examples: a person is looking at the lower part of the stem and describes the clear transition between the whitish root and the upright stem, which at its base is purplish and then turns green. Someone else describes the stoutness of the stem and the fine hairs that are mainly present along its vertical



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73 EXPERIENCING BIODYNAMICS

ridges. Another person describes the oval shape of the lower leaves with their smooth margin, and notes the veins, especially visible on the leaf's underside. You can imagine that with such detailed observations and descriptions, we are carefully attending to what can be seen, felt, and smelled on the plant. We might go around the circle two or three times until we have a sense that we've attended to the different features of the plant. Such a process may take an hour if not more.

Although deceptively simple, this process yields many fruits. First, and perhaps foremost, it is a cathartic practice to step out of everyday habits and to simply give one's full attention and time to something one would normally, at best, take in only at a glance. It helps us realize that we almost never look at things in a careful and detailed way. How often we gloss over things! Moreover, we are impressed by the plant in all its detail, pattern, and variability. In one course at The Nature Institute, we studied common milkweed and a participant remarked: "I always look at milkweed differently now. I had the profound experience that, even as a total novice in the life sciences, I could, through attentiveness to the natural world around me, come to know it better." This can happen with the most inconspicuous wildflower. So, by looking carefully we take the plant seriously — we turn our unencumbered attention toward it. We see the plant as a being and learn to value it for its own sake. One person expressed it this way: "I will never walk past a daisy the same way!"

If we were to look at the plant from too narrow of a perspective, this realization might well not occur. If we were interested only in, say, what medicinal properties a plant has, we could get a quick answer from an expert or a book. But we are not carrying out a question-and-answer session with the plant. Instead, we are taking the time to perceive, to dwell with the plant and its features.



In this exercise we also notice that there is no natural end to observing. There is — even if we don't dissect, use hand lenses, microscopes, or do biochemical analyses — always something more to see, smell, or touch. In this sense, the perceptual world has endless richness of detail and pattern to disclose. It's only we who choose to stop perceiving at some point. For most people this discovery is a kind of "aha" experience. We get a glimpse of what philosopher Merleau-Ponty once called the "hidden and inexhaustible richness" of the sense world (1969, p.139).

Something else is remarkable in the process of group observation. We notice how differently people perceive and describe. Everyone in the circle realizes that, alone, they would not have seen nearly as much. Our senses

are opened and directed in new ways by what others perceive and describe. Some people have an ability to see more and more within a detail that others don't attend to, like a participant who never left the root, even after everyone else was focusing on the flowers and fruits. Or the person who noticed the different shades of green, or how the plant felt when she waved it back and forth as if in the wind. So, the plant reveals more and more of itself as different people make different discoveries. Knowledge arises in a community. Through such a process a learning community develops, and, in Goethe's words, "The interest of many focused on a single point can produce excellent results" (1995, p. 12). The unique perspective each person takes truly enriches the whole.

What allows different perspectives to show their best sides is the fact that everyone's attention is on a phenomenon about which people don't have a great deal of pre-knowledge (prejudices and assumptions). They can look in quite an open way. Even people who have studied botany have rarely looked at one plant for so long and in such detail. Also, it's not about what we know from memory or our book learning, but about what we perceive *right now*.

Different people can have different perceptions, but these differences do not create separation; they enhance one another. We learn to appreciate the different ways people observe and describe. There may at times be need for clarification and more precise or accurate formulation, but that can all be achieved through recurring attentiveness to the thing itself and through mutual struggle to find ways to adequately express what we've perceived. The plant is a natural corrective for flights of fantasy or mere opinions. All we need to say is, "Look again."



II. SIMPLE DRAWING EXERCISES

Drawing can help facilitate looking. As John Ruskin noted in his classic *The Elements of Drawing*, "We always suppose that we see what we only know" (1971, p. 28). We all "know" that a blade of grass is green. We may even believe we see it as green when, in fact — if we put aside our preconception and actually look — the blade of grass is yellow in the particular light conditions in which we are observing it. Anyone who looks closely observes that color is dependent on the illumination. We have to look; we can't know the color beforehand. Similarly, we may know that the form of a building is rectangular, but when we attend to what we see, from the particular standpoint we have, we notice that if we draw a rectangle for the face of the building, we are drawing something that looks completely wrong. So, drawing can lead us out of our mental preconceptions and into the appearing phenomena themselves.



Ruskin spoke of regaining a childlike "innocence of the eye" (p. 27) that can open our perceptions and give us the possibility to draw what we see: "For I am nearly convinced that, when once we see keenly enough, there is very little difficulty in drawing what we see.... I believe that the sight is a more important thing than the drawing; and I would rather teach drawing that my pupils may learn to love Nature, than teach the looking at Nature that they may learn to draw" (p. 13). Drawing in this sense is a schooling of seeing — a way of opening up our looking and orienting it around the fine nuances of form, shadow, and color. One course participant remarked: "Of most value was the increasing ability to see and to see how little I see. I feel that my eyes have been newly enlivened, and I want to keep drawing."



In some courses we started by drawing a white-colored ball on a cloth; the ball was illuminated from one side so that it threw a shadow onto the cloth. This setup provides a wide spectrum of light and dark shades and the “simple” elegance of the sphere. We draw in such a way that we do not make outlines — a line as a boundary is the creation of the intellect; what one sees are shades of light and dark. In trying to put these shades on paper, we notice how the object emerges out of the interplay of light and dark and how its bodily, three-dimensional aspect becomes all the more “visible” on paper the more we can do justice to the seen patches of brightness and darkness and the transitions between them.

On the basis of such an exercise we can turn to an organic form, such as the leaf from a tree. We sketch it first by filling out the form from the inside out. Again, no outlines but shading from the center and moving toward the edges. It’s not so important that every detail is “right,” but that the form emerges centrifugally. Then we do the exact opposite: we start by shading the outside — the space around the leaf — and move in toward the leaf margin. In this way we draw the space around the leaf, and the leaf emerges as the “empty” space in the middle. This trains our observation to attend to a form in relation to its surrounding. Drawing the leaf from the inside out is much easier and comes more naturally — natural for our object relation to the world. It is more difficult to take the space around the leaf to be “real,” draw it, and let the leaf emerge in this way.

The process of drawing presents challenges, because we often struggle with our own limits in technical facility, but if that concern can be overcome, we make discoveries. In the words of a course participant:

The drawing started out very difficult for me. I wanted to do it and be done. I was surprised as I sat with my

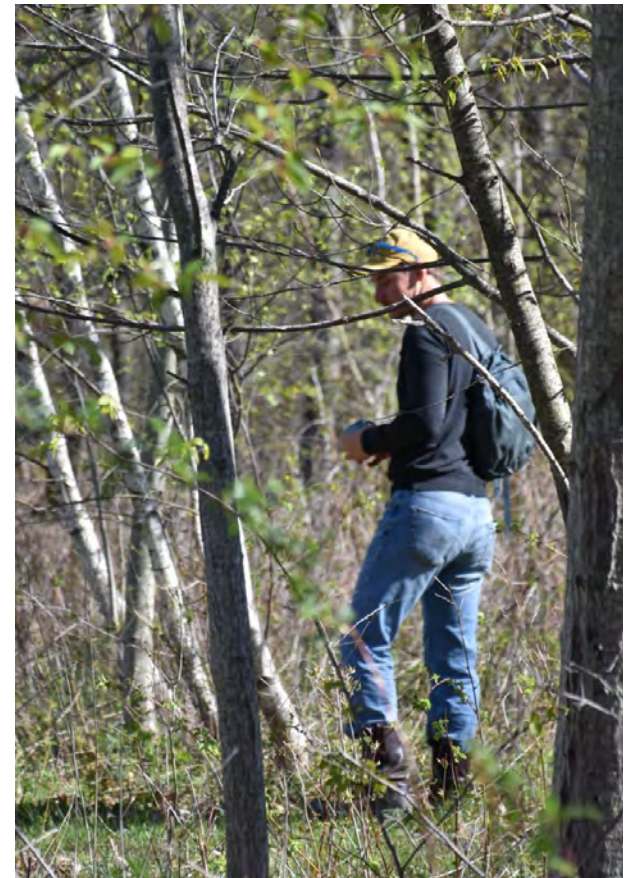
drawing and “what” I was drawing, that I really could take the phenomenon in and express it on the paper by going into it. It helped to bring up and demonstrate the going in and going out. Working in one color only also was amazing in helping me feel subtle gradations rather than discrete “things.” Through drawing we are, literally, drawn into the phenomena.

III. AUNTERING OF THE SENSES

Another kind of exercise complements the focused attention to detail in observation and drawing. We let our attention spread out and wait to find what comes toward us. Here we don’t predetermine what we attend to but, in a sense, invite the world to speak. Henry David Thoreau describes the intention:

I must walk more with free senses — It is as bad to study stars & clouds as flowers & stones — I must let my senses wander as my thoughts — my eyes see without looking.... Be not preoccupied with looking. Go not to the object, let it come to you.... What I need is not to look at all — but a true sauntering of the eye. (Journal entry; September 13, 1852)

Going for an unstructured walk is not easy. We strive to enter a mode of open expansive attentiveness. We are not focusing, but we are expectant: What might come toward me? Or asked differently: How can I be wakefully “out there” so that things catch my attention? If something catches my attention — the way a leaf is oscillating in the wind; the bird that lands on a nearby limb; the sparkling dew drops on the vegetables; the way two cows are interacting — then I can dwell for a time and take in the scene. At some point I continue to saunter.



It is much easier to describe a plant in detail than it is to go sauntering with open senses. In the latter case we must willfully try to open our attentiveness and invite the world in — we have little control, and that is both unsettling and cathartic.

One exercise that helps bridge the gap between controlled focus and the ability to saunter with the senses is to choose a broad sensory focus for attention. For example: we go for a walk and decide to focus our attention on color. Or we focus on scent, or on sound. This focus by no means determines what we see, smell, or hear, but by narrowing our attentiveness to a sensory modality we are more receptive to that realm of experience.

One day I was walking in a forest and wetland preserve with the intent of paying attention to light in the forest. I began noticing what I otherwise took for granted and had not really seen at all: the dark areas, the spots that were very bright, the more diffuse columns of “sunbeams.” The wind was blowing on that day, so there was an ongoing play of changing illumination. At one moment a spot lit up brightly, changed form, and disappeared. I was strongly struck by this appearance. I don’t know why, and I cannot describe it any further. But it was a deep experience and one that I can remember back to, although that memory is by no means the same thing as the one-time, striking experience itself.

Imagine as a gardener or farmer that you walk out onto your vegetable field or onto a pasture. You choose not to focus on all you need to do today (no easy task!). Instead, you intentionally let yourself be guided by the question: What might show itself this morning? In such moments of openness, we can make unexpected discoveries.

* * *

So far, I have described two complementary types of sensory observation exercises. In the one case — the example of the plant observation — we go out with our attention to meet something particular and take it in with all its details. We move with our senses and attention in and through the phenomena. In the other case, we try to create a kind of open receptivity that allows us to take in what appears at a given moment.

Every perception of a thing or situation has these two aspects — focus and receptivity. Without these there would be no perception. By carrying out such exercises in both directions, we are honing our capacities to

perceive the world around us. In this way we can shift into a sensory mode, being with the things themselves. The two kinds of exercises enhance one another.

IV. EXACT SENSORIAL IMAGINATION

When we have made the effort to perceive carefully, this interaction leaves an impression on us. New features of the world have become part of us. We can remember, at least to some degree, what we have seen, smelled, touched, or heard. So, after we have carried out a variety of observation exercises, I request that participants in the course willfully re-picture or re-create in their imagination what they have perceived. Picture the color of the stem and how it changes from bottom to top; feel the consistency of the stem by imagining the feeling of the pressure you applied to it with your fingers; reawaken the fragrance of the blossom and dwell in it for a moment. In this way we can build up a vivid picture of the plant we have observed or of the meadow we have walked through. By doing so we awaken in ourselves what we have met through sensory engagement. We can actually remember much more than we realize, and, moreover, sometimes the hue of green or the shape of a leaf will speak more strongly in our inner picturing than it had in the moment of observing.

During a course I ask participants to make re-picturing into a daily practice: picture in the evening or morning the plant or environment with which we have been concerning ourselves. We talk about the experience of picturing, and people share their questions and approaches. It is fascinating how differently people picture. Often people notice that they couldn’t picture something because they hadn’t really looked at it.

What is the significance of inner re-picturing, which Goethe called “exact sensorial imagination”? First, it is a practice that allows us to connect ourselves consciously and vividly with what we have experienced. We bring to awareness what would otherwise sink into a sea of potential memories. We willfully call up these experiences and enter into them with our picturing activity. This activity is imbued with feeling: not reactive feeling but feeling as a connecting agent, as an inner sensorium for qualities.

In perception we go out to things and invite them in. In exact sensorial imagination we re-create and enliven within ourselves what we have met in experience. In this way we connect deeply with the world we meet in sensory experience. One course participant described how the work in a course created “lasting experiences of the plants through the practical observation and visualization exercises — I feel I have ‘met’ two plants, as many of my perceptions still live fresh in my imagination.” We have taken the plant in and now we move it in us. Or, said differently, we come into inner movement by re-creating in imagination the qualities we have perceived. We can thereby become more aware of these qualities.

Second, this practice can help us to notice that we need to perceive more carefully if we are going to be able to faithfully re-create in ourselves a vivid image. This realization motivates a return to the phenomena.

Third, it is an aid to overcoming the tendency to think abstractly. In exact sensorial imagination we are using our mental capacities to get closer to the concrete sensory qualities. This contrasts starkly with an abstract frame of mind that uses concepts to

explain and interpret what we perceive. Exact sensorial imagination lets our minds practice intimate dwelling instead of abstract distancing.

* * *

We can view perception exercises (1 to 3) and the practice of exact sensorial imagination as two polar practices that enhance each other. Both need to be practiced. By going out into perception and openly taking account of what the world offers we inform experience with the richness of the sensory world. Through exact sensorial imagination we connect these experiences with ourselves and at the same time become inwardly active. The world comes to life in us. We can practice a kind of pendulum swing between going out and bringing in and enlivening, going out again, bringing in and enlivening. My personal experience is that by doing this, both perception and picturing are enhanced. Through careful perception I participate in the phenomena. This gives me a wealth to re-picture. Through vivid re-picturing my attentiveness to the world is enhanced. I perceive vividly and more can be disclosed in any moment.

When we move far out into the world with our sensorial attention, we can then move far into ourselves; this allows us, in turn, to expand more into the world. “Outer” and “inner” can no longer be viewed as two distinct realms; they are two aspects of one oscillating activity. Inasmuch as we bring forth this dynamic movement, we are interfaces in which we and the world continually intersect in vibrant activity.

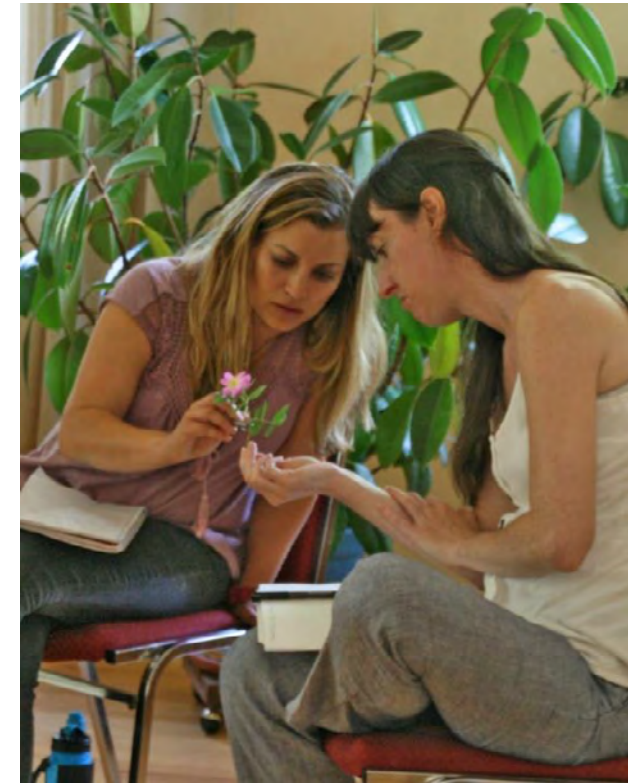
V. THE PLANT AS A BEING OF TIME AND TRANSFORMATION

In the first exercise, the task was to observe the plant as carefully as possible, staying with all the details. This allows us to practice exact sensorial imagination and to come into an intimate relation to concrete appearances as just described.

There is a danger in the first plant observation exercise — if that is all one does. The danger is that we have the parts but lose sight of the plant as a whole. We may lose the forest for the trees. Already doing the active re-picturing helps to avoid this. But there is more.

After doing the careful observation, in a next session it is good to ask: In what way — even when we only observe it at one point in time — does the plant show us that it lives in time, that it goes through transformations? If you are looking at a flowering herbaceous plant (such as a wildflower, a flowering squash plant or a pea plant) there are many features that lead us into time and transformation. It is good to have participants share what they can discover in small groups and then collect the observations. For example:

- Some leaves are wilted, others fully unfolded, and still others just emerging.
- The shape and size of the leaves along the main stem change in shape from bottom to top of the plant.
- In the axils of the leaves there are buds — hints of something to come.
- Some flowers are just opening, others are fully open and in some the petals are wilting.
- A few fruits (pods, etc.) are appearing.



In these and other characteristics the plant shows us that it is, at any given moment, in a state of becoming. We can see its passing (wilting), its present in manifold forms, and intimations of the future in buds and fruits (the bearers of seeds). We can see the expressions of its life activity. If we are open to it, the plant is always transporting us beyond the spatial into the temporal, into transformation, into life.

The transformative nature of the plant becomes all the more vivid when we observe a plant over time. It is a worthwhile experience to observe one plant during its growth and development. We never see the whole plant. We see snapshots on different days. We are seeing the tracks of its life process. The plant's life is a

continuum, an ongoing unified process that manifests in manifold forms and substances. We can consciously picture in our imagination, say, how the plant appeared one day and then again three days later. We let the one form morph into the other. In this way we come closer to the stream of the plant's life, to the plant as activity. It is through our exact imagination — through which we bring forth a transformation — that we get a sense of what the plant is doing day in and day out. This transformative life process is never apparent to our sensory observation. We need to become inwardly active to participate in the life processes of the plant. In Goethe's words: "If we want to behold nature in a living way, we must follow her example and become as mobile and malleable as nature herself."

VI. PLASTICITY IN A PLANT SPECIES

When we have observed a specimen of a species carefully, a next step is to observe it in different contexts. If we have attended to a common wildflower or "weed" (in the words of Emerson: a weed is "a plant whose virtues have not yet been discovered") we can go around and see how it grows along a roadside, in a ditch, at the edge of a hedgerow, in a garden, or at the edge of a compost pile. If we have observed a cultivated plant: even if the specimens are in the same garden or field, do they all look the same? How are they different when planted at different times or in a greenhouse compared to outdoors? The key is to notice that we are seeing the same plant species, but we are beholding it in different manifestations.

The same plant species can range widely in size, in the shape of its leaves, in the extent of branching, and so forth. The image shows different pressed specimens of wild radish (*Raphanus raphanistrum*) that were picked at



the same time. They were all growing in same area, but the microenvironments were strikingly different. As in the other exercises, we need to slow down and dwell with plants. If we only register, "Oh, they are different from each other," then we haven't really met the plant in its capacities. Here the activity of re-picturing is helpful: picture the smallest specimen with its short main stem that hardly branches and carries few slim leaves. It was growing in "soil" that had been strongly compacted by heavy machinery the previous year. The largest plant — only 30 meters away — was growing at the edge of a meadow. Picture its effusive growth with many large leaves and strong branching that ends in a multitude of flowers. The other specimens were growing in the area in between these two plants.

Through such observations we begin to get the sense of the plant as a dynamic being. It can be itself differently in different contexts. The small plant is expressing in its form and substance something of the quality of the compacted dry earth it is growing in, just as the meadow plant is showing us what the richer soil means to it. We begin to see through the plant qualities of the environment.

Similarly, we can compare specimens of a vegetable variety growing in different parts of a field, or that have been sown at different times. Trees offer another potent opportunity to witness plasticity: How does a tree of a given species grow in an open field, at the edge of a forest, or in the middle of a forest?

VII. WHAT THE LEAVES OF A TREE CAN TEACH US: VARIETY AND POTENCY

This is a wonderful exercise to do in a group. We go outside and consider one particular tree that has at least some of its leaves and branches at a height that we can observe closely. We spend some time looking at the tree as a whole: its overall form, its colors, the play of light, how its leaves and branches move (or don't) in the breeze. Then we move closer and observe one limb of the tree. How does it branch? How are the leaves and buds arranged on the twigs? As a next step — and in acknowledgement of and gratitude for the tree's abundance — each person picks just one leaf.

Then we go inside (or gather in a circle outside). Each person studies their leaf — exploring its characteristics with different senses. Then we try to re-picture that leaf. We look again, and re-picture again. As a next step, each of us passes our leaf to our neighbor on the right (or left). We consider this leaf for only a short time (maybe a minute) and then we pass it on. We do this until the leaf we started with returns to us. What an experience! The variation in the leaf size, shape, consistency, color! And we have only considered maybe 10 to 20 of the thousands of leaves on the tree. (It's also interesting how everyone becomes attached to "their" leaf.)

The photograph shows leaves from one white oak tree (*Quercus alba*) that were pressed in the autumn, soon before they would have fallen from the tree.

No two leaves are alike — we can observe as many as we like. This experience can fill us with wonder. Just imagine: each year a deciduous tree in a temperate climate unfolds thousands of leaves, each unique and each part of the unity of the tree. And each year the leaves are new and different yet again. The tree as one



organism brings forth itself (through its environment) in an unfathomable variety. We usually overlook this creativity of plant formation because we stop with registering "this is an oak, a maple, or a birch." We don't make the effort to look more carefully. Here the key is that we don't look at just one leaf, but at many. Similarly, we can look at many branches of a tree, or look at many specimens of one species.

After we make these kinds of observations, we need to stop and consider the implications of what we have noticed. We realize that the tree has immense potency.

Or we could say: the tree as a living being is creative potency and this potency is always greater than what comes to appearance in any given case. The tree as activity brings forth itself and all its members (trunk, leaves, and branches) in remarkable plasticity. Through this way of attending to a tree, we catch a glimpse of the creative power that is everywhere present in the living world.

VIII. OBSERVING SEEDS AND GERMINATION

How one prepares and carries out the following observations depends on the length and schedule of a course or workshop. In a short workshop, for example, the teacher will need to have planted seeds ahead of time so that the phases of germination can be observed in different specimens. In longer courses, participants can set up the experiments and observe the processes over time.

As in the previous exercises, we want the participants in each of the “steps” that follow to observe, note characteristics, describe changes, share impressions, inwardly re-picture, and actively participate in the process-nature of the plant by letting their imaginations morph the sequential snapshots into each other.

The dry seed: We begin by observing some seeds — shape, consistency, and so forth. Large beans are easy to observe. It is worthwhile to open up a dry bean along its “seams” and then with a hand lens or low power binocular microscope observe any structures that may be visible. The bulk of a bean consists of the two nutrient-rich cotyledons. At one end it is possible to see the tiny primary root (radicle) and toward the other end, the growing point (apical meristem) and one or two tiny leaves that will develop into the first foliage leaves of the plant.

Swelling: We take a dinner plate and put a few layers of moist paper towels on it. We place a number of seeds on the paper towels and cover with another plate. In a warm room, already the next day we can observe how the seeds have changed. How are they different? We can open up a couple of seeds and look inside (as we did



with the dry beans). Has anything changed? We can use the remaining seeds for the next exercise or plant them in earth in a pot for further observation.

Germination (1): We can use different seeds for this. Bean seeds and grains (wheat, corn) work well. We can either observe just one type of seed or compare different ones. Here is one setup and procedure that allows us to observe initial shoot and root development:

1. Wet two or three paper towels then line the inside of a tall drinking glass or a cylindrical glass jar with the towels. (The containers should be at least 15 cm high so that the roots have enough space to elongate; the photo below shows such a germination jar in the lower right-hand corner.)

2. Fill the glass or jar with crumpled newspaper. The newspaper will hold the wet towels in place. Wet the newspaper and let up 1 to 2 cm of water pool at the the bottom of the glass.
3. Now “plant” the seeds between the glass wall of the jar and the wet paper towels, fairly high up in the jar. You can place up to about 4 seeds in each jar.
4. Place the glass jar in a warm place.
5. Sketch the setup.
6. Observe every day, note the changes in a notebook, and make sketches of how the seeds change, writing down the date for each entry and sketch. Keep the towels and paper moist.

The photograph shows, in addition to the germination jar, a custom-made root box for observing germination and root growth in seedlings. When ample time is available, we can have the same setup and then vary the conditions and observe what happens. For example, we place one jar in sunny and another in shady conditions. Think about what the conditions are in the environment that allow the seed to germinate.



Germination (2): We take seeds and plant them in pots in soil or outside in beds. We observe the germination process. As above, we observe regularly and describe changes. There are many ways to vary and compare different conditions in order to observe the plant-environment relation: different soils, light conditions, watering, and so forth.

IX. DOES A PLANT GROW OUT OF A SEED? – A CONTEMPLATION

After carefully observing plant phenomena and working to bring the forms, processes, and relations to life in us, we can engage in a further kind of activity that builds on these experiences. We want to thoughtfully consider our experiences to gain deeper insights. Such contemplation based on careful observation is a capacity to enhance. This is not merely intellectually thinking about the seed as onlookers. We want the work we have done in the above exercises to lead into a mode of concretely thinking with the phenomena. We want to school pictorial thinking that is rooted in the vividness of sensory experience. In this way we can encounter riddles and gain insights that are not accessible to abstract thought.

Here I bring one example. What deeper meanings and relations can the seed and germination reveal? In what follows I will also incorporate knowledge gained from other experiences and from the scientific literature that can help shed light on the phenomena.

A simple question can stimulate a contemplative inquiry: Does a plant grow out of the seed? The answer seems obvious. But is it?

There is perhaps no process in the life of the plant that can evoke more wonder than seed germination. The seed is the most compact, condensed, and driest form that a plant creates. It contains, in germinal form, a whole plant surrounded by tissue from the mother plant. When released from the mother plant it becomes an independent entity. It can remain dormant — depending on the species — for a long time. This in itself is a riddle: the seed hardly seems alive — no growth and minimal metabolic activity that only refined laboratory



investigations can discern. Yet it harbors the potential for abundant life.

Only when the seed encounters particular conditions will it germinate. Some seeds need to go through the cold of winter or the heat of a wildfire to be ready to germinate. Most of the seeds we plant in a flower or vegetable garden need the warm moist soil to germinate. Then we can witness in a few days the beginnings of plant development. The germinal primary root (radicle), the cotyledons, and the growing point of the shoot (apical meristem) have formed while the seed was developing. What consequently emerges as root

and shoot (or hypocotyl) through the seed coat as it breaks open was not previously there. These are new formations; the plant is growing. There is the aspect of unfolding (especially apparent in the cotyledons), but it is not like unfolding a piece of paper, because growth is occurring at the same time. The shoot elongates, the leaves turn green (formation of chlorophyll). The plant is continually creating new substances and structures.

So where does the new substance of the plant come from? Without what was in the seed there would be no growth and new development. New life builds on already existing life. For a time, new substance may be formed through transformation of the substances (fats, proteins, starch) that the seed has stored. These were formed in the previous growing season. Soon, however, the seedling needs the interaction with the present environment to continue to grow and develop. (Already the swelling of the seed and initial substance transformations that lead into germination require warmth and water from the environment.)

The work of countless researchers during the past couple of centuries has shown that the plant needs air, water, the soil with its minerals, warmth, and light to create its own living substance. This occurs through the miraculous process known as photosynthesis. The plant does not feed on other life as do animals; rather it creates living substance mainly out of air (CO₂), water, and some minerals that it takes in from the environment.

If we say: “The plant develops out of the seed,” we focus on the necessary presence and activity of living germinal tissue in the seed. But we can shift our focus and say: “The environment (all I mentioned above) develops through the seed into the plant.” This is a strange formulation, I know. But what it does is to call our attention to the fact that a plant is not isolated. Its development is only in and through the world with which it has intimate connection. The plant is connected with a large world — one that extends at least to the sun — and this large world is transformed through the plant and becomes embodied in the processes of growth and development.

“The plant develops out of the seed” is a centered-perspective — thinking from a center (the seed), outwards. It honors the potency of life inherent in every seed (remember the countless ways in which particular species can bring itself to expression.) “The environment develops through the seed into the plant” is a peripheral perspective — thinking from a broad context towards a center. Here we see the environment in its plant-forming potential. Only in the active interplay of this center and periphery does life manifest in growth and transformation. Each plant species is a revelation of a particular way of being and at the same time a revelation of the world in and through which it develops. A plant vitally seen and understood is a world-plant.

IX. GESTURE — THE INNER COHERENCE OF A PLANT

We all “know” that each part of an oak tree, a dandelion, or a spinach plant belongs to that plant and in one way or another contributes to its existence. In this sense we take the wholeness and inner coherence of the plant for granted. The question arises: Can we learn to see how the parts cohere, how they are expressive of a unified character or quality? All the exercises described so far facilitate the forming of capacities for such holistic insight. What is the “oakness” in the oak, the “calendulanness” in the calendula? The goal is not to be able to nail down that character, but to see if through moving through the parts of the plant and the way it relates to its environment something of that character shows itself as an inner quality, as a kind of gesture. It may be very hard to communicate that character, but in group work we can share impressions and attempt to express the character or gesture in words, movement, drawing, or by other means. In my experience, we often do come to a similar sense of that “something special” that shines through the characteristics of the particular species.

One fruitful way to get closer to the expressive character of a plant is to compare it with another plant. First go into the characteristics of one plant in the ways already described: looking carefully; sharing with others; inner re-picturing; moving through the plant so that its process-character becomes more evident; seeing how different specimens relate to their environments and are expressive of it. When we have done this with one plant, we carry the impressions of that plant within us.



As a next step we turn to another plant. The experience with the first plant will illuminate the study of the second plant, just as its characteristics shed light on those of the first plant. It is good to choose a not too distantly related plant. For example, we compare one broad-leafed tree with another, or two wildflowers or vegetables that are in the same family. If we study an oak, the study of the maple will be enlivened by the oak.

It is not a matter of just registering: the oak has leaves, branches, bark, and fruit like this and the maple ones like that. When we observe the forms as expressions of formative moments, which we can do by carefully and consciously moving through the forms with our imagination as we observe, characteristic gestures may appear in the different features of the plant. Can we begin to see how the different aspects of oak speak “oak” and the different aspects of maple speak “maple”? In my article, “Phenomenon Illuminates Phenomenon” (see bibliography) I have tried to express what course participants and I have discovered in carrying out this practice studying two prevalent species in the forests of eastern North America, the white oak (*Quercus alba*) and the sugar maple (*Acer saccharum*).

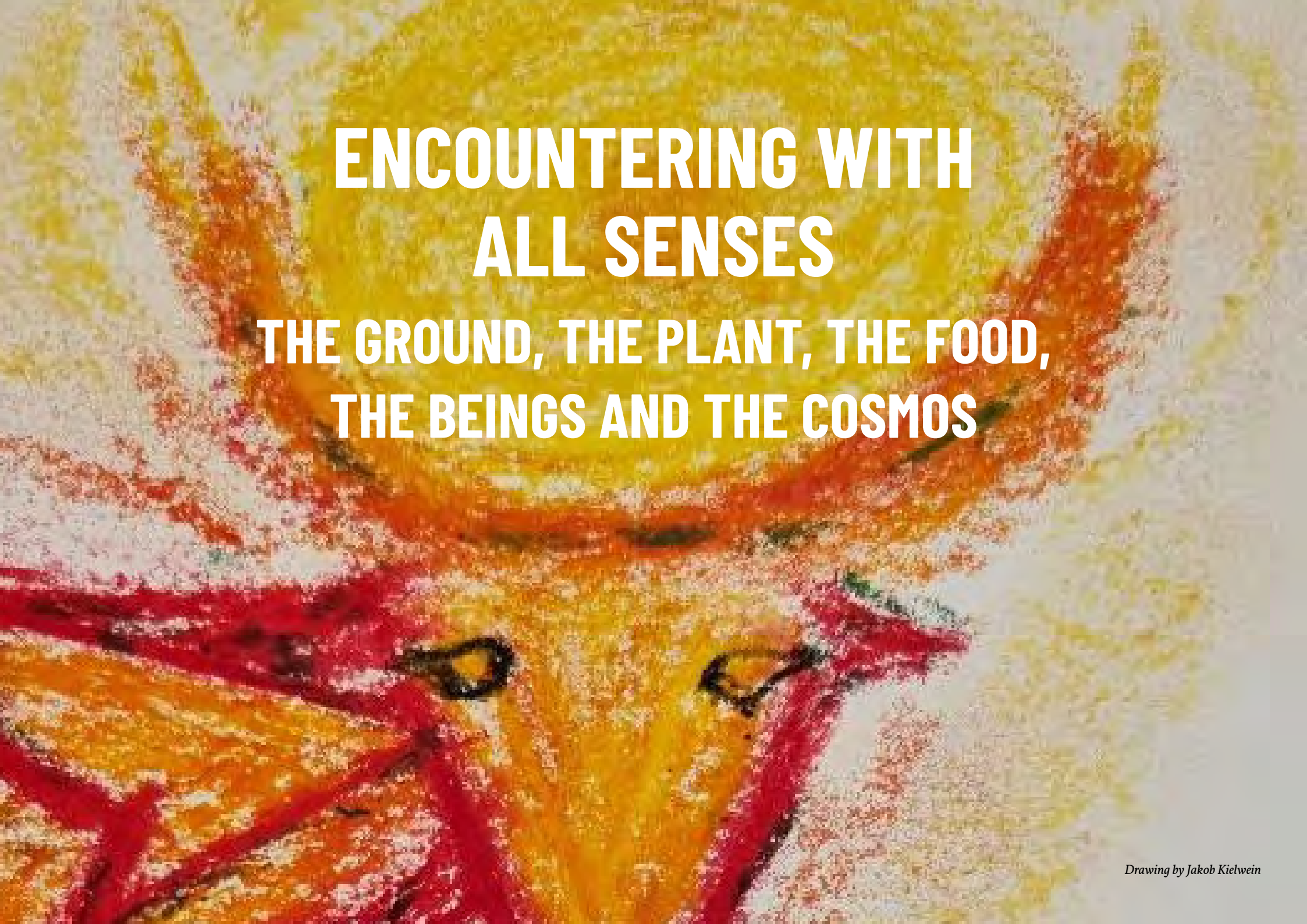
An alternate entryway into this kind of study is to begin, say, with the leaf or fruit of an oak and then consider the leaf or fruit of a birch tree. What does the tiny, almost weightless fruit (nutlet) of the birch tell us about “birch”? What does the acorn tell us about “oak”? How different they are from each other! From these contrasting ways of fruiting, we can then move onto the other features of the tree and see what shows itself.

This mode of gestural inquiry can be expanded into the study of different plant families. We study, say, a number of different grasses and build up a picture of their salient

features. When we then shift to studying the legumes in the same meadow, we discover a wholly different way of being — a different way of being plant.

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ENCOUNTERING WITH ALL SENSES

**THE GROUND, THE PLANT, THE FOOD,
THE BEINGS AND THE COSMOS**

MEETING SILICA, LIME AND CLAY

by Kai Lange, UK.

The main **GOAL** of this exercise is to learn to use and trust all your senses to know and understand the natural world around you. Through this exercise you will get to know the qualities and characteristics of silica, lime and clay, and understand that each mineral has got individual qualities and properties. You will open up to meet the natural world with wonder, instead of trying to fix it in facts.

THE EXERCISE

Learners should be made aware of their twelve senses and how they help us to connect to the natural world around us.

STAGE I (2-5 MIN)

Stand silent in a circle, ideally outside surrounded by nature, be guided to become aware of the present moment, leave past and busy thinking behind, focus on body, heart, breathing and senses.

STAGE II (10-20 MIN)

Each learner picks a silica rock or crystal from the center of the circle, that can fit easy into one hand. Then they find a place in nature to explore alone the silica rock or crystal, without interacting with any other learner, even when being close by. Focus on the silica and sense impressions, this can include in the surrounding environment. Follow your intuition like a child what senses come to us first and what next. Meet the silica rock or crystal with wonder like a child. Potentially explore any one of the twelve senses or even all of them in no particular order.



STAGE III (10-30 MIN)

Gather again into group circle. First, 'create a poem': offer or voice words that relate to your rock crystal experience in the circle. Second, each learner takes a turn uninterrupted to share their full experiences, observations and feelings. Only after each learner has told their story the conversation is opened to share more or new thoughts that have occurred during the sharing.

STAGE IV AND V

Repeat stages one to three, first with lime rocks followed by soft formable potter's clay pieces. It's best to leave some time between the three exercises - one hour to three days. Stage four and five are important to realize differences and learn from comparison.



Kai is a farmer, grower and teacher. He is coordinating the Biodynamic Agricultural College (www.bdacollege.org.uk) work-based training and quality assurance. Kai has been involved in biodynamic education since 1985 starting in Germany, working seven years in Denmark and, since 2000, in the UK.

He aims to inspire people's love for land work through biodynamic practice, develop their sensibility, and discover a feeling of deep belonging.

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EMPATHIC FOOD TASTING

by Jens Uwe Geier, Germany

Empathic Food Testing is a method of mindful food tasting. A body meditation to get into the testing mindset is an integral part of the methodology. The aim of Empathic Food Testing is self-empowerment. After a workshop, many people are surprised at how much more perceptive they are. Their capacity for judgement about food is increased. When groups of people form after a workshop and continue to practice, they develop a tool that can be used in a variety of ways and allows them to grow personally. The method is used both in workshops and for product profiling with a standardized questionnaire, as in a sensory taste test according to ISO. The workshops last from at least 2 hours to several days.

THE PROCEDURE

A brief introduction to the exercise is given at the beginning.

STAGE I: THE BODY SCAN

The participants are guided to be attentive to certain body parts for a few seconds, starting with the forehead, followed by the nose, chin, shoulders, arms, hands, hip bone, top side of the thigh, knee, shin, heel, foot, toes, sole of the foot, calves, hollow of the knee, bottom side of the thigh, the buttocks, the back, the neck, and the back of the head to the crown. The body scan takes approximately 3 minutes.



Empathic Food Testing with consumers at the Forschungsring

STAGE II: TASTING

The tastings take place as comparisons between two or three samples. If possible, the samples are always blinded. One's attitude is important during the tasting. Expectations of any kind are disruptive. Instead, a great openness and childlike curiosity help, as well as the desire to be surprised by the food. Incidentally, if someone is surprised by their own observation, this is a sure sign of a genuine observation. The tastings should be started with samples that are expected to be very different, for example carrots and potatoes. Butter (or ghee) and coconut oil are another good starter sample. Of course, the trainer should know the effect of the samples beforehand. Later, more demanding samples can be analyzed, such as comparisons of varieties.



Uwe Geier studied agricultural sciences at the University of Bonn, Germany. Uwe Geier completed his doctorate in 2000 on the application of the life cycle assessment method in agriculture. From 2000 to 2006, he worked in two laboratories for image-creating methods in Switzerland. Since 2006, he has been conducting research in the field of food quality at the Forschungsring (or Biodynamic Research Circle). As part of his work, he has been developing the WirkSensorik method for measuring food-induced emotions since 2010. He heads WirkSensorik GmbH, which was founded in 2016 and is a wholly owned subsidiary of Forschungsring. He has been the Managing Director of the Forschungsring since 2016.

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During longer seminars, breaks are important in order to regain strength for new observations. A good pair of samples to start with is water. It can be spring water, tap water or still mineral water. The same water with and without treatment can also be suitable. Because the taste impression of water is weak, differences in effect can be observed all the more easily. I like to comment after tasting water: anyone who notices the subtle differences in the effects of water can also observe everything else.

STAGE III: OBSERVATIONS & DISCUSSIONS

During the tasting, questions are asked about the effects of the food that remain after the taste impression - about half a minute or a minute later - about the effects on physical and emotional well-being. One important task of the workshop leader is to help sort the participants' observations. These observations can be characteristics such as light and heavy or moving and motionless or awake and tired. There are no limits here. I do not specify the terms. The variety of terms grows through the exchange in the group. In addition to observations of physical and emotional well-being, observations of flavor or associations are often made at the beginning. For example, the polar qualities experienced and described by a group of 12 trained people when tasting butter and coconut oil are shown in the body effect image below. At the end of the workshop, time is given for participants to discuss their observations. A detailed explanation of the method, including the scientific approach, can be given by the trainers or the workshop leader.

*** Elements of Empathic Food Testing can be used by anyone in their own seminars. However, the method is protected by trademark law for quality assurance reasons. Therefore, Empathic Food Testing cannot be used in workshop titles, except by people who have completed training as Empathic Food Test trainers.*



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www.empathic-food-testing.com / www.forschungsring.de

PLANT MEETING

By Lucy Voelcker and Kai Lange, UK

The main **GOAL** of this exercise is to learn to use and trust your senses to know and understand the natural world around you. To exercise your twelve senses, to get to know specific plants' qualities and characteristics, to trust your intuition, as well as to open up to meet the natural world with wonder, instead of trying to fix it in facts, are all also goals of this exercise.

THE EXERCISE

To begin, learners should be made aware of our twelve senses and how they help us to connect to the natural world around us. They should trust their senses and follow their intuition and playful emotions throughout the exercise.

Please do not talk or interact with others, leave past conversation thoughts and experiences from the day behind. Meditatively focus on your own body, heart, breathing and senses.

The whole group of learners is told the specific chosen type of plant that can be met growing outside.

STAGE I (2-5 MIN)

Stand silent in a circle, be guided to become aware of the present moment, leave the past and busy thinking behind, and focus on body, heart, breathing and senses

STAGE II (10-20 MIN)

Each learner approaches that particular single or group of plants alone, without interacting with any other learner, even when standing next to each other.

Focus on the plant. Follow your intuition like a child, what senses come to us, and what comes next. Meet the plant like a being, with wonder like a child. Potentially explore any one of the twelve senses or even all of them in no particular order.

STAGE III (10-30 MIN)

Gather again into group circle.

First 'create a poem': offer and voice words that relate to your plant experience into the circle. Such a poem is like a mosaic or a cloud of words. Secondly, each learner takes a turn uninterrupted to share their full experience, observations and feelings.

Only after each learner has told their story the conversation is opened to share more or new thought that have emerged during the sharing.

STAGE IV (5-15 MIN)

Repeat stage two. Revisit the plant with your new perspective and insights.



Lucy works as an artist, always connecting with the Earth for inspiration. During a Vision Quest she discovered a gateway into the Earth using her voice. She understood that all these years of focused observation served as a form of meditation and a portal into Spirit. Also, that every place on Earth corresponds to a place within. Since, she has developed tools in order to journey more deeply; some influenced by Celtic, Native American, and Indian traditions, and some crafted through experience and imagination. So much has opened for her that she feels bound and stirred to share these things and assist others to find ways to create change in our lives. She runs regular plant meeting workshops and individual session to connect individuals to nature's inspirations.

www.hortusheart.co.uk

THE TREE

by Jean-Michel Florin, France

The main **GOAL** of this exercise is to approach the specific nature of a tree with fine observation by all the senses.

THE EXERCISE

To begin, you choose a tree that interests you, that you have noticed in passing, or that is close to you. Take the time to forget what you think you know about this tree in order to have a new perspective that allows perceptions to be more vivid. Very often what we know - the concepts (yes, the oak over there) - instead of helping us get closer to the intimacy of the plants, takes us away from it because we quickly fix a label to it and continue to name the next plant.

The exercise has four main stages.

STAGE I

Do not approach the tree right away but take the time to observe it in its context. Describe the place where it grows, the general atmosphere in a qualitative way by the elements. For example, how is the soil (compacted, aerated, mineral, humic), water and air (is it humid, dry, aerated, protected, hot, cold)?

You can make a sketch of the tree from a distance with pastel chalk to better feel the general atmosphere. This will help you to perceive the tree as part of the whole and no longer an object placed in a setting.



As expressed by Jean Bazaine:

“The distant day when I tried to draw a tree, I realized that the space between the branches was only behind because we knew it and could just as easily be in front of or floating in space, the world changed shape, it became a breathing world, richer and more elusive...”

Jean Bazaine (catalogue-Drawings 1951-1988 Musée Matisse)

STAGE II

Then start to observe the tree in more detail. How precisely is it formed? Start from the bottom: the trunk, the bark, to the branches and then to the thin branches and leaves. By observing and describing the different parts of the tree, always ask yourself the question: is there a link between all these elements? Do they have a common style? Just as with a little exercise you can recognize the paintings of the same painter, so you can exercise a physiognomic look to learn to discover the style of each species.

For example, in lime trees, it is interesting to observe the soft bark, the soft branches, the wide leaves.

STAGE III

You can then exercise a third way of observing the tree from the bottom up to the tops of the branches without stopping at the various details but trying to follow the trace of the specific forces that have built this tree over the years. Pay attention to the specific way in which the

tree branches. Comparison with another tree can help to better understand the specificity of the observed tree. The way in which the lime tree with its branches rising high in the sky and falling back like a kind of water jet with very graceful curves is very different from the oak tree which seems to penetrate the space in force by sending branches horizontally, and whose growth seems to be regularly blocked. But it is no problem: the oak changes direction and continues to grow. This gives it its famous gnarled character. Thus we move from the observation of the physical tree to the dynamic tree.

These observations can also be further investigated by observing the tree throughout the year to see its specific growth dynamics. For example, lime blossoms at the height of the rising year in June, as a maximum exhalation. Oak, on the other hand, flowers early and needs all year round to ripen its dense and dark acorns.

FINAL STAGE

The last step of the exercise consists in gathering together all these observations and looking for the GESTURE of the tree. What is the specific character expressed through all these phenomena? For this, smell or taste can help. For example, the sweet smell and taste of lime blossom tea allows for a more interior experience to better grasp the unity of the tree.

THE ARCHETYPAL PLANT

by Pedro Otero, Perú

Clay modeling as an artistic expression can awaken the soul forces of the heart, mediating and harmonizing volitive action between thinking and sensing.

The main **GOAL** of these exercises is to allow students to experience the manifestation of the “archetypal plant”. This exercise aims to support the intellectual understanding of the plant, by enabling practical experiences that enrich the understanding of the phenomenon. Its aim is that students can experience the polar forces shaping the archetypal plant, meaning that the plant grows rhythmically between earthly forces attaching its roots into the earth, and cosmic forces, acting through light and heat, lifting the plant towards the sky.

Active dialogue and exchange on the phenomenological transformation of the plant should be encouraged among students throughout the exercise.

THE EXERCISE

MATERIALS:

Red pottery clay (3.5 kg); 1 wooden board (35 x 50 x 1cms) with a plastic bag to protect from humidity; 1 plastic pot (250 ml.); 1 sponge; 1 skewer stick 20 cm long; 1 universal grinder; 1 wipe dryer; 1 wooden slat (20 x 20 cm.) with a plastic bag to protect from humidity; 3 A4 bond sheets; 1 2b pencil with eraser

STAGE I: THE PLANT

The first exercise is the representation of an “own archetypal” plant that each person must let emerge from themselves and capture it on a plane, modeling first its main organs and accentuating the details at the end.

- Each participant is given a first block of red clay of 2.5kg and the materials from the previously prescribed list.
- The clay must be expanded uniformly on the board. It is a manual activity that requires some strength and the fingers, the palm and even the fist can be used.
- The surface should be left sufficiently smooth by wiping it with the sponge gently, so that in the next step you can design your plant.
- Then, concentrate in kneading the clay by distributing it over a space, the lower third of which will house the roots, i.e. the soil, and the upper two thirds, the vegetative parts of the plant.
- Draw a line, dividing the lower third from the upper two thirds.
- In this phase, students must let their own image of a plant emerge. The roots, stem, leaves (with or without petioles) and the flower are drawn with the skewer stick. The finer details such as calyxes, leaf margins and axillary buds will be created at a later stage, as well as the fruit and the seed.
- With the drawing serving as a guide, begin the modelling by carrying, dragging and pushing the clay towards the drawn organs. Clay should not be



Pedro studied biology at the Universidad Nacional Agraria La Molina, Peru and was trained in Biodynamic Agriculture in Brazil. In 1986 he started the first biodynamic farm in Peru. Since then, he advises on, promotes and trains Biodynamic agriculture throughout the country. He is an active member of ABD-PERU.

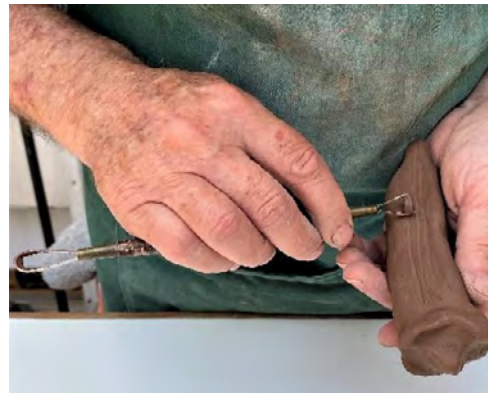
The development of his ceramics began in the 80's and is continuously enriched, incorporating the results of the Goetheanistic observation to the clay exercises and to the ceramic pieces that he makes in his workshop.

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extracted and placed as filler in leaves, flowers or roots. The idea is to take with the thumbs the clay from the outside of the drawing towards the organs of the plant, from the external to the internal. The fingertips finish by modelling the contours of the plant structures.

- Now, having the plant formed, it is possible to start working on the details with the help of the universal cutter and the fingers. You can then texturize the areas around the leaves and flower and thicken the soil and root by taking clay from the contours, thus further differentiating the soil-solidity (terrestrial) from the vegetative part air-lightness (cosmic). Prepare the next exercise by observing first on a plant what an axillary bud looks like and placing clay on this plant, between it and its branches.
- Taking the clay as the “earthly and cosmic” substance, the participant now forms its fruit.



STAGE II: AXILLARY BUD

Approaching goetheanistic botany, we identify in a plant the axillary bud. We observe its size, shape, how it is inserted between the petiole and the stem, its colors, and other parts. We transfer what we perceive to a pencil drawing on paper, at a larger scale than it is. It is a simple sketch that will serve as a guide to later model a three-dimensional piece.

You can also opt for other botanical structures: calyx, petiole and insertion in the leaf, anthers, stigmas, etc. Parts that need to be observed vividly in plants, to be modelled later; but I recommend starting with the plant as the first exercise.

- Each participant is given a 1 kg block of red clay and will use the materials from the list provided.
- The clay is expanded on a 20 x 20 cm slab. A uniform sheet of 1 cm thickness should be achieved. An approximate rectangle of 20 x 15 cm should be marked and cut.
- As most axillary buds have a wide base and a tip, the blade will lift off the board forming a cone. The wide base will give the necessary initial support to the piece.
- The thickness of the sheet (1 cm) will be used to give the height and shape, according to the drawing itself.
- Once the desired shape is achieved, the botanical details of the bud are delineated. Basically, how the external scales are arranged and how it is supported on the stem and petiole. Clay will be added to give shape to all of the structures. Interesting is to give the angle at which it is arranged on the plant.



- Thus, we achieve a “giant” bud, a three-dimensional piece that should then be made either smooth or textured, with an expression of opening or in latency, static or with some twist of movement.
- The participant pours out his or her feelings after modelling what was contemplated and perceived before and during the modelling.
- Finally, all the figures can be presented as an exhibition for people to contemplate the work of their peers and to encourage a conversation and exchange of impressions about them.

BIODYNAMIC FOOD & FARMING

by Ambra Sedlmayr, Portugal

Over the years, I have always sought ways to let people have their own experiences with Biodynamic Agriculture, rather than just telling them about it. I found that comparing differently produced food items is a great introductory exercise for beginners. It raises a lot of questions, and it makes them want to learn more. I found that degustation is a great way to start to talk about fertilization, nutrition and fundamental principles of Biodynamic Agriculture, in answering questions or bringing your own talk about what could cause the massive differences.

THE EXERCISE

MATERIALS AND PREPARATION

- Prepare comparable food items produced in different ways (conventional and/or organic and biodynamic). It's best to use foods that one can hold and eat easily, such as nuts, carrot slices, cherry tomatoes or other small fruits. Teas are interesting to be compared, as it is easy to make them in exactly the same way. However, the logistics to have 2 or 3 labelled cups for everybody is more complicated. It is important that the food items are as similar as possible (for example the same cherry tomato variety produced in different ways), because participants will try to find other causes that could explain the differences, besides production method. This is also the reason why I like to compare at least 2 different types of food (for example nuts and tomatoes), so participants can experience

that there is a common thread among production methods. When I can't find the same variety, for example of walnuts produced biodynamically and conventionally, I tell participants that the choice of how to breed plants and what varieties to grow is also part of the production method.



- You need to label your food items so participants have no clue what production method they could come from. For example, I like to label tomatoes as “Tomato no.1” and “Tomato no.2”, rather than with letters A, B, C, as you and participants can get confused and try to guess whether that means Biodynamic, Conventional, etc. Sometimes I choose just 2 production methods to compare and label them “left” and “right” and instruct participants to hold each item in their left or right hand, respectively. This avoids production methods being mixed up by you or participants on serving. You need to keep your own hidden notes on how you



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labelled and anonymized the food items, or else you can get confused in the midst of the emotional waves of the tasting!

INTRODUCTION AND INSTRUCTIONS

- Depending on the context I'm in, I introduce the tasting in different ways. I might talk about the history of agriculture, the rise of conventional agriculture, biodynamic and organic agriculture. I tell them that there is a continuum: not all conventional agriculture is a massive polluter and animal welfare infractor, and that organic agriculture can be very close to conventional but with the substitution of conventional inputs with those allowed by organic regulations, or it can be close to the best of biodynamic farms. Biodynamics can be like paradise, but it can also be like very bad organic. Participants get an overview of the production methods at stake, without it being too fixed or dogmatic, which would lead to distracting discussions on this point. Then, I might ask what difference they think these different production methods make to nature, health, food quality, etc.
- Then I introduce the tasting exercise. I tell them that we want to find out for ourselves if we can learn about and distinguish food quality, based on our own senses and whether production methods might have any impact. I tell them that we are not here to guess what the production method of each product is, but to really use our senses and pay attention to the different qualities of each food item they will try. Sometimes I give handouts where they fill in what they perceived with regards

to smell, shape, texture, taste, color, etc. to really bring the focus to perception. There are a lot of assumptions about production methods. I have had promoters of biodynamics assert that the small, wormy, tasteless walnuts must be the biodynamic ones, because they couldn't imagine it was the big, healthy, tasty ones. Also, people who are used to conventional foods are likely to prefer those and instead of describing them, they say "I like this chamomile tea, I could drink liters of it" - unaware that the lack of taste and character produces the effect that you can drink it by liter. I like to say: "Let us pretend we are professional taste-testers. We really want to describe each food item as it is, rather than bringing in our own preferences, sympathies and antipathies."

- As well as naming the usual 5 senses, I also introduce the life sense. I say: "Have you ever noticed that you have a way of perceiving how you feel inside your body? You can feel whether you are fully awake or sleepy, healthy or ill, hungry or full, thirsty or just fine. Let us also pay attention to this inner perception, to how the food item we taste makes us feel." This is generally a game changer for people – at least some will feel and name the big differences they feel after tasting each of the comparable items.
- Then I invite participants to start tasting the foods, perhaps in silence or commenting with their neighbor. I give them plenty of time to taste, take notes, compare and talk to each other about it.

HARVESTING THE EXPERIENCES

- After participants have tasted the different available production methods for any food item, I make a small plenary for them to share what they noticed and what stood out for them. Sometimes I have to ask questions to draw out more information from participants about the differences they found.
- After participants have tasted all the food items and production methods, I make a longer final plenary to draw out what they noticed being the commonalities about the different production methods. Sometimes I don't know the results myself: once I had lost my sense of smell when preparing the tasting, another time I found a beautiful looking conventional chamomile tea and expected it to be spectacular. But the tasting always shows that conventional products are bland with little taste and aroma, one can eat a lot without feeling satisfied, sometimes there is a slight disgust towards them and people don't want to taste more of them. Organic foods vary widely: from fresh and tasty to old and tasteless, but they don't tend to reach the complexity of aroma that biodynamic food invariably does. Biodynamic foods often give a sense of plenitude and fulfilment, like producing ripples of satiation and satisfaction in the body (life sense): one doesn't need to eat much to have one's craving for food satisfied.

TRANSITION TO QUESTIONS AND TOPICS RELATED TO BIODYNAMICS

I like to move on to take questions and/ or to talk about:

What is it that nourishes us? Is it really the macronutrients? What does our body crave for and need when we are hungry?

How can these differences in taste and effect be explained? How is conventional, organic and biodynamic food grown?

CLOSING

Finally, I come to a clear close, summarizing what we did and what we concluded as a group, appreciating all contributions and questions, and telling them about next steps or resources to learn more. Enjoy running your own food tastings.



THE BIODYNAMIC CALENDAR

by Jakes Jayakaran, India

This exercise's main **GOAL** is to enable participants to experience and learn to use a Biodynamic Planting calendar and thereby to help them to plan their different farming activities, according to some well understood cosmic rhythms.

THE EXERCISE

MATERIALS

- Prepare charts (60 cm x 45 cm) for each planet (Sun, Mercury, Venus, Earth, Moon, Mars, Jupiter, and Saturn) in the solar system and the 12 constellations. Use different colors for the 4 types of constellations: red (fire), brown (earth), blue (air) and green (water). In total, this will be 24 charts.
- Provide a BD Planting calendar to each participant.

INTRODUCTION

- Begin the exercise by explaining to students about the basic astronomy of our solar system, the planets, and the constellations, so that the participant has a visual picture of the Cosmos and the Solar family.
- Then, introduce the core concepts behind different Moon rhythms, including:
 - Full Moon, new moon, ascending and descending phases of the moon.

- Nodes, both ascending and descending nodes.
 - Apogee and Perigee.
 - Constellations and their classification as Fire, Earth, Air and Water.
 - Different parts of the plant that we use (root, leaf, flower and seeds / fruit)
 - and their connection to these constellations.
 - Moon opposition to Saturn.
- To complement, introduce the research done on Planting calendar by Lili Kolisko and Maria Thun.

STAGES OF THE EXERCISE

Normally at least 20 participants are needed, for each person to hold a placard (12 constellations, 8 planets including the Sun, Earth and Moon). If there are less people, then it is better to pin the 12 Constellation charts in the right sequence in a circle on the outside where this exercise is being played. We would need at least a space with a 10-to-15-meter diameter circle to do this exercise.

- Make each person hold one placard and put them in the right position. The 12 Constellations will be on the outside – Aries to Pisces. If there are enough people, each can hold one Constellation sign placard in the right sequence.



I am from India and I have been doing BD farming for 30 years. I own a Demeter certified fruit growing project, exporting mango and other tropical fruit products. I have spent sufficient time seeing and understanding the Cosmos, and finding connections between planetary events and life on Earth. Understanding Indian Astrology is one of my favourite pursuits. I have been involved in BD training for farmers and spreading the message of Biodynamics in India, Sri Lanka, Malaysia and China.

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- The question will arise whether we should put the Sun in the middle (Heliocentric) of our live model, or whether we would be better off having our Earth in the middle (Geocentric). We could try the more popular Geocentric model, with the Earth in the middle. In this example, the Earth will be in the center, and the moon will be next to the Earth and going round it. Venus will come next, then Mercury, then the Sun, and further away will be Mars, Jupiter and Saturn. Put them in the correct position as per the Calendar planetary positions on that date.
- Explain some basics of the Solar system. Talk about the Sun and all the planets, spending time next to the person representing the planet. I generally give

some basic astronomical information first, then make the planets go around the Sun. In between, one could also try to bring in some mystical connections with these planets mentioned in different cultures, some ideas from the planetary phases in one's life as explained in Anthroposophy.

- Having explained the bigger picture, we let the planets other than the Sun, Earth, Moon and Saturn return to their seats. This is to prevent over-cluttering in the middle space while explaining other concepts in the BD Planting calendar. We can now focus on the Full Moon – New Moon rhythm, Ascending and Descending phases of the moon, Nodes, Apogee / Perigee, Moon in opposition to

Saturn. Bring in plant-based research aspects, done on these different Moon rhythms, and suggest recommended farming activities for each of the above.

- The next part is the final session with a one-month Planting calendar case study. Normally the following month is easier to take, or any month of the participants choice. The participants look at a month calendar, and then a discussion starts on interpreting the different information found in the calendar, and connecting it with different farming activities like sowing, transplanting, applying BD preps, CPP Foliar sprays, and how to plan the farm work based on some astronomical phenomenon mentioned in the calendar.
- It is possible to have an hour in the evening / night, to look at the sky to identify Constellations, the Ecliptic line, and some planets that may happen to be visible. There are several apps these days like Skywatch / Stellarium / Star watch etc. that can be immense help in identifying some of the stars and planets. The whole idea is to make the participants learn to look up at the Cosmos, hopefully with awe and reverence, and to integrate these ideas in their farming work.

MY PERSONAL EXPERIENCE

Normally, this whole exercise takes about 3 hour-long sessions, preferably 4 sessions during the BD Training period. So, depending on the time available, one could adjust the training time needed. However, experience shows that it takes a lot of time and effort to get people started on this path, so the more time available to disseminate this knowledge during the training session, the better.

It is possible to have a Solar model fabricated in the farm / training center. It is permanently fixed but could be dismantled to be taken other places. However, it is best not to keep moving it too much, since damages to the fiberglass planetary models seem to happen often. This model is easier to explain to visitors / students for the Trainer. The earlier Charts method is more participatory for the students and could be fun way of learning.



ENCOUNTERING ELEMENTAL BEINGS

by Anthony Mecca, USA

Elemental beings are sometimes spoken of casually in biodynamic agriculture. To do them true service, to support them in their work and evolution, we will need to strive towards a living relationship with them. Starting with the other exercises I have offered, one may strive towards building an inner relationship to these beings that are in the substance of everything, from plants to our electronic devices, and also exist outside material substance. They are also active in the realms where our thoughts and feelings exist.

Most traditions in the world have some relationship to what we call elemental beings. Though this relationship has mostly passed away due to the dominance of the materialistic worldview, it is still present in some ways, for example in indigenous communities, and in many land-based cultures throughout the world.

We know from Steiner's spiritual-scientific indications that elemental beings have no physical body, nor an individual 'I' consciousness; they have an etheric, life body and a sentient, astral body. They are not sense perceptible but exist within and behind the sense perceptible world in everything we experience. They also work throughout the world in connection to thoughts, feelings, and will impulses, for example, as well as in many other ways. Elemental beings' consciousness is on the elemental, or etheric, plane; they do not experience the physical as the human being does, but what weaves in the realm of life. When we are dreaming (unconscious picture consciousness) we are traversing their realm in an unconscious, often

incoherent manner. They are instrumental in creating the images that then appear in our consciousness when dreaming. Building the capacity of imagination (conscious picture consciousness) brings the human being into conscious relationship with their being and state of consciousness and supports working with them co-creatively in a conscious manner.

Most often elemental beings are known as being connected to the plant world and the world of the elements. There are also common pictures from the world of fairy tales and, more recently, from cartoons and movies. Due to our current modern consciousness, we need to be especially discerning to recognize where these beings exist and how they may be experienced. Though we will often use words that are connected to things that exist in the physical world, these beings are not physical. We experience them in our inner life.

They contribute greatly to the coming into being and passing away of the physical, but they themselves cannot be captured by any physical means. Some ways ascribed to being able to capture them on film for example are capturing a result of their activity, but not an image of them as beings as we would commonly consider them in our everyday material consciousness. As a corollary, we may possess an image or object that another human being has created, but that is clearly not an image of that human being and is only a small imprint of their life and soul activities.

“Just as perception is not mere visualization, so imagination is not visualization either. By means of perception, the life of visualization comes in contact with a primarily unfamiliar outer world. . . Just as there is a real transition from the mere conceptual complex, “a tree is green,” to the verdict, “a green tree is,” so there is an analogous transition from the mere life of conceptions to what is comprised in imagination, in a conception filled with other than the yield of a spatial outer world. There we have the process that in our imagination, life enriches our conceptions.

There is, however, something that intervenes between imagination and visualizations. Imagination has a way of announcing itself quite realistically the moment it appears. When our soul really attains to imagination, it senses in its life of visualizations something akin to what it feels in its life of perceptions. In the latter the soul feels — well, its direct contact with the outer world, with corporeality; in imagination it feels an indirect contact with a world that at first also appears to it as an outer world, but this is the outer world of the spirit. When this spirit begins to live in the visualizations — those that really attain to imagination — it is just as coercive as outer corporeality. Just as little as we can imagine a tree as golden when we are in contact with the outer world — just as the outer world forces us to visualize in a certain way — so we feel the compulsion emanating from the spirit when visualization rises to imagination. In that case, however, we are at the same

time aware that this life of visualizations expresses itself independently of all the ways and means by which visualizations are ordinarily given a content. In ordinary life this takes place by reason of our perceptions through our eyes, ears, etc., and of our nourishing of the life of visualizations with these perceptions, so that it is filled from the content of our perceptions. In imagination we suffer our visualizations to be filled by the spirit. Nothing must intervene that might become the content of our soul by way of the bodily organs, nothing that enters us through our eyes or ears. We are directly conscious of being free of all that pertains to outer corporeality. We are as directly free of all that as we are — to use a material comparison — of the processes of the outer body during sleep...

Goethe, who knew well how art comes into being, often maintained that ‘imagination’ is by no means something that arbitrarily manipulates cosmic laws, but that it is subject to the laws of truth. Now, these laws of truth act absolutely out of the world of imagination, but here they integrate the ordinary world of perceptions in a free manner, so that true ‘imagination’ is something between ordinary conception and imagination. ‘Imagination,’ rightly understood, not conceived of simply as something that isn’t true, bears direct witness to the progress of conceptions toward the point where they can flow over into the super-sensible region of the imaginative world. This is one of the points at which we are able to perceive the direct streaming in of what we can call the spiritual world into our ordinary world.”²

² Steiner, Rudolf. CW 115 “Wisdom of Man, of the Soul, and of the Spirit” Dornach. 21 November 1911. Accessed October 27, 2022 <https://wn.rsarchive.org/Lectures/GA115/English/>

Since elemental beings do not have a physical body, the physical world as we know it does not affect them in the same way it does us. They do not experience boundaries as we do, for example. There is much less separation; some elemental beings exist more independently from each other, and others may work in groups, but their experience is that they are immersed in the greater whole of the etheric world, a world with a different lawfulness than the physical world. Through working with imaginative consciousness, we may gradually learn these laws through our own experiences.

Without an individual ‘I’ consciousness, elemental beings’ directive for being and contributing to the world comes from without. Different than the ‘I’ consciousness of minerals, plants, and animals (which are each different from each other as well), they are directed strongly through the thoughts, feelings, and willing of human beings, as well as through different groups of the hierarchies, as both imprint upon the etheric and astral realms. The human being’s consciousness has a strong effect on the activity of the elemental beings, though they too still maintain a certain degree of independence from human directives.

Given the stronger and stronger polarization towards materialization and away from the realm of life, these beings are becoming ‘enchanted’ into matter more often and more strongly. We do not recognize and revere their work in the realm of the living, and our human directives have used their work to create more physical objects to serve us which are increasingly divorced from the other realms of existence: from life, soul, and spirit. We see this particularly in the world of agriculture as

the focus on quantity, size, and outer appearance in produce without also considering the qualities of the substance and how it nourishes human beings, animals, other plants, and the soil.

Elemental beings work in pure service of the larger whole to the best of their abilities, but due to the changes in human consciousness, our challenge to recognize them, they are not as able to offer up their tasks. The human being now has the opportunity to freely choose to take up bringing different directives to these beings. As a bridge between the earth and cosmos, between the elemental beings and the hierarchies, the human being may work to consciously form direct living relationships with both to bring healing to the heavens and earth. A starting point can be as simple as working more strongly and objectively with sense perception through goethean observation and exact sensorial imagination. We imbibe elemental beings in all of our sensory perceptions.

Cultivating this activity in a healthy way can help the elemental beings experience being seen through their work, and in getting to know more clearly and deeply their work, we can more healthfully support them in their tasks in supporting the life on our farms and gardens and the life forces in our food. Our warm interest, striving for recognition and reverence, and care and gratitude for their work is a first step in creating, and becoming, this bridge.

Though elemental beings exist in all that is material as well in working in other realms, the plant is a strong, clear, and pure representation of their work. Our relationship with plants is a prime entry point

to experiencing, understanding, and working co-creatively with elemental beings. This work can be a healing starting point to bringing our other work back into a healthy relationship with the realm of life and all that streams through earth and cosmos. We will look to get to know some aspects of how types of elemental beings work in the realm of plants.

ELEMENTAL BEINGS AND THE PLANT WORLD

In the most commonly discussed rank of elemental beings, there are four primary types: the gnomes, which exist and work within the earth element and work with the life ether especially in the root activity of plants; the undines who make their home in the water element and work with the chemical ether, weaving the substance of the plant leaves; the sylphs, whose work in the streaming of the air element and with the light ether brings form to the leaves and supports the plants towards flowering; and the fire beings, sometimes called salamanders, who working in the warmth element and ether bring forth fruiting and seed forming processes. Though these are places where these beings can be readily experienced, there are also many other aspects to their being, and they are active everywhere, not just in plants. We must also always keep in mind that although we will speak of them separately as they exist within different elements and parts of the plant, that they all are nearly always present in anything that exists in different collaborations, and the work of any of them relies on the work of the others. The Human Being as Symphony of the Creative Word is one place where Steiner gives ample descriptions of elemental beings. Reading through lectures 7, 8, and 9 will give

pictures of the activity of each of these beings, which will then be used in the following exercises.

As best as you can, work to read these descriptions through the lens of imaginative consciousness, taking each in objectively and allow the qualities and inner activity to resonate within. It is also helpful to give a pause and let go of whatever did come up more clearly for you to sense what lives behind it.

EXERCISE I

For each of the four elemental beings (gnomes, undines, sylphs, salamanders or fire spirits), work with the following prompts:

- What was your impression of the description of this elemental being? How does it live within you?
- Work to express it artistically (in drawing, painting, poetry, speech, drama, sculpture, or some other way) to help integrate and understand their activities.
- You may also work to translate it, for example: What color do they embody? What gesture or shapes? A particular smell or taste? How can you translate their qualities and activity to other qualities and build a living picture of them from your own experience of where and how they are actively connected to other deeper experiences?

EXERCISE II

Following on from the above exercise, work to bring together the activities of the elemental beings into the picture of the becoming of the whole plant through imaginative consciousness. Bring each individually up through imagination, allowing the image then to

drop and allow what lives behind it to reverberate.. As you bring each up, place it next to your experience of the other. How do they compare and contrast? What questions do you have about each and their relationship? How does this experience help distinguish and connect each to the others? This work may take patience and time to work with each before there is much to report,



Blumenmythos, or 'flower myth' by Paul Klee

but working with each individually, and their work together, can help to reveal their work more fully.

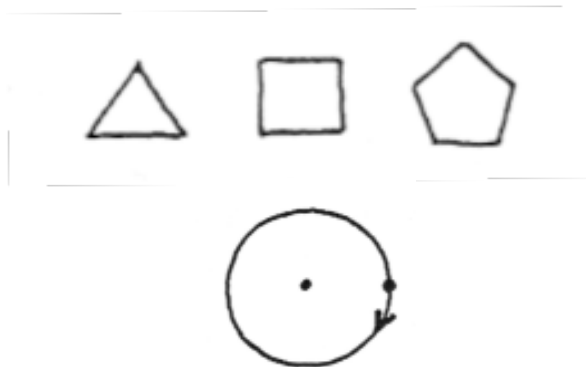
EXERCISE III

The following is a set of meditative exercises for working with the elements and elemental beings directly from Rudolf Steiner:

“We can feel a clear difference, if, for example, we imagine the feeling that is stirred in us when we take hold of a snail or when a snail crawls over our hand without our knowing. If we develop well these different feelings, then we can form a concept of the difference between the subsensory [elemental] and the supersensory [higher hierarchies] world.

The whole physical world, with our feelings of this kind, is a maya or illusion. We can picture this world as a field or a plane; above it is a supersensory world, under it is a subsensory world. The suprasensory world is such that it can be brought together with the feeling of being taken hold of; the subsensory world, on the other hand, can be associated with the feeling of taking hold of Something.

In Rosicrucian teachings, the subsensory world was always called the elemental world; this is the world of the elements: fire, air, water, and earth. One penetrates to the element of earth by meditating on triangles, squares, pentagons; altogether on geometric figures. This should be done by writing these figures with the fingers of one hand on the palm of the other hand. Then one should drop every thought of the hands and writing, and imagine the feeling of the figure being written onto one’s hand as if floating freely in space.



One should immerse oneself in this feeling. In this way, one gradually takes hold of the earth element.

The element of water is grasped by imagining a fixed, material point and another mobile point that moves in a circle around the first point. Then one should write this on one’s hand and proceed as with the first figure. One should think of the second point as one that rotates constantly.



For the air element, one thinks of two fixed points that want to fly apart from each other into infinite distances after they first describe a kind of semicircle around each other. If we work with this figure exactly as with the preceding figures, then we grasp the air element. Then we do not merely feel the air flowing past us and caressing us, we rather take hold of it.

For the element of fire, we think of a closed figure such as a loop or a lemniscate (a figure eight on its side). One should especially feel that there is an intersecting point where the curve touches itself.



PROSPECTS OF THE EXERCISE

One should do these exercises constantly for an extended period of time. They are not easy. One must first acquire a certain skill in feeling the sensations in space without using one’s hand; and secondly, in holding the figures firmly in mind. But then these exercises lead to perception of the elemental world; one learns to take hold of the elemental world. When we meditate on these symbols in the indicated way, we will certainly notice how we live into the elements, how we will recognize which beings live in them. At the same time we will feel how we are constantly becoming more egotistical. These exercises can benefit us only if we simultaneously develop a sense of universal compassion, which allows us to experience every cry or sound of complain, every moan of pain in our surroundings, as if they were originating in our own tortured hearts.”³

³ Steiner, Rudolf. CW 266/2, Esoteric Lessons 1910-1912. Anthroposophic Press. 2012. p. 134-139



THE FARM ORGANISM EXERCISES TO STRENGTHEN ITS INDIVIDUALITY AND DEVELOPMENT

WHAT IS THE HEART OF MY FARM

by Simone Helmle, Germany

The main **GOAL** of this exercise is to allow farmers to exchange with their peers on different aspects of their farm. It is expected that the synopsis of all farm presentations supports the conceptualization of farm organism and farm individuality. The exercise strengthens the awareness of one's own farm initiative and it gives insight into the context of other enterprises. It also trains observation and encourages independent thinking, while emphasizing the uniqueness of the farms in their embedding in the natural, landscape and climatic space. The exercise strengthens the trust of the individual participants and trust between the participants.

THE EXERCISE

- Start by introducing the exercise: explain what the exercise is about and what you hope to get out of it for the training and for the individual participants.
- Small groups of 3 to maximum 5 people are created. The guiding question for each participant is:
- **What is the heart of my farm?**
- The small groups will work together for 60 minutes. Each person in the group will talk on the question for about 7 minutes while the other participants in the small group listen attentively. Everything that is said remains in the confidential space of the small group.
- Make sure that there is no discussion in the small groups. It is important to create a "listening space" that allows the speakers to speak while the listeners follow along.



- When everyone has said something, feedback follows. The guiding question for the feedback is:
- **Which part of your narrative has been valuable to me for my own farm development?**
- Final conclusion in the plenary. For the closing, you can ask three participants to report how they personally experienced the exercise. Alternatively, you can invite participants to spend 7 minutes in silence reflecting on the work and writing down personal notes.

MY PERSONAL EXPERIENCE WITH THE EXERCISE

For most participants this exercise takes some effort. It is very personal, touching and the setting is unusual. The leading question stimulates almost everyone and invites them to look into one's own enterprise in a different way. Furthermore, the participants have the opportunity to feel how much respect and attention they receive from their colleagues. It is a moment of pause and reflection for the place and the people we interact

with on our farm every day. Encourage them to try it out themselves. Point out how important it is not to discuss, but to remain in attentive listening. It is about reflection and strengthening oneself. It is not about ready-made answers or very big plans, but about exploring into the question of the “heart of one’s own farm”.

Sometimes the idea of standing like a bird or a star above one’s own farm helps to look at oneself with the focus “what do I see when I look for the heart or hearts from this perspective of my farm? What makes up the heart, what do I discover there in the place, in the rhythm, in the flow, in the pulse ...?”.

If the training is carried out by a team, it is worthwhile to do this exercise with the team during the preparation. Instead of the farm, the question could be about “the heart of my activity” or “the heart of our course”.

What is most appreciated by the participants is what they were able to listen to the other people, which is warm, touching and stimulating. If the feedback remains as a strengthening verbalization, in the form of “what do I notice about you in particular?” or “what made it valuable for me to hear from you?”, people feel a deep, heartfelt gratitude.

NOTES TO THE HEART

“One sees well only with the heart, the essential remains hidden from the eyes”, - The Little Prince by Antoine de Saint-Exupéry.

The Little Prince expresses in simple words what we are able to experience in the heart. Personally, I discover again and again how gestures can be different from each other. I experience the desire to meet at eye level as a desire for equality and acceptance, so I experience it as a delicate line between above and below. How different it

is when we meet at heart level. I experience this gesture much warmer, it’s more open and inviting to walk with each other. For a moment I am truly received by another person. Or another person is visiting me in my heart. This can be experienced as a process of warmth spreading through the heart-belly area. Knowing that I can only look a little bit into my organs and that I don’t notice a lot of things there, I increasingly try to observe the emotional expressions of the organs and pursue the questions.

- When do we actually perceive our organs?
- How seriously or how lightly do we relate to the organs?
- How do organ observations help us to see life and the organism better?
- How can plants, in their appearances and in their metamorphoses, make us aware of the organs, their mobility, their shape, their abilities and their characteristics?
- How can we find clues for the agricultural or horticultural organism from the observation of the organs?

For participants, it is helpful if you collect some aspects of the heart. You can do it together before starting the exercise. Try to describe the organ a little in the sense of: What does it look like? How does it feel? What are the tasks of the heart? Where is it located? Perhaps everyone puts their hand on their chest, feeling the heartbeat and the warmth of the body, and feeling the breath. What kind of organ is the heart? Here are a few ideas about the heart:

- The heart lies between the head pole, of perceiving, and the metabolic pole of moving. The heart, like the lungs, lies above the diaphragm. If we look at

the second lecture of the agricultural course, the diaphragm stands for the ground. Where does this place the heart in this view?

- In the heart the blood streams from above, below, left and right. With the four chambers, the whole can be imagined as two lemniscates. Thus, the heart is the center of a lemniscate which connects the human being with the outside world at the top via the lungs and head and is in connection with the inner organs at the bottom.
- The heart is at the center of our circulation. In it, blood is compressed to the maximum and is thus subject to heaviness. This is countered by capillary effects, i.e., suction effects that bring the blood to the periphery. This is rather a fine, light movement.
- The heart is severely challenged when movement and sensory stimuli are overloaded or underloaded on one side. In fact, it often happens in course groups that a great deal is done sitting or standing. Movement through dancing, running, singing, sculpting etc. is very beneficial for the heart. It seems to us that the muscles become joyful and are gripped by what is happening around them.
- The heart is an organ that has been studied since ancient times. Our heart stands for compassion, care and love. We can carry the sun in our heart; without the heart, like without the sun, we cannot be. The heart is our organ of fate and memory, it is more comprehensive than a quick smile and it is more complex than a pump.
- Rudolf Steiner mentions in the fifth lecture that the stinging nettle “should really grow around man’s heart, for the world outside – in its marvellous inner working and inner organism. The stinging nettle is the greatest boon.”

COMPOSING AN AGRI SCULPTURE

by *Walter Siegfried-Hahn, Philippines*

Biodynamic agriculture is a practice, a science and very much a cultural effort, something deeply human, something in the very sense of the word artificial: it is ART, it is Agri Sculpture.

INSTANT COMPOSITION

An Agri Sculpture is a huge piece of art that is composed of an infinite number of artistic decisions, based on the spiritual, scientific and creative knowledge and experience of the farmers (the decision-makers). Decisions with very long-lasting effects and consequences will be thoroughly prepared, but much like decisions with rather short-term effects, these decisions will often be taken individually and spontaneously, answering to the moment and the situation. To make good decisions, flexible and creative personalities who are in constant “conversation” with the farm individuality are needed, involved individuals in the whole who will be able to create in the presence of the moment and in relation to all those involved. This kind of decision-making reminds one much of an improvising musical band like a free jazz ensemble or the good old Grateful Dead. The actual “composition” work that leads to the Agri Sculpture is thus quite a spontaneous process and in the farm teams that often lead farms today, this kind of spontaneous group composition is an experience of everyday.

Instant Composition as a method stems from experiencing and creating music or soundscapes. I have used it as one approach to training faculties that we need to develop a Biodynamic Farm Organism or Agri Sculpture. While the experiences and teachings cannot be transferred directly, they provide insights through a less complex environment than the farm. In a similar way, as listening to sounds and creating soundscapes develop our abilities in the musical realm, the active dealing with the whole farm and its challenges develops our ability to create the Agri Sculpture. In the following, the Instant Composition method is used as an equivalent to one of the many different challenges and tasks of a farm: it is not by accident that the wisdom of language shows us a deeper understanding of terms which we may use rather unconsciously - composting and composing really come from the same word stem and show us from a different perspective that agriculture really is an art.

CIRCLE SONGS

As biodynamic farmers we bring into the day on the farm all our knowledge, experiences, presence and desires. And through the encounter with the farm and all her inhabitants, decisions are made and things grow. Similarly, in a Circle Songs session, a method I have found, I may just listen to what is out there, and out of this listening and the encounter with all those present,



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out of this present precious moment, the sounds and actions, rhythm, harmony and the silence may grow.

For the purpose of this manual, I try to describe a few of the practices and exercises that have come up. They are not meant as finished products, rather as descriptions of experiences. The sequence of their appearance here is not meant as hierarchical, rather as inspirational: you will find in the moment and context, how to start and how to proceed.

- **Listening to what can be heard now.** It usually helps when participants close their eyes. You can focus the attention both to the audible sounds and their inner reactions to them. A variation of this can be done in a rather intimate situation or when one is further progressed in some work: listening to one's own heartbeat by holding the hands over the ears, or even to the heartbeat of someone else through paper rolled into a tube and positioned on one's back or front.
- **An old game:** We stand in a circle and I whisper a word or two in my neighbor's ear. The neighbor passes it on and so forth till it comes back to me. I reveal both what I first said and what I last heard. I can intensify this exercise by whispering more and more words into the circle, speeding the whole affair up, making them then more and more audible and developing the whole into a live sound sculpture. Like a flower from seed, a musical composition evolves out of silence into something grand.
- **Hum a tune.** Ask participants to repeat what they hear. Let them describe what they hear. Keep humming and ask the participants to join in the humming to develop a carpet of humming sound. Are they aware of the over and under-tones present? Make them aware of these ever-present but usually over-heard over and undertones by stressing them, alone or on top of the humming group. This way become aware of the melody which is present in the single tone (Steiner GA 283). An important deepening can be expected when in addition, focus is given to the silence before and after the hum.
- **Call and response.** I sing phrases which I ask the participants to feed back to me. It will mostly depend on my own creativity how this musical piece develops and transforms. However, the less clear I am with my own part, the more the group will unconsciously become creative - a nice example of how "mistakes" can develop into something new, if one only accepts them as part of life.
- **Form groups** - maybe first two groups, later three or four, or even more. I sing a phrase that will be repeated by the first group over and over, although they are free to transform it (which usually happens naturally in the course of the evolution of the song). Then I give the second group a different phrase, the third another one and so forth. These "phrases" can be anything, only they will usually fit in the time given to the first one. They may not only be sung, but they could be body percussion or any other sound that can be produced with the human body. This can of course also be done with known songs - either round songs or a Bach Fugue or harmonies to a well-known pop or folk song. However, the spontaneously created material is mostly perceived as much more exciting - and it schools more of what we need as biodynamic farmers: good perception and making decisions in the moment. As a further extension of this core of the method, participants can come up with their own phrases. Finally, whether it is myself or a courageous participant, it is a lot of fun to improvise solo over the many-layered carpet of sounds produced by the group. It is always a great joy for participants to listen to this kind of addition while they were holding their own part.
- **The Soundscape of the Farm:** I form several groups of 4 to 8 participants. They discuss a short while which sounds of a farm they know and which they would like to perform. Examples go from "hearing the grass grow" over "soil microbial activity" to the more usual ones like certain birds, a tractor or the bees on a flowering tree. The groups then have some time to discuss and rehearse their sound. Then, one group after the other performs. Without asking to do so, almost every group will come up with gestures or acting besides the actual sounds. It is exciting to see how, naturally, people will try to capture the essence of a being with their whole body. When all groups have performed individually, the whole farm soundscape is set free. In the first attempt, it usually becomes very loud. Only after some intervention, namely that I ask participants to listen also to the others, the whole of the soundscape will become more perceptible. Then it is the time to "feature" individual groups, that is, while the majority of the groups become softer, to ask individual groups, one by one, to become louder in order to be really heard by everyone.
- **Music enjoys features we find also in plants:** A large field of cognition opens up when we observe in different ways how a musical tune, spontaneously found or known, unfolds in time. How we can make the song grow and develop through

actively listening to it and “following its intentions”. How it echoes or reverberates for a while after we stop. How a spontaneously found or an existing composition will sound different in different places, much like how a plant unfolds differently in different locations: try singing the same song in a bamboo grove, in a stairway, in a church or in a pineapple plantation.

- **Instant Composition.** A group that has experienced some time together and had some sound experiences may be ready for open spontaneous creation: instant or intuitive composition! We stand in a circle or distributed in the room, with everyone in the place they like best to be in. We listen to the group and go with the flow. It comes out of silence and flows into silence.



COMPOSTING: THE ART OF COMPOSING A COMPOST HEAP

Via musical exercises like those introduced in Instant Composition we can withdraw ourselves from the actual farm work and through this distance get new insights into it, particularly into the similarities of more traditionally accepted arts such as music and biodynamic farming, whose artistic qualities we may only now become aware of. It is a special pleasure to see similarities between such, linguistically speaking, close art forms as composing and composting, between a musical composition and the composition of organic waste / re-cyclable materials. We can follow the artistic steps taken to create something new and whole - and also find where the comparison ends.

What are the elements of what we experience in Instant Composition? Tones, intervals, time, rhythm, lengths, strong and soft, instant decision-making, and so on. A musical piece, performed a capella or with a guitar, may follow to show how differently one song will sound, depending on changing one or the other of the materials. And how and why does the composer or performer make decisions?

Then we will look at the compost: which are the materials here? Manure, dry grass, wet grass, weeds, leaves, lime, kitchen waste, carbonized materials. Why and how do we make decisions here? How do we do the actual composition / performance? As in music, the basis is knowledge and experience, but there are strong components of intuition, feeling and acting out of the moment.

What are the similarities between composing music and composing compost? Consciousness, elements, time and space, setting something in motion in the outer world. Which are the differences? Musical performances last usually only minutes to hours, composts take weeks or months. The goal of composing a compost heap is to create something like a ferment, a medicine for the earth. The goal of composing a musical piece is that it is being performed. It can be like a ferment, like a medicine for the human soul, even for cows, as we know. Composing is an amazingly satisfying activity. The wellbeing of the soul after completing a compost heap is very similar to that after finishing a musical composition. To go back to it almost every day, to care for it - but also to let it rest at times, it is true for both.

But in the compost, we also use the biodynamic preparations. Do we have something like biodynamic preparations in music? If yes, what are they? If not, what could they be like?

Where I live, farming is looked down upon. It is for the un-educated and left behind. The result of this is that no young people are left on the land. It seems that for me, these, and similar exercises and musings are important in order to share of the beauty, the relevance and the grandness of biodynamic agriculture.

One thing is for sure: Agriculture is an art, as much as music is. When we consider the Farm Individuality, the relations to customers, co-workers, users and contributors, learners and teachers, Agriculture can really become Agri Sculpture. Practicing Instant Composition can provide lots of understanding, knowledge and faculties which can help develop similar understanding, knowledge and faculties for the Art of Biodynamic Agriculture. The deeper we get into the Art of Agriculture, the deeper we understand life, because Agriculture is connected with virtually everything in our lives.



THE FARM ORGANISM

by Jean-Michel Florin, France

Each sense perception developed through these series of perceptive exercises should become an inner living picture that can be shared with others. The process of internalizing through thinking should enable an integration of all the perceptions into a picture of the whole (the concept or the idea of the landscape). The overall **GOAL** of these exercises is to go beyond the mere description of facts to grasp the character of a place.

THE EXERCISE

Ideally, the different stages of this exercise will be repeated over many days. By going to the same place every day, students may discover it with new perspectives and from new angles every time. The materials needed for the different stages of the exercises are sketch pad, drawing paper, charcoal, alumina, pencils, pastel chalk, clay, spade, knife, etc.

STAGE I: VIEW FROM OUTSIDE (EAGLE VIEW)

To begin, *the Concept of Landscape* is introduced. All students are asked to present their own (native) landscape to the group. It is considered helpful to work from a specific experience. The aim at this stage is that participants will develop an overall perception of the place and will experience how different focusing (relief, vegetation, etc.) can change perception.

- To begin, the group walk toward the higher point of the farm in order to develop an overall perception of the farm.
- In order to look at different aspects of the landscape and to discover its full richness, the observation is supported by different drawing methods: Charcoal drawing to show the relief (high and low, light and shadow); Pastels to represent vegetation (like Claude Monet), Pencil to draw the lines in the landscape (rivers, paths, roads, horizon, etc.). Other methods can be used as well.

- After the observation and the drawings, exchange of experiences take place in the plenum.

STAGE II: INSIDE VIEW (COW'S EYE) AND A LANDSCAPE MOOD MAP

- A path for a short hike (less than an hour) is chosen before the beginning of the exercise. It is a good idea to visit as many different locations (wet and dry, in shadow and in full light, hot and cold, etc.) as possible. It's important to focus the attention of the students on the elementary qualities.
- As the group walks in silence through the landscape, all senses are open as you try to perceive the first impressions, the different elementary moods, unbiased.
- It is important to pay attention to the qualities and their polarities, feel the mood in different places during the walk: earth quality (solid or light ground under the feet), water quality (wet or dry), air quality (windy or protected), light quality (shadow or light), temperature quality (warm or cold), openness or closed-off, vitality or weakness, etc.
- It is also interesting to pay attention to the transitions and interruptions in the landscape: Where does something stop and where does something new begin?
- Then, in groups of 4 people each, a mood map (with pastel chalks) is created together on flipchart paper where a rough map of the observed landscape is drawn. At the end of the exercise, each group presents its mood map to the other groups. The mood maps are compared to reflect the richness of the impressions and to promote the exact memory.
- Then, in a dialogue it's also possible to describe specific locations where the students feel there is something that can be done to improve the quality.

STAGE III: THE KINGDOMS OF NATURE: DETAILED OBSERVATION

In this exercise, the different nature kingdoms are described in more detail at a selected location (not the entire landscape). Each group of 3-4 participants does one or two exercises. Possible exercises for the different nature kingdoms are:

Mineral kingdom:

- Description of the water conditions, rocks, etc. by making a map.
- To describe the soil profile or simply different aspects of the soil.

Vegetation:

- Create an atmospheric picture of the vegetation.
- Produce a vegetation map.
- Along a transection, record the vegetation and the main plants present.
- Draw and describe selected characteristic plants.

Animals:

- Search for animal tracks: what traces have the animals left in the landscape?
- Look at an animal and draw it blindly (without looking at the drawing).
- Look at an animal and then try to imagine how the animal sees the world (Franz Marc Übung) and drawing this world.

Humans:

- Mapping traces of human activity.

Now using the different observations, we try to find and understand the relationships, e.g. to understand the quality of the vegetation as a mirror of the environment and the animals' ability to bring life to the landscape (to give it a feeling quality), in which understanding does not mean explaining, but allowing the "inner relationships" to arise.

STAGE IV: CONDENSING LANDSCAPE IMPRESSIONS

In this exercise you try to condense all the impressions of the landscape in order to arrive at an overall picture: What is the essence of the landscape? For this, you have to let go of all ideas and let something completely new, from a not-yet-conscious level, come. For this exercise you will need clay and a work pad.

- In silence, reflect on all experiences in the landscape; then let them go to create a free space for the question: what is the gesture, the genius loci of this landscape?
- Let the hands work with clay, if possible, with closed eyes.
- Two participants look at their sculptures together, using the phenomenological observation method: one person observes the sculpture of the person who made it. Then they describe what they observe, as objectively as possible, without interpretations and evaluations.
- Then the roles change, and the second sculpture is observed.
- Journal (write in your own notebook) on the questions:

- What has become clear to me through this exercise?
- What does my sculpture tell me?
- What qualities of the landscape does my sculpture express?
- What could be the name of this sculpture?

STAGE V: WHAT WANTS TO DEVELOP?

In this exercise one tries to go from the current state (condensing), into the future. What can develop from the sculpture? Which leitmotifs result from the landscape itself?

- 1st transformation of the sound sculpture from the previous day with the question: "What wants to develop?"
- Then, in pairs, with the colleague from the previous day's sculpting exercise, one looks at the changed sculpture. The person who made the sculpture tells the other what they changed. The other person listens attentively and is allowed to ask open questions. The goal is to find verbs that describe the changes that have been made. Helpful questions can be:

- What have you changed? What exactly did you do for it (movements)?
- Which qualities have you strengthened? Which have you weakened?
- What is newly expressed?

- Journal with the same questions and record the verbs that best describe the activity of transformation.

STAGE VI: DIALOGUE WALK WITH THE LANDSCAPE

The development motifs, which were created in the exercise with the clay sculpture, are checked directly in dialogue with the landscape and adapted to reality.

- One walks alone in the courtyard landscape and tries to get directly into a conversation with the landscape. One can trace the gestures of further development that were created in the work with the sculpture, ask the landscape directly how the found development motives stand, and how and where they could manifest themselves in harmony with the landscape (approx. 40 min. - 1 hour).
- Journaling: After returning to the working space, the most important new findings are noted in silence (10 min.).

STAGE VII: SKETCHING A DEVELOPMENT MAP

To show on a map where the activities / leitmotifs could be implemented. It is also important to find a denominator in the group about which leitmotifs actually correspond to this farm landscape. The point is not who is right and who will prevail, but what corresponds to the landscape. It's also not about going into detailed planning, but about keeping the leitmotifs. Materials needed for this stage are: Paper with rough landscape map, pastel chalk, pencil

- In groups of 4 people each, the leitmotifs will be drawn on a flipchart with a pencil on a roughly sketched card: in silence, each person entering their own colors and verbs.
- Exchange in a small group: who has entered what? Are there similarities? Differences? What can we agree on? What are the leitmotifs?
- The card can be corrected, or a new one can be created to represent what the group has worked out together as leitmotifs



WORKING WITH POLARITIES TOWARDS SELF-KNOWLEDGE AND OUR RELATIONSHIP TO THE FARM

By Anthony Mecca, USA

Polarities are a fundamental tool in assessing where a situation stands and guiding it towards greater balance or harmony. They are present all around us, and can be used with plants, animals, soil, social situations, and many other places where we wish to bring greater understanding. Working from a perception of the wholeness of a being or organism, we seek to perceive the one-sidedness that it is tending towards, while also recognizing the presence of the polarity of that tendency. Holding both polarities inwardly, a dynamic tension arises that weaves between them. In this weaving we find a third activity that we may employ to bring healing by harmonizing or balancing these polarities.

Polarities can also be used in assessing and harmonizing our own individual activity, our inner life, from which springs our outer activity.

This is one way of working towards greater self-knowledge that helps us observe, experience, and act more objectively, deeply, and morally towards serving the world.

As a preparation for the exercise, you may wish to work with the below paintings to experience the polarity that lives between them. Allow first the one, then the other, to make an impression upon you. Then allow both impressions to live inwardly and direct your attention to what lives in each of these impressions when contrasted next to each other, as well as what lives in the tension between.

THE EXERCISE

Read through each of the polarities below that portray how we as individuals may tend to relate to our work as farmers and gardeners. For each pair, allow each side to become active and alive within you, and consider and contemplate how you might see that dynamic present in your own life and work.

- Farming/gardening works best if the human being lets nature take its course with very little intervention” and “Farming/gardening works best if the human being is able to control as much as possible”.



©Mark Rothko, Red and Orange, 1955

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Mark Rothko, Untitled (Blue Divided by Blue), 1966

- "Farming/gardening is to satisfy my own needs, whether that be to find solace, comfort, or enjoyment, to feed my close kin, or to make profits and earn money" and "Farming/gardening is self-sacrificing work to support the life of other inhabitants of the Earth (including human beings, animals, plants, the soil) as well as the Earth itself".
- "I farm/garden relying on careful analysis at a micro-level to implement practical applications in response to isolated outer impressions" and "I farm/garden relying on general vague feelings regarding macro-level activities beyond my individual knowledge."
- "My nutrition is guided by an outside expert or source/system of knowledge" and "My nutrition is guided by whatever I want and feel like at that moment, whatever is needed to satisfy an urge."
- "I mostly use electronic sensors, devices, the internet, and knowledge obtained intellectually through others, including spiritual teachers and researchers, to guide my activity in the farm/garden" and "I mostly rely on my own human capacities, knowing that what sensors, devices, the internet, and others who don't know my situation provide are abstracted and not whole."

Look towards your general tendency; we each carry both polarities within us and act from various places on the spectrum at different times, but what is the general habit, instinct, or reaction we may tend towards? Sometimes there is also a challenge towards becoming open and willing to evaluate, and know, more of ourselves, and a rationalization comes in to say in a variety of forms "I do both, and strive to be balanced". While this may be true to some extent, in both the striving to balance and that you are active in both, it does not help with where we can improve and take our next steps in growing capacities and developing ourselves. Where do you tend towards, even if it seems just to one side of the center?

To support this work, consider the following questions: Where do you find yourself in your thinking between the following polarities? How do you feel in relation to them? How do you act in relationship to these polarities?

From there, consider the question: What steps do you see to support finding balance? Work the polarities with a friend in conversation to find the nuances where you get caught as well as where you might strive towards harmony. You may also find modelling your relationship to them in clay or wax useful.

THE “QUINTESSENCE” OF THE FARM INDIVIDUALITY

by Hans Supenkaemper, Germany

This exercise is based on the “Cloverleaf Model” by Larsu Salonen, a Finnish coach, consultant and researcher. It builds on the four elements, earth, water, air/light and warmth, by asking the question: How does this element leaf live in your Farm. What do the four element leaves stand for?

- **The Earth** reflects the way the soil is cared for, how the farm is organized and how it is cultivated. It also reflects how money is handled, resources, maintenance, planning, controlling and in general, which “cultures” are cultivated.
- **The Light** illuminates the spiritual dimension, consciousness, thinking, research, information processes, ideas, visions, knowledge and creativity.
- **The Warmth** lives in social interaction, how people deal with each other, how they encounter each other, coldness or warmth in social life.
- **The Water** carries it into the world. On the water, the “products” can flow out into the world, to the people. Here it becomes apparent what and how it was created, how valuable it is for the world and how it really supplies the need of the world and the people.

In the center of this cloverleaf, energy becomes effective when the four elements are in balance with each other in the farm. There in the center, something new is released, called the **QUINTESSENCE**, the “**fifth element**”. It is an “element of warmth” that can only exist in the world through human beings; it is not natural in this sense like earth, water, warmth and light. It is formed through a human activity that forms and makes possible an inner space in which the quintessence appears and becomes effective.

That is then the question: **What lives in the middle?** What wants to show itself there? What space do we form together there? Does it perhaps describe the essence of the farm? Does “Agricultural Individuality” live in this space? Or, on the other hand, is it oppressed in its center? Can it not incarnate in the way that would actually be good? Where is a balance disturbed, where is imbalance? Where are the vitalities one-sided and oppressive? In a community process, the structures and the relationships of forces, the dynamics and the disturbances can be brought into experience so that future tasks become clear.



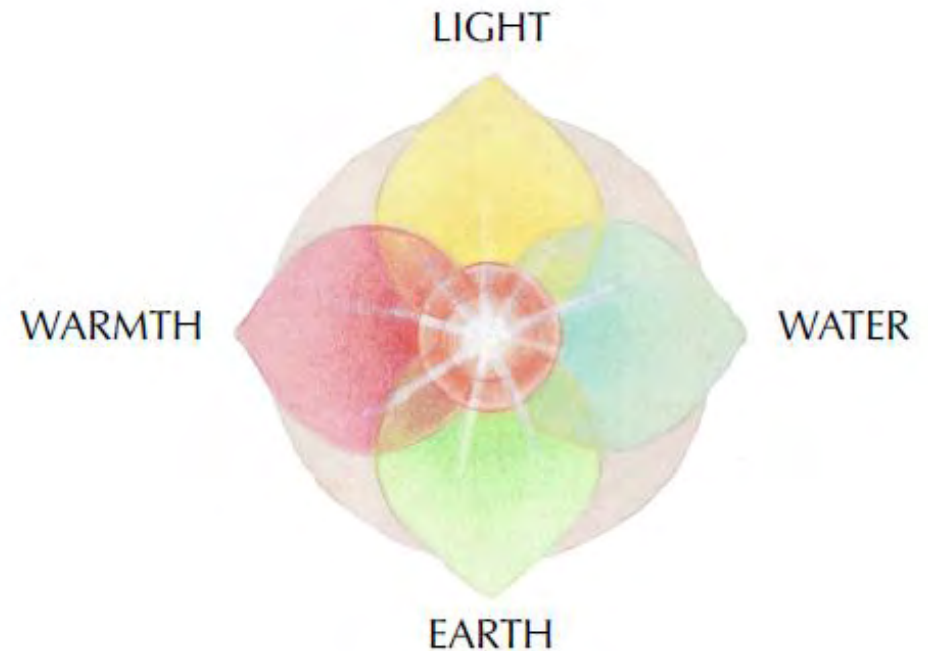
Hans has been practically active in biodynamic agriculture for 49 years. Today he is actively teaching and advising in biodynamics across many countries of Europe and Africa. He is a co-founder of the Wanderschule (<https://wanderschule.world/>) from where they support the further development of biodynamics in farms, communities, and organizations. His experience is composed of managing a 100 ha Demeter farm, in all aspects of the technical and structural equipment of an organic farm. Also in the field of social organization and individual development through many years of supporting cooperation in the Höhenberg Community of Life (Lebensgemeinschaft) and through the versatile experience as a coach, mediator, facilitator and lecturer in the field of adult education, where very personal and group-dynamic processes are accompanied and supported in seminars and individually.

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This quintessence process holds a special quality. It can and wants to be questioned, explored, and experienced everywhere. One thing is very important: this space cannot be forced, made willing, or pressed. It only emerges in freedom and trust, in the courage to do something new and unexpected. I cannot plan or even claim the quintessence. That is precisely the reason for the creative potential of the inner space, this space of the heart. Creativity cannot be planned, arranged, or organized. Creativity is a generative process that appears entirely from the present moment, awakens, and comes to life.

One can only provide the surrounding space, take care of the framework conditions and work on them. Even that requires unconditional selflessness, attentiveness and devotion. Even if I make myself the standard for others, I will not succeed in experiencing the creative, inspiring moment of the quintessence.

On the other hand, it is precisely the distracting vitalities, the fears, the needs, the glare, the self-love, the longings that are the doors to self-knowledge. They are the unpleasant helpers and enablers in these processes.



THE EXERCISE

The **GOAL** of this exercise is about sensing and experiencing our own relationship with the elements in me and in my environment and meeting them. The key to this kind of exploration is always the heart or, in other words, feeling. The head alone cannot do this. It is usually always contaminated and distracted; it knows everything better anyway and it doubts and organizes everything into boxes and drawers. Contrastingly, the heart is free of this and turns completely to inner perception. The task then is to keep the feeling free from the vitalities of thinking, or rather, of the brain and intellectual reasoning! This is an important task at all levels of New Adult Learning.

EARTH

- Try to connect with the soil, the earth in your farm. Feel it strongly in your consciousness, in your heart and even in your body. *HOW DOES IT FEEL?*
- Are there questions or needs you can listen to, observe, feel?
- What is the earth saying to you?
- Summarize your experience in one word! Please write it down!

LIGHT

- Try to experience the outer light coming from the sun and also the inner light energies and qualities of the people around you? You can also think of your spiritual light around and within you. Feel it

strongly in your consciousness, in your heart and even in your body. *HOW DOES IT FEEL?*

- Are there questions or needs you can listen to, observe, feel?
- Summarize your experience in one word! Please write it down!

WARMTH

- Try to experience the quality of warmth, especially the social warmth between people in the farm. Feel it strongly in your consciousness, in your heart and even in your body. *HOW DOES IT FEEL?*
- Are there questions or needs that you can listen to, observe, feel?
- Summarize your experience in one word! Please write it down!

WATER

- Finally, try to experience water energy on your farm. What does water mean here? It touches the issues, the things, the products that flow into the world. The water helps you to bring your “products” into the world. Are you satisfied? Do you feel good? Or not so much? What are the consequences for others? Feel it strongly in your consciousness, in your heart and even in your body. *HOW DOES IT FEEL?*
- Are there questions or needs that you can listen to, observe, feel?
- Summarize your experience in one word! Please write it down!

QUINTESSENCE

- Now you have written down four words. What is their message? What are they asking you to do? Imagine that there are four beings around you all the time asking you for mindfulness, for help, for kindness, for love! Listen to them and imagine their common message coming from the center. This is the heart message, it is a new quality of human being, created by your heart forces, FROM NOWHERE, right now in the present. It is a new element, the fifth element! It is the quintessence. It is the essence of your Farm.
- Please write it down.
- Hold this quintessence in your hand. Keep it warm and protect it. Then open the space, let it grow. It will fertilize all the other fields, all the other elements of life!

GRATITUDE - *Hallelujah for Farmers*

by Ruth Tschannen, Canada

VENERATION

A dew drop on a grass blade in an early morning walk creates veneration. The stary sky in winter fills us with wonder. This soul quality of veneration later in life is the first condition on the path towards spiritual science (Knowledge of Higher Worlds by Rudolf Steiner). There the capacity for veneration is guided towards veneration for the truth and knowledge.

VENERATION: A HEALING TOOL

In lectures given to people interested in the healing aspect of eurythmy Rudolf Steiner gave 12 exercises known as the soul exercises. The exercises start out with: Yes – No and Sympathy – Antipathy and end with HA (eurythmical laughter) and AH known as A-veneration. Rudolf Steiner describes the last exercise as following: ...” The effect on the human organism of the feeling of veneration, when it is habitual, is to make the organism more durable, sturdier. It becomes capable of greater resistance...” (Dornach April 16, 1921). This statement given in the beginning of the last century rings ever truer in our time where the attacks on our immune systems are increasing daily.

HALLELUJAH: A HEAVENLY GIFT

It was on a beautiful Sunday morning in the fall of 1912 when Rudolf Steiner asked Lory Maier-Smits to do certain movements in eurythmy. Little did she know at the time that this will be the very first word ever done in eurythmy. After she finished the movement, she was told that she made visible the word Hallelujah. The word itself calls forth deep reverence and awe whenever sung or spoken. Rudolf Steiner then added the meaning of this mighty word: I purify myself from everything which hinders me from beholding the Highest. Ever since that Sunday in the last century the word Hallelujah has been done in eurythmy all over the world wherever people come together to practice eurythmy. It is a wonderful way to incorporate these movements after stirring the preparations such as 500 (Horn manure) and 501 (Silica).

The word starts and ends with the sound H, breath or ‘magic breath’ as we learn when the sound was introduced for the first time. The first H in Hallelujah is exhaling, the last inhaling. This process we know at the end and the beginning of earthly life: the gates of death (exhaling) and birth (inhaling).



Ruth grew up in Switzerland. She discovered biodynamics as a young person in Camphill communities, where she then spent most of her adult life. The first study group she joined, with a group of enthusiastic, young people in the UK, was to study the Agricultural Course by Rudolf Steiner. Since then, she has always been an avid gardener. During her time in the UK, Ruth also discovered eurythmy. These two things became her life's work. Bringing them together, doing eurythmy with farmers and gardeners, brought Ruth great joy. Heraclitus's words ring true: “Everything flows”. At 60, it became clear to Ruth that the next part of her life would be devoted to the healing of the Earth. Ruth lives in North Vancouver, British Columbia, where she is involved in urban gardening, applying biodynamics to parks and areas around the city. She also works as a therapeutic and pedagogical eurythmist.

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THE EXERCISE

- Start with our hands gently closed, the two fists side by side, in front of our heart. We take a moment to establish peacefulness within ourselves. Now we are ready to open our heart to something greater than ourselves. With a slight jerk we thrust our shoulder blades back, and by doing so our arms move naturally away from the heart in an opening gesture. We are riding on the magic breath of the exhaling H.
- A (Ah): With the A the movement of the consonant comes to an end. Our arms are stretched, pointing in two different directions. Our fingers are closed.
- A (ah): We move the A(Ah) from above downward keeping the angle. We can have the image of the stars coming down to the Earth, even into it.

- 7x L's: The sound L has creative powers within itself. It transforms matter into spirit. It is life giving, refreshing, even nourishing when spoken repeatedly L-L-L. The genius of the English language knows about that power within the sound in words such as: Life - Love - Light. With the consonants we take hold of the outer world.

We start with a small movement. To begin with we use only our hands. We gather substances by bringing the fingers together to the midline. From there we have a circular movement whereby the fingers open slightly at the top to circle back down to where we started from. The second L starts a little bigger lifting the earthly into the heavenly substance. Now the lower arms are involved; later the upper arms are part of the movement until we have reached the largest movement by the 7th L.

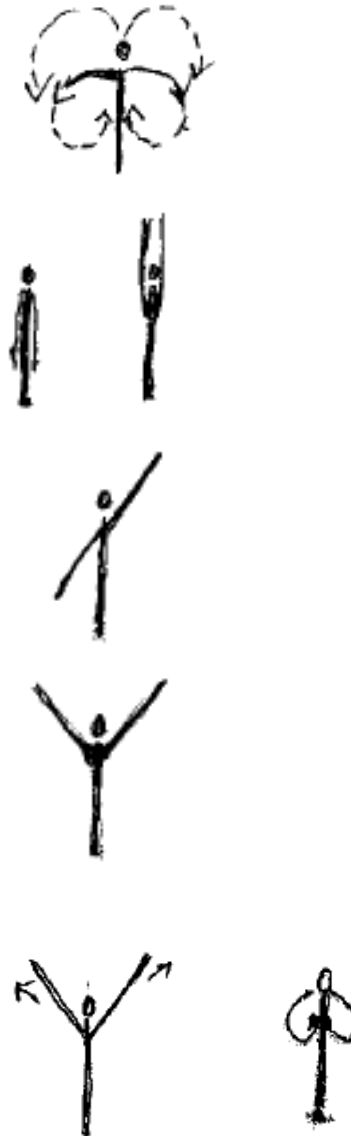
As farmers we can imagine our farm starting where we are standing and slowly embrace the whole farm with consciousness. From our own farm and land, we can extend our consciousness to the region, the country, the whole earth.

- E(a): As our arms descend with the last L, we stand for a moment holding our arms stretched in the horizontal. Here we stand between heaven and earth. Our soul is filled with love for the world. This love for the earth and the world is drawn into our heart. We cross our arms in front of our heart. In the eurythmy figure we see the left arm crosses to the heart. We pause for a moment. We have arrived at the threshold.



121 EXPERIENCING BIODYNAMICS

- 3x L's: We form three large L's. Those L's are different to the 7 growing L's. We have crossed to the spiritual world. We move with the beings of the hierarchies.
- U(oo): Our arms are parallel with the hands pointing to the Earth. We lift our arms from below upward, the arms remain in a parallel position throughout the movement. Earthly matter is transformed into spiritual substance, we are uniting ourselves with the spirit.
- J(ee): Our left remains in the heights, our right arm points to the Earth. Why is it done with the left arm up? It is the side of the heart, connecting us to the Christ being.
- A(ah): Our right arm is brought up to form the A. The arms are stretched pointing to two different regions in the stars. Wonder and reverence to the highest.
- H: The clear angle of the A is dissolved by a backward movement of the upper arms. The inbreath of the H ripples down our back and enters between our shoulder blades into our heart. We end holding our hands in front of the heart with our hands gently formed into fists. We allow a moment of peace before we take our arms away.





DESIGNING MEANINGFUL LEARNING PROCESSES FOR ADULTS

By Ambra Sedlmayr

INTRODUCTION

In this chapter, I would like to share some essential ideas, or guiding stars, on how you can think about and plan a lesson, workshop, or entire training programme, from the perspective of modern adult education. Every attempt we make at coming closer to these ideals increases the impact of our classes for students exponentially.

I built this chapter up in such a way, that, depending on where you are in your teaching practice, you can start implementing things from the early sections and gradually stretch to take on the more demanding propositions of the later sections. I focus on the shifts you can make that can transform informational learning into a holistic learning process. I cannot provide details on what is important to do and how to think about each phase of your class or program in detail, as this would go beyond what is possible in a single chapter. However, these are topics where a lot of excellent cutting-edge thought and practice is available also outside of the Anthroposophical movement.

My aim is to make this chapter easy to read and understand. I would love to infuse a bit of true adult education in it for you to experience. Therefore, I will ask you a number of questions that can help you in designing and planning your next class. You can read through this chapter once to get an overview and then take pen and paper and reflect in writing as you read along, about a class that you are planning.

My perspective on adult education is informed by the work of Coenraad van Houten, which was passed down to me by his student and my teacher, Julia Kubler. Van Houten developed adult education out of Anthroposophy, relying heavily on Goethean observation. In addition, I'll draw from modern transformational education that I've learned from humanistic coaches, first and foremost from Dr. Claire Zammit, founder of Evolving Wisdom Ltd., and a graduate of the California Institute of Integral Studies.

CORE AIMS OF ADULT EDUCATION BASED ON ANTHROPOSOLOGY

“To remain ignorant where acquiring knowledge is possible,
is sinning against the divine destiny of the human being.”

Steiner, GA128

Adults learn in different ways than children. Children learn through imitation and have spiritual guidance that helps them do so (Steiner, 1911). Adults, in contrast, need to activate their I-forces and consciously engage their senses, minds, and hearts, to acquire a new understanding, sensitivity, or skill.

What is actual adult learning?

I feel it is a mystery. I believe it is always about our higher becoming. Reconnecting the microcosm we are with the macrocosm perhaps? Isn't it a process of unfolding our human potential, connecting to and making our spiritual nature increasingly manifest?

Whether I'm learning to prune a tree or to speak a new language – it opens my horizons, develops new skills and capabilities in me. My soul widens as a result of learning. I am able to take up new opportunities and challenges and contribute to the world in a bigger way. I become another person.

So: What is it that we actually really want to create and provide space for in our classes for adult learners of Biodynamic Agriculture? (Instead of conditioning, instead of the linear passing on of information and the teaching of practices for students to repeat.)

Coenraad van Houten (Houten, 1993) stresses that adult education has two main objectives:

- Activate the students' desire to learn and develop. He called it “**Awakening the Will.**” Chances are that our childhood curiosity and interest in the world has become dormant over the years. As adult educators, we must awaken or ignite the will to learn and develop within our students. Furthermore, to inspire creativity and active participation in this process, we must start by looking within ourselves. Awakening of the will is the precondition for learners to participate actively in their own development.

- Students need to develop their **“Independent capacity for judgment”**. We want them to become able to decide for themselves (a central capacity of the free human spirit). We don’t want them to copy and repeat things by following only certain rules. We want to help them understand which decision criteria really make sense to them so they can independently judge and decide how they want to act in any given circumstance. Van Houten distinguished three types of judgment the formation of which need to be supported by us adult educators: cognitive judgment, aesthetic judgment, and moral judgment.

We want students to unfold their humanity out of their own independent will and spiritual being, strengthening those. How do we do it? How can we develop and facilitate learning processes, in which learning truly supports the process of whole human becoming? When teaching becomes facilitating learning processes, these foundational practices become exponentially important: creating a learning container; creating a meaningful learning process; creating conscious endings.

CREATING A LEARNING CONTAINER

Once one moves away from talking as one’s main form of teaching, and one invites students into a space of sharing and reflecting, one needs to create safe conditions for this. Learning is a vulnerable process, where we have to be open and admit that we do not know all of the answers and might even have held wrong assumptions. And: we need to be open to change, which is inherently scary. If you feel you need to be guarded and control your environment, you can’t open up to learning something new. For you as a teacher, creating safety, a space where it is okay not to know and ask any questions is an essential task.

Therefore, you need to create a ‘safe learning container’; a place where it is safe for learners. A place where your students know from the outset that they will not be judged or made wrong. A place where learning is seen as a process in which concentration and ease, discovery and explanation, creativity and joy go hand in hand. A place of trust and openness, where what they share is kept confidential, and where their authentic contribution is welcomed, respected and valued - whatever it may be. A place where

participants’ possible fears, frustrations and excessive demands give way to confidence in themselves. They experience encouragement and, at best, unexpected potential is uncovered layer by layer. Over the course of the days, encounters at eye level and with mutual respect increasingly become encounters at heart level, imbued with thought, empowerment, and willpower.

What is needed for students to feel they are safe and can open up?

- The physical space you are in is important to generate a basic mood of authenticity and confidentiality.
- Your presence and attitude are essential; you need to be in integrity with what you propose; show students that you are competent to guide them on the journey, but make sure you don’t place yourself above them as a distant authority or better human;
- Create clarity about what is coming and what is going to be asked of them during your class, and give them a choice of whether to take part or not, to support autonomy and create safety;
- You can make it explicit how you would like students to work with you and with each other; you can even make an explicit agreement (for confidentiality, non-judgmentalism, arriving on time after breaks, forms of engagement, etc.)
- Extremely important is also that you share the context of what you are going to teach, why it matters, and what it will enable students to do – this is highly motivating and brings the whole group to a common understanding of where they are going with your support.
- You can also share your intention in teaching them what you are going to teach, i.e. What do you hope to help students achieve and what do you want to contribute to their lives and perhaps to nature, communities... the world... as a result? If you are yourself, if you are authentic, it helps the students to trust you.

A CULTURE OF LEARNING DIALOGUE

by Simone Helmle

What can be harnessed from the potential of the learners and the learning environment? How do different people stimulate each other in a learning context? How can their experiences provide answers to your own questions and process? How can we cultivate a fruitful culture of learning dialogue during biodynamic training and beyond? This not only between students, or between students and teachers, but also between teachers, with the different actors on the farm, and finally - after the course - with people in their own field of activity. In the following, I will go through some of the dialogue pairs and use mirror points to highlight the potential of these different learning encounters.

How to support a culture of learning dialog between students & trainers/ teachers:

- Allow questions to be asked and explored by learners and teachers. In particular, questions to which there is no ready answer, but where answers are based on experience, practice and knowledge of the themes at hand.
- Work with tasks that stimulate activity. The tasks arise from questions from the learners.
- Reviews during and in the transitions of learning units support the learning process and contribute to a trusting working atmosphere.
- Build an atmosphere of mutual respect and equality, where people trust each other's skills and abilities.

How can trainers cultivate a culture of learning dialogue among themselves?

- Looking beyond your own topic and working with colleagues on the basic topic of a course.
- Reporting to each other and sharing the subjects and approaches of colleagues.
- Hold trial lessons and arrange to observe each other. It is fruitful here to discuss concerns, needs, perceived uncertainties, increased knowledge, etc. in advance.
- Select and read texts together.
- Practicing supportive attitudes, giving mutual feedback.

How does a culture of learning dialogue continue in the student's field of activity?

- Viewed from the perspective of a learner, the farm is a field of activity, a field of experience, a testing ground and a pool of knowledge.
- Returning from a course with fresh skills and ideas, your heart full of enthusiasm. What kind of respect and awareness is needed on both sides to create space for new things and to allow suggestions and questions that learners bring with them to become fruitful?
- The dialogue between learners and the farm (as employer) requires a special agility. It includes opportunities for awareness and renewal and freedom for the individual.

What activities support a culture of learning dialogue in the course group?

- Discover and utilize individual expertise of the participants.
- Teamwork, dialog walks, listening, exchange of experiences.
- Exchange on specific questions in small groups or in plenary sessions.
- Speeches and presentations by participants.
- Finding common topics and projects, especially for longer courses and learning contexts that take place in several modules separated by time.
- Mutual support for progress, helping each other and practicing together.

How can trainers and people related to the farm (or course locations) cultivate a culture of learning dialogue?

- Showing interest in each other.
- Allow theme-specific tours and unusual insights into farm life to support the learning process.
- Enable open lessons / work shadowing.
- Invite people from the host farm or the surrounding farms to development discussions with the learners.

Learning dialogue culture as consent with oneself

- Learning requires that I accept myself. In learning, I meet myself. I encounter my breath, my warmth, my experiences, my capacity of reflection, my sensations, my gifts or talents.
- Discovering your own question, taking a fresh look at it, allowing yourself to be surprised by it and deciding how far you are prepared to go as a learner in a specific context is a moment of freedom.
- In moments of stress, impatience, ambition and perfection, it is worth accepting yourself lovingly in your own inadequacy.

CREATING A MEANINGFUL LEARNING PROCESS

There are three core aspects of how you can think about your content to make the shift from traditional intellectual teaching to soul-centered adult education. These aspects are: (1) to plan your classes from the perspective of what your students will experience; (2) to be clear about the outcomes you want your students to get from your class; (3) to develop learning processes that are in harmony and aligned with how adults learn.

PLAN YOUR CLASSES FROM THE PERSPECTIVE OF WHAT YOUR STUDENTS WILL EXPERIENCE.

As teachers we can be so passionate about our topic, we want to talk about it all day long. However: How would that be for our students? How much do they actually learn, understand and change when we deliver a talk? Some studies suggest that 80% of the content of any talk is immediately forgotten by listeners; it doesn't even enter into the short-term memory. Therefore, the shift you can make is to plan your classes from the perspective of your students' experience. You can ask yourself:

- *How can I develop and guide learning experiences, so that students can, through their own, active I-engagement, discover what is true?*
- *How can I support students in becoming independent in applying the knowledge or skill I'm wanting to teach them?*

Creating learning processes for students means that you are creating conditions where students can actively engage with a topic, explore, try, and reflect. This is: you appeal to their I-activity, you want them to be active in the process of developing new insights and skills, and sensitivities. You give them their power back to be in charge of their own learning process. You just create the conditions and guide them through the flow that is most likely to help them learn what they come to you to learn.

Active I-engagement passes through organic phases that we can mold our class around (See next - Seven life process as adult learning Process). Here I would just like to highlight that it means students are reflecting, exploring, trying things out, etc. And, of absolutely crucial importance in this is the following: as humans, we have the need to express ourselves. Being asked to express ourselves, helps us to bring semi-conscious experiences fully into consciousness. Once in our consciousness, the understanding anchors more deeply into ourselves and becomes more accessible for us to use in the future. Being allowed to say and reflect on how we see and experience

things gives us a certain relief from our silent, passive, semi-conscious state that we would otherwise have in class, it values our contribution and is highly motivating and energizing. To help students express themselves, active empathic listening skills are extremely helpful.

You can invite students to share in pairs, groups, or in the plenary, about a piece of content you spoke about, an exercise they did, or a question you put them on the topic of your class. Opportunities to reflect and express oneself with colleagues turn any class into an exciting learning experience!

Give participants opportunities to hear from each other how they understood a talk or experience. Often participants understand something much better in the way a colleague makes sense of it. If you give participants a chance, you will see that your content generates a dynamic of learning that is bigger and deeper than what you could possibly plan for from your desk. It is incredible to watch how much wisdom, care, and creativity participants bring to the table, as soon as we give them an opportunity to do so (Read the table "A Culture of Learning Dialogue" by Simone Helmlé for more insights on how to encourage meaningful learning encounters during training).

If you are already weaving in experiences for students and moments for reflection and sharing in your class, now is about organizing a truly meaningful sequence of activities that support learning. How can we do this?

BE CLEAR ABOUT THE OUTCOMES YOU WANT YOUR STUDENTS TO GET FROM YOUR CLASS, SO YOU CAN DESIGN A MEANINGFUL LEARNING PATHWAY

When we are so focused on what we want to teach, we forget to clarify what it is that we actually want students to take away from our class. We can't control what people will actually learn, but we have to make a decision to create the best possible conditions for the learning we want to happen. If we fail to decide on a clear learning outcome, we end up assembling a number of activities around a theme, without having a clear pathway that takes students from where they are at in their understanding when they arrive, to where we would like to lead them to. We may introduce aspects that appeal to head, heart, and hand, but we assemble them in almost random ways. Consider instead: *What is the essence of what you want to teach? What purpose does your class serve?*

When we have a clear learning outcome, we can start to brainstorm the key components that lead to that learning outcome. Helpful questions are:

- *What do students need to understand?*
- *What do they need to feel? What sensitivities and awarenesses do they need to develop?*
- *What do they need to learn to do in practice?*

At this point, it is best to empty your mind of all previous plans and see afresh what activities and sequences make the most sense for your students to go through to reach the learning outcome. Considering the knowledge and skill your students are at when they arrive, how can you build up their learning, step by step, to reach the level that is the aim of your class?

By answering this question, you will help develop what is called a “learning pathway”: the step-by-step content and experiences you can facilitate your students to have to gradually build up the understanding, sensitivity and skill. Remember: you can propose basically anything to your students, as long as it serves a meaningful purpose. Adult students need to know what they are going to do and why. This gives them clarity, the ability to choose to engage or not, and a sense of safety because they know what is coming.

One more thing you can consider: the outcome of your class, the purpose of your class – isn't it also a spiritual being? An archetypal idea that you want to make accessible to your students? How about connecting to it in meditation, invoking it, and allowing yourself to be inspired by the Being of your content to guide you in designing the learning pathway? This Being is the center of your class. The learning process should be such that students are given opportunities to connect to this primordial idea. How can we best do this?

DEVELOP LEARNING PROCESSES THAT ARE IN HARMONY AND ALIGNED WITH HOW ADULTS NATURALLY LEARN.

Rudolf Steiner mentioned that etheric forces that are active in the development of the body of children get gradually freed up as the body gets fully developed, and these forces become available for the process of learning. In his talk from the 12th of August 1916, Steiner described that the life forces are not one single homogeneous mass, but distinguishable into seven forces or processes, associated with the planets. Van Houten further studied these indications and named the seven life forces as adult learning processes.

What makes it difficult to understand these learning processes is that they do have a fractal nature – each step contains all other seven steps in it - and they are not

assembled in a straight linear order, but they melt into each other, and it can be difficult to distinguish which process is dominant at any given time. What is important is to consider that in any adult learning process, all seven qualities and activities should be present.

What are these seven vital processes and how do they appear metamorphosed as learning processes?

SEVEN LIFE FORCES AS ADULT LEARNING PROCESSES

I. THE LIFE PROCESS OF BREATHING BECOMES PERCEIVING OR OBSERVING

The objective use of the senses is the beginning of all adult learning. All learning starts by taking in something with our senses; be it observation with our eyes or listening to a talk, or an experience with our sense of touch, life, or balance. First, we have the perception - that we would like to be as objective as possible – not colored by interpretations, sympathies, or antipathies. We haven't yet made sense of those sense perceptions. We just took them in. And we are bringing the perceptions to consciousness.

The learning process of Observing has been associated with Saturn.

II. THE LIFE PROCESS OF WARMING BECOMES RELATING

Now we can make our relationship with it conscious. How does this perception and sense experience make us feel? What is our relationship to it? Warming also implies developing interest and even enthusiasm for what we observed and are trying to learn. Interest breeds more interest. As adult educators, we need to create conditions for students to be motivated to learn what we want to teach them. We can do this by sharing our enthusiasm and understanding of why this matters, what it will enable students to do, what problems it solves, etc.

Another aspect of warming in learning is to connect to the students' previous experiences and understanding of the topic. What experiences and questions do they have?

In practice, the learning processes of observing and relating intermingle. We might want to start by warming students up, telling them about the wonderful dandelion plant with its long-recognized healing properties and why we are going to study it. Then take them out to observe, taste, smell, and touch the plant. Perhaps they can draw it –

this increases objective sense perception and recreates the plant inside of students – a process of relating. Then we want to hear about the students' experiences: how was it for them? What did they notice? What touched them? What did they discover? The process of Relating in learning has been associated with Jupiter. This shows us that it can also be about: what is the learning topic's place in the world? Sharing a bigger context for what we are teaching and what role it plays in the world is also very motivating for students to want to learn about it.

III. THE LIFE PROCESS OF NOURISHING BECOMES DIGESTING

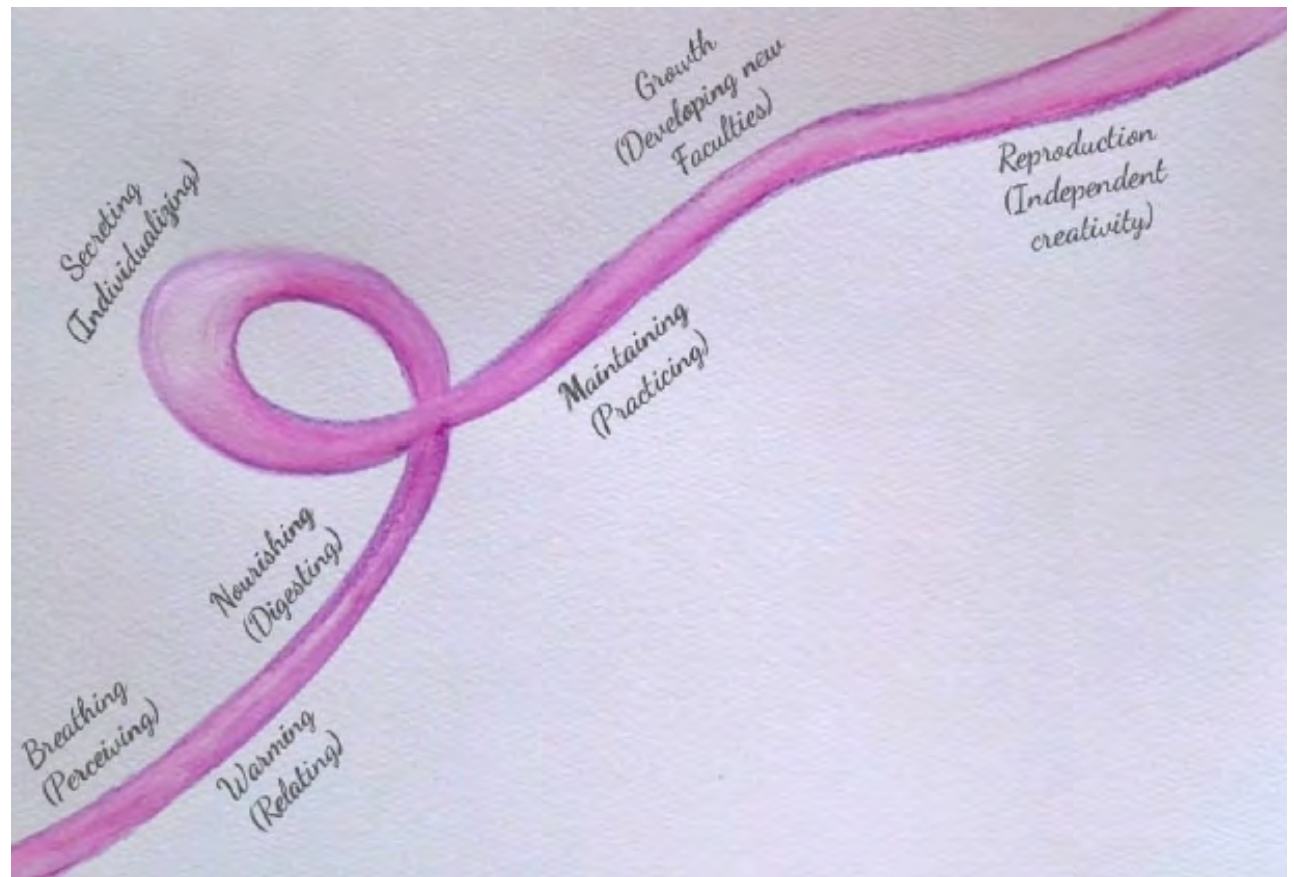
Now the sense perception or content we heard needs to be digested. Relating to it becomes exponentiated. We actively engage. We take it apart. What were the main components? How does it relate to our previous experiences and knowledge? What do we think of it?

If this part is skipped, students might either ignore new things that don't fit into their previous understanding of the topic or, they might take in what you said as a fact. This can be problematic, as it can become a fixed belief, and the thing you were trying to teach them might have different nuances too (in different contexts or that you only find out later). Or it might not be at all the right approach for a student to go about it in the way you do. The step of digesting, taking things apart, relating it to previous understanding, figuring out how it works, etc. prepares the space for deeper insight.

The process of digesting in learning has been associated with Mars.

IV. THE LIFE PROCESS OF SECRETING BECOMES INDIVIDUALIZING

As the topic of study goes through digesting, specific things stand out to different students. Students relate



and integrate the new understanding into what they already knew. This, to begin with, requires acceptance: that the new insight is true. This discovery enables students to start to make the new understanding their own. The individualized understanding gradually emerges as one takes the topic apart and relates to it (previous learning processes).

Individualizing is the central and crucial process in adult learning. What has come from outside now becomes part of me; it becomes the learner's own.

This breakthrough can manifest itself as a new insight or a new idea. The new understanding is perceived as an experience with a light quality. It is of utmost importance that the adult educator pays attention and 'catches' these moments, to make space for them, so they can reveal themselves fully with regards to their significance to the participant who is having the experience. It is these experiences of new insight that can awaken the will of the student and take her closer to fulfill her life's calling.

Questions can deepen the learning and bring what is new into consciousness: What is it that is actually new, interesting, or inspiring for me? What new understanding have I gained, that expands or modifies something I believed earlier? What do I take away from this session? It can also be: what do I want to do with this insight? What does it change for me? What are the new possibilities that open up, now that I understand this?

The process of individualizing in learning has been associated with the Sun.

V. THE LIFE PROCESS OF MAINTAINING BECOMES PRACTICING

Once something new has been discovered or understood, it does not mean that we are able to use and apply it immediately. As humans, we usually have to practice to keep something alive in our consciousness or to develop a new skill. It is about developing competencies. Now it is time for students to perform practical tasks. For example if students have understood the main aspects of pruning, let them try it on a tree, while you continue to observe and assist.

The learning process of practicing has been associated with Venus.

VI. THE LIFE PROCESS OF GROWTH BECOMES DEVELOPING NEW FACULTIES

As students keep practicing, they become better and better at applying the new learning in real life. In fact: they develop new skills and capabilities. Regular practice and especially with nights in between are really important for the effort of the practice to bear fruit and be integrated into the etheric body. As a teacher, you can build up exercises from simple to higher levels of complexity, so students expand their skills.

The learning process of Developing New Faculties has been associated with Mercury.

VII. THE LIFE PROCESS OF REPRODUCTION BECOMES INDEPENDENT CREATIVITY

Once students have developed new faculties, they can become creative with their new understanding and skill. If they became great at pruning, they can now care for their own fruit orchard or start up a pruning service. You can see that acquiring a new

understanding is not the end of a learning process. It's in fact the middle. One needs to continue in order to anchor the new understanding into new faculties and finally into independent creativity.

The process of Independent Creativity is the aim and purpose of all adult learning. It has been associated with the Moon.

CREATING CONSCIOUS ENDINGS

Too often we end our class when the time is over, without doing a harvest of what students have learned, nor giving them time for questions, appreciation, and feedback.

The ending is a crucial time to anchor the learning more deeply into students' consciousness, by allowing them to review what they have learned, what that changes for them, and what changes they want to make in their everyday life as a result of what they have learned. The ending is also important to give a sense of closure, of rounding off and completing something you were in together. It can be great to have a moment to celebrate what you have accomplished and to appreciate the connections made and the time shared together.

Endings are often emotional moments. Some students may be upset or angry because they didn't find what they were looking for in your class. Others were so happy there, that they now dread going back home. It is very important that you as a teacher create extra containment and have a raised consciousness in the last section of your workshop or training, to hold a space for such emotions if necessary, without having it affect the harvest and ending for the entire group.

SUGGESTIONS ON RECEIVING FEEDBACK AND THE HARVEST

by Simone Helmle

Following the seven phases of learning processes as described by Coenraad van Houten, learning requires an inner readiness for change. Learning is clearly more than just broadening one's horizons and getting to know new things or looking somewhere else for once. Adult learning is about acquiring new skills and understanding learning as part of a process of professional and personal development. As a trainer, I carry with me the triad of insight, development, and improvement. On this basis, I will give suggestions for the design of carrying out retrospectives and the evaluation of a training program. The scope of retrospectives varies greatly, depending on whether I am looking at a single learning unit, a day, a week or even half a year, or a whole year. As a course instructor, I try to look at three levels:

- **What is significant for the individual course participant(s)?** This is about how the individual feels supported in his or her development.
- **What is significant for the learning group?** The question here is whether we are traveling as a learning group in such a way that the individual within the group is able to follow along well. Think of it as a group going on a hike together. We hike together, but each person walks individually. There are phases where I walk in front, other phases where I walk in the middle or behind. There are passages that are playfully easy, other passages are very challenging. Ideally, this is mixed so that it is sometimes easier and sometimes more strenuous for the individual. For the individual, especially at the beginning of a training, the questions arise "am I in the right place here?", "who are the others?", "will I be able to come along?", "what is our relationship to each other?". For the course leader, the question arises as to the pace of learning, the content and method, the organizational matters and also the eye for detail and attention to the whole.
- **What is significant for the course leader?** This is about the harmony of preparation, implementation, and follow-up. Particularly at the end of a training course, feedback contains information on how to improve the next training course. It is important to be aware that participants give feedback on improvements for the next course group and not for themselves.

Questions that address the individual person and thus enable a first-person statement are particularly valuable for the retrospectives. They allow the individual to stay with him/herself and yet they provide information about the individual's relationship to the learning object, the learning path, the learning atmosphere and the learning environment. The following list of questions may serve as a stimulus to pick out individual questions or to extend the list with further questions. The collection of questions is followed by key points from which perspective the question can be asked. Here, too, there are no limits to the expansion of possible perspectives. The issue of "how" the retrospective can be applied is given below in a third list of ideas, how they can be presented for an individual in a larger group. Nevertheless, the most beautiful moment is when you put the lists aside and realize that you only need these collections as cheat-sheets and combine the questions and approaches that are appropriate for the training, in tune with the people and place of the moment.

Question Collection:

- What touched you the most this week? What was a precious moment for you personally? What made you wonder?
- What do you take away from this week?
- When you look back on this week a year from now, what will you remember? What made the week worthwhile to you?
- What was unexpected for you? What would you have imagined differently?
- What would you like to give your neighbor from this week?
- What do you think course participants should know about this week?
- What didn't go well from your point of view? Are you disappointed about something?
- Did something bore, overwhelm, or underwhelm you?
- What thoughts are you going into next week with?
- How do you feel? How have you been?
- What resonates?
- What have you experienced?

Perspectives on these Questions

- Time units: although I ask about a week's impression, the units could be individual impressions over days or hours.
- Emphasis on professional learning or personal maturation.
- Conditions of space and place, as well as from the organizational point of view.
- Perspective from the now, but also from the expectations for the week or in the future: "How did I get here? How have my hopes for the training been fulfilled?" or also "When I look at my activity in a year's time, what will have changed by then? What specifically do I plan to do? "
- Depending on how the training is integrated, for example, if it is part of a qualification to be obtained that includes exams, the perspective of exam preparation is also relevant.

Collection Method

There are three levels to consider the method of feedback collection. For the participant, the individual review is most significant for professional and personal development. Here, the individual is completely subject to his or her own inner process. Support can be provided by thought journeys or journaling. Usually, participants feel the need to share. Consider whether this always needs to be done in the entire course group, or whether it is also appropriate in conversations in pairs or small groups.

Support the review of individual participants

- Dialogue walk for two
- Weekly review as a journey of thoughts
- Writing a letter to yourself

Review as a summary and consolidation of learning content

- Write a cheat sheet with key learning moments and outcomes from the week.
- Task for small groups, recording results on flipchart paper.
- Chart paper on the wall for free writing of questions that come up.

Playful creative methods for review

- Everyone collects an object outside that is emblematic for this week.
- Bring dough and knead the mood of the week in the dough.
- Weekly review in the form of newspaper headlines, slogans or even poetry.
- what ideas do you have that could go here?

Support of retrospection from an overall view

- Individual participants take on the task of accompanying the training as reporters for a certain period and report back in the evening or morning. Gladly encourage creativity as a skit, role play, poem, or song lyrics, so that this is entertaining, meaningful and stimulating at the same time.
- Small groups each looking at one perspective, e.g. 3 people looking at Monday, 3 others looking at Tuesday.

Is there anything missing from this list? Where is the classic evaluation questionnaire? The questionnaire comes at the very end, when everything has been said and the participants have said goodbye. Personally, I work with brief feedback sessions, daily or nightly reviews. At the beginning, middle and end of the training, I set aside extensive times for individual reflection. This enables the individual to look at the relationship to the learning, to consolidate or renew the personal relationship or to build it up in the first place. Only individual reflection makes it possible to engage the taught material, to process it and to individualize it through the inner forces and to muster the willpower for repetition and practice until it is finally made one's own. To this end, I like to encourage partner or small group work in which participants listen to each other. What is reflection and digestion to the person speaking becomes stimulation to the person listening intently. Think of the image of the hiking group, there you walk again and again with other people, talk animatedly, take a rest, pack up and walk the next piece. At distinctive points, the course leader's attention now shifts back to the entire group. Is everyone with us? Are we on a path that is appropriate for us? Will we arrive and does the breath of the training inspire us?

CONCLUSION: TRY IT OUT AND HARVEST YOUR LEARNING

To bring the seven learning processes to life and to help you get the most out of this chapter, I would like to invite you to an exercise. If you have colleagues who are interested in this topic, you could invite them to do these reflections together, and then share your ideas.

- Consider that Reading this chapter was the beginning of a learning process for you; reading was the first learning process: **Observation**
- Now we need to move to the phase of **Relating**:
How does what you read relate to your previous experience? How do you feel about it? What interested you most?
- **Digesting**:
What was a confirmation of what you already knew? And what did you understand in a new way? Was there something you didn't agree with, and what do you believe instead?
- **Individualizing**:
What are you taking away from this chapter? What are you now understanding in new ways?
- **Maintaining**:
How could you use what you learned here in your teaching? What would you like to try out and start practicing?
- **Developing new skills**:
What new skills might you need to develop in order to be able to use what I shared here in designing and running your classes?
What could you do to develop these new skills?
- **Independent creativity**:
How could you apply your learning from this chapter to creating something new? What would you like to create? Upgrade and transform a class you teach regularly? Create a new awesome workshop? Raise your impact in a field you care about and want to promote?...

After you have done your reflections, take a moment to think about what changed for you in working through the questions that relate to the life and learning processes. *Did the reflection exercises based on the 7 learning processes add anything to your learning experience that you didn't get by merely reading (observing) the chapter? How did the sequence of questions work for you? Did the sequence help you to get deeper and clearer?*

DESTINY LEARNING

Once you have mastered holistic adult education, you might feel the impulse of going deeper. You might notice that there are personal problems and limiting beliefs that keep your students beneath what you can sense as being their higher potentials. They may have repeated similar problems or hold themselves back, not giving their fullest, or be stuck in places they don't want to be in. This is the next level of adult education: where adult education becomes facilitation of personal development and even healing work. Coenraad van Houten distinguished between Vocational learning and Destiny learning. To help your students develop as a whole human being, you might want to consider learning about these areas too, so you can weave ever deeper and more empowering reflections and exercises into your training and mentoring.

As adult educators, we need to be continually learning, growing, and developing. We can't just want our students to become more authentic and fully-fledged humans. We have to walk that path ourselves. Therefore a final reflection:

- *Where in your life have you been stuck for years doing things in the same way, even though it doesn't really fulfill you or feel right? What could you do to acquire a new understanding and greater abilities to act and be creative in this area of your life?*
- *As an adult educator: where do you see your biggest gaps and potential for further learning and development?*

And a final remark and suggestion: it is so easy to get bogged down by our work. Even though we chose this work because we love Biodynamic Agriculture and are excited about adult education, it's incredible how fast the work becomes „too much“, stressful, and a „to-do list“ we need to work through. *How can you keep the love and joy alive in your heart on every step of the way in your work as an adult educator?*

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**EPILOGUE &
ACKNOWLEDGEMENTS**

“IT’S ABOUT NEW FACULTIES”

This is the title that my professor, Dr Jochen Bockemühl, long-time head of the natural sciences department at the Goetheanum, gave to his afterword to the reference work on biodynamic agriculture, *“Der Landwirtschaftliche Betrieb”* (the Farming Enterprise) published 40 years ago. I include it as a tribute to his fundamental contribution to the development of a Goethean science based on concrete human experience. He and his colleague Georg Maier have trained generations of young biodynamic farmers.

Why do we need to develop new faculties? The dominant science developed in Western countries and then extended to the whole world is based on the ‘naturalist’ paradigm in the sense of Philippe Descola*, which reduces nature to objects with no interiority. Nor does it accord any reality to concrete sensory experience (tastes, colors, smells, perceptions), which are relegated to the realm of the subjective. In this way, this approach has deprived farmers of their concrete experience of the world, the land, the plants and the animals with which they live and work on a daily basis, leading them to believe that only what is learnt in the classroom counts, instead of training them to learn in the great school of nature. It has also cut farmers off from their intimate relationship with the living beings they work and live with.

Today, the ideal of this ‘smart agriculture’, supported by numerous firms, is to rely on data supplied by databases that would be implemented by an agri-manager at the controls of his robots and hyper-technological machines.

Developing a sense of the living world requires a sensitive experience.

If, far from this technocratic vision, we want to develop a living agriculture that respects life, such as biodynamic and organic farming, what skills and faculties do we need? Not just knowledge (data) - which is of course essential - or practical know-how, but also a sensitivity to living things that enables us to apply knowledge in a way that is adapted to the ever-changing situations in agriculture. How can I see if the weather is too cold or too hot and my crops stagnate? What can I do if my animals regularly suffer from inflammatory problems? How can I feel if the atmosphere in the farm team is too tense and react? First of all, I need to observe the situation carefully, assess it properly and find the right solution for my specific situation, rather than applying standard recipes. To do that, you have to hone your powers of perception, observe and also feel the situation with the heart. Like the fox explains to the Little Prince: “you can only see clearly with your heart. What is essential is invisible to the eye.” (A. de St Exupéry)

This kind of approach, practiced more or less consciously by many biodynamic farmers around the world, can lead to insights for responding to increasingly unexpected situations. In the face of today’s many challenges - ecological (climate chaos, increasing pandemics and plant diseases, etc.), socio-economic and human (loss of meaning, often leading to depression) - developing new skills will help future farmers develop resilience. It’s all about strengthening your connection to the earth and the sky, to the natural and social environment and to yourself.

On behalf of the Agricultural Section of the Goetheanum, which for more than 10 years has been organizing international meetings of trainers, now co-organized with BFDI, I would like to extend my warmest thanks to all the trainers who agreed to share their exercises. Let’s hope that this book will prove a great success, encouraging many trainers and farmers to develop a practical research attitude on a daily basis.

JEAN-MICHEL FLORIN

Co-leader Section for Agriculture

**Beyond Nature and Culture*. By Philippe Descola. Translated by Janet Lloyd. 2013. University of Chicago Press, Chicago

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*Clarity
Light in the heaven
Light of the earth
Light in human beings
Gold imbued divine beauty.
the light shines
through our hearts
into our actions,
into our words.
Light-borne wisdom
stand up, risen.*

Simone Helmle, 2022



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