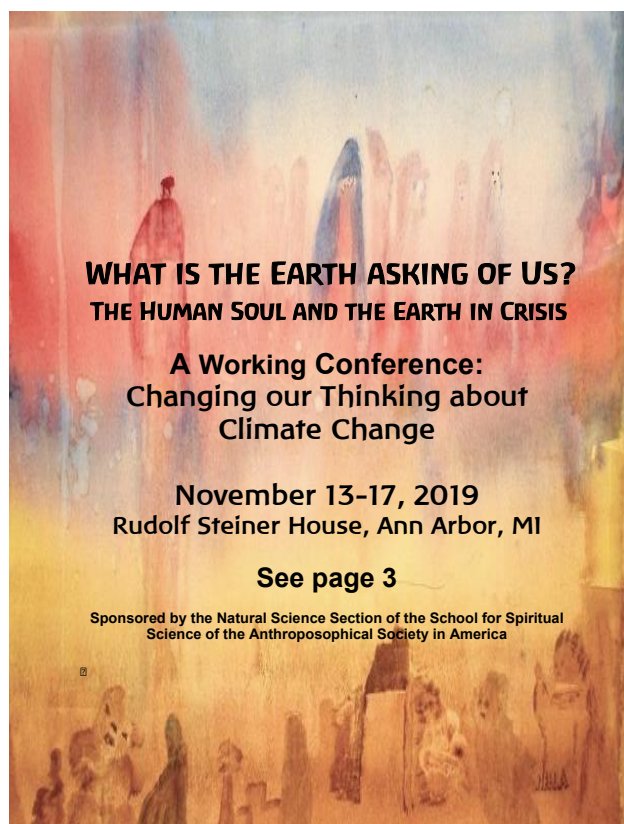


MAY-JUNE 2019

VOLUME 2 ISSUE 5-6

Contents

Editor's Note	2
Please Support our Work	2
2019 Conference	
Conference flyer	3
Invitation to for all to Participate	4
Notes and Commentary	
Exercise from <i>Practical Training in Thought</i>	5
Reports	
Forum for Renewal of Science	7
East-West Dialectic Workshop	9
Videos from "Bridging" Conference	
Video Archive of Dr. Heusser's evening lectures	12
Announcements	
<i>To the Infinite and Back Again</i> , Henrike Holdrege	13
Events at The Nature Institute	14
Calendar of Events	15



***Steering Committee
 Of the Natural Science/
 Mathematics-Astronomy Section***

John Barnes

Judith Erb

Jennifer Greene (Representative to Collegium)

Barry Lia (Editor; Treasurer)

Andrew Linnell (Webmaster)

Gopi Krishna Vijaya

Editor's Note

Welcome to the “May-June” issue of the Correspondence! You can expect to see the “July-August” issue shortly. We will then return to monthly issues as we distribute material in preparation for our conference in Ann Arbor in November (see p.3 & p.4). Along those lines, in this issue we encourage anyone, but especially those who may attend, to take up an exercise from *Practical Training in Thought* which is particularly relevant to our topic (see p.5). You will also find a couple meeting reports, announcement of Henrike Holdrege’s new book, and calendar announcements.

As always, our Notes and Commentary section is meant to come from you, our readers, reflecting upon what you are encountering in science and technology. This is your opportunity to share a note on an article or a scientific paper you’ve just read, or a commentary on something that struck you in a book you are reading. This newsletter is intended for *reader participation*. And for the next few issues, it will be an aspect of upcoming conference participation, *whether you can attend or not* (see p.4).

Don’t forget the availability of the video archive of each evening’s lecture for those who could not attend the “Bridging” conference with Prof. Dr. Heusser in November 2018 (see p.12). These convey a scientifically justified epistemological basis for a spiritual science.

The *Correspondence* welcomes pilot research reports, comments on current scientific research and news, book and article reviews, letters from readers, reports on meetings and workshops, and announcements. There will be editorial review. **For submissions**, click [here](#).

We look forward to hearing from you. Please send **feedback** [here](#).

Barry Lia, Ph.D.
Correspondence Editor

Please Support Our Work

We ask that you please consider making a financial contribution in support of our mission to bring a discerning and unique perspective on developments in science and technology into today’s culture.

Furthering the epistemological foundation of anthroposophy is not only a matter of scientific method. It is important to know that there *is* a scientific basis for a monistic science of spirit/matter and to know *what* that basis is. This is important for *all* of us working with anthroposophy to further our culture today, be we teachers, farmers, doctors, therapists, artists, entrepreneurs, or anyone seeking to heal the contemporary worldview.

Your donation of *any amount* will help us better serve the Society.

(It is possible to set up recurring monthly donations.)

**To donate through the ASA, click [here](#),
or find a PayPal button on our [website](#).**

Or mail check payable to “Natural Science Section” in care of our Treasurer, Barry Lia at:
Anthroposophical Society in America, 1923 Geddes Ave, Ann Arbor, MI 48104

Thank you kindly for your consideration.

For a copy of our Case for Support, contact Jennifer Greene: jgreene@waterresearch.org.



WHAT IS THE EARTH ASKING OF US?

THE HUMAN SOUL AND THE EARTH IN CRISIS

A Working Conference
Changing our Thinking about Climate Change

The Science of Climate
Cosmic rhythms
Earth & Human Evolution
The Role of the Elements and Etheric Forces
Indigenous wisdom
The Future of Agriculture
Economics and The Threefold Commonwealth
Creating a Conscious Future

When: Nov. 13 -17, 2019

Where: The Rudolf Steiner House, 1923 Geddes Ave, Ann Arbor, MI., 48104

Special Guests: Johannes K hl, Natural Science Section Leader at the Goetheanum,
Geoffrey Henny, Professor of Business Economics at Cleary University.

Schedule, Preparation Materials, Registration, Meals, and Housing Info:

<https://www.naturalsciencesection.org/2019-annual-conference-climate/>

Planning Committee: *John Barnes, Judith Erb, Jennifer Greene, Barry Lia,
Andrew Linnell, Gopi Vijaya.*

Schedule, Background Material, and Registration information will be available soon.

<https://www.naturalsciencesection.org/2019-annual-conference-climate/>

See also pages 4 & 5

Invitation to Participate

*Even if you cannot attend the conference,
you can participate in our work on the conference themes.*

In our weekly planning calls, we have been drawing upon the following books as background for our upcoming Section Conference in November. On our [conference webpage](#) you will soon find an expanded list of Background Material, including scientific articles and noteworthy news reports.

We invite any of you familiar with any of these materials or other sources to submit commentary review or noteworthy remarks for publication here in our *Correspondence*. What can be drawn from these materials as regards the range of conference topics above? Submit to editor@naturalsciencesection.org.

In this way, we hope to engage all of you and for this work to extend beyond the conference itself.

Climate—A New Story, Charles Eisenstein (2018, North Atlantic Books)

Coming Back to Life, Joanna Macy and Molly Brown (2014, New Society Publishers)

Eco-Alchemy: Anthroposophy and the History and Future of Environmentalism, Dan McKanan (2018, University of California Press)

Humanity's Last Stand: The Challenge of Artificial Intelligence; A Spiritual-Scientific Response, Nicanor Perlas (2018, Temple Lodge)

In the Shadow of the Machine: The Prehistory of the Computer and the Evolution of Consciousness, Jeremy Naydler (2018, Temple Lodge)

Inner Experiences of Evolution, Rudolf Steiner (2009, Rudolf Steiner Press, CW132)

Life is a Miracle: An Essay Against Modern Superstition, Wendell Berry (2000, Counterpoint)

Life of the Human Soul and its Relation to World Evolution, Rudolf Steiner (2016, Rudolf Steiner Press, CW212)

Native Science: Natural Laws of Interdependence, Gregory Cajete (2000, Clear Light Publishers)

Sensitive Chaos: The Creation of Flowing Forms in Water and Air, Theodor Schwenk (2008, Rudolf Steiner Press)

Steiner and Kindred Spirits, Robert McDermott (2015, SteinerBooks)

Taking Appearance Seriously: The Dynamic Way of Seeing in Goethe and European Thought, Henri Bortoft (2012, Floris Books)

The Mutual Evolution of Earth and Humanity: Sketch of a Geology and Paleontology of the Living Earth, Dankmar Bosse (2019, Lindesfarne Books)

The Systems View of Life: A Unifying Vision, Fritjof Capra and Pier Luigi Luisi (2014, Cambridge University Press)

The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era; A Celebration of the Unfolding of the Cosmos, Brian Swimme and Thomas Berry (1992, HarperSanFrancisco)

The Variety of Integral Ecologies: Nature, Culture, and Knowledge of the Planetary Era, Sam Mickey, Sean Kelly, and Adam Robbert (eds.) (2017, SUNY Press)

Thinking Like a Plant: A Living Science for Life, Craig Holdrege (2013, Lindesfarne Books)

Toward a Phenomenology of the Etheric World: Investigations into the Life of Nature and Man, Jochen Bockemühl (ed.) (1985, Anthroposophic Press)

World Ether, Elemental Beings, Kingdoms of Nature: Texts compiled from Rudolf Steiner's Spiritual Science and with commentary, Ernst Hagemann (1993, Mercury Press)

Notes and Commentary

Note:

—*Editor*

My younger daughter and I try get out in nature at least once a month on a hike. My wife often points out that nature is always with us every day even in the city: just look up.

Given that the sky is always available to all alike and given that it connects to our conference theme of climate disruption and earth in crisis, the conference planning committee agreed that the following phenomenological exercise from Steiner's "Practical Training in Thought" would be valuable preparation for everyone planning to attend our upcoming conference. You might build your mental images not only on visual appearance, but also attend to winds, smells, moods of light, etc.

As John Barnes wrote in a recent planning email message, "One aspect of *active* knowing is that we connect ourselves experientially with the object. When we connect ourselves with nature in this way, we begin to *care* about it."

Excerpt from "Practical Training in Thought"¹

Schmidt Number: S-1909

A Lecture By

Rudolf Steiner

Carlsruhe, January 18, 1909

GA 108

Let us assume that someone says to himself: "I want to strengthen my thought, so that it may find its true bearings at every point in life." He must then take guidance from what will now be said. The indications that will now be given are to be taken as real practical principles — principles such, that if you try again and again and again to guide your thought accordingly, definite results will follow. Your thinking will become practical, even though it may not appear so at first sight. Indeed, if you carry out these principles, you will have altogether fresh experiences in your life of thought.

Let us assume that someone makes the following experiment. On a certain day he carefully observes some process in the world which is accessible to him, which he can observe quite accurately — say, for example, the appearance of the sky. He observes the cloud formations in the evening, the way in which the sun went down. And now he makes a

distinct and accurate mental image of what he has observed.

He tries to hold it fast for a time in all its details. He holds fast as much of it as he can, and tries to keep it till the following day. On the morrow, about the same time, or even at another time of day, he again observes the appearance of the sky and the weather, and he tries once more to form an exact mental image of it.

If in this way he forms clear mental images of successive conditions, he will soon perceive with extraordinary distinctness that he is enriching his thought and making it inwardly intense. For what makes a man's thought unpractical is the fact that in observing successive processes in the world he is generally too much inclined to leave out the actual details and to retain only a vague and confused picture in his mind. The essential, the valuable thing for strengthening our thought is to form exact pictures above all in the case of

¹ <https://wn.rsarchive.org/Lectures/19090118p02.html>

successive processes and then to say to ourselves: “Yesterday the thing was so; to-day it is so.” And in doing this we must bring before our minds the two pictures which are separated in the real world, as graphically, as vividly as possible.

To begin with, this exercise is simply a particular expression of our belief that the thoughts are there in reality. We are not immediately to draw some conclusion — to conclude from what we observe to-day what the weather and the sky will be like to-morrow. That would only corrupt our thinking. No, we must have faith that outside in the reality of things they have their connection, and that to-morrow's process is somehow connected with to-day's. We are not to speculate about it, but first of all to think, in mental images as clear as possible, the scenes which in the external world are separated in time. We place the two pictures side by side before our minds, and then let the one gradually change into the other.

This is a definite principle which must be followed if we would develop a truly objective way of thinking. It is especially valuable to take this line with things which we do not yet understand, where we have not yet penetrated the inner connection. Particularly with those processes — the sky and the weather, for example — which we do not understand at all, we must have the belief that, as they are connected in the outside world, so will they work their connections within us. And we must do it simply in mental pictures, refraining from thought. We must say to ourselves: “I do not yet know the connection, but I will let these things grow and evolve within me, and if I refrain from all speculation, I am sure they will be working something within me.”

You will not find it difficult to imagine that something may take place in the invisible vehicles of a human being who, refraining from

thought in this way, strives to call forth clear mental images of processes and events that succeed one another in time in the outer world. Man has an astral body as the vehicle of his life of thought and ideation. So long as he speculates, this astral body of man is the slave of his Ego. But it is not completely involved in this conscious activity, for it also stands in relation to the whole Universe. Now as we refrain from giving play to our own arbitrary trains of thought, and simply form in ourselves mental images, clear pictures of successive events, in like measure will the inner thoughts of the universe work in us and impress themselves upon our astral body, without our knowing it. As, by observation of the processes in the world, we fit ourselves to enter into the world's course, and as we take its scenes and pictures into our thoughts clearly and faithfully in their reality and let them work in us, so do we become ever wiser and wiser in those vehicles and members of our being that are outside our consciousness.

So it is with processes in nature that are inwardly connected. When we are able to let the one picture change into the other just as the change took place in nature, we shall soon perceive, that our thought is gaining a certain flexibility and strength.

Later Steiner says:

Goethe developed this way of thinking to a high degree. More than once it happened, when he was intending to go out for some purpose or other, that he went to the window and said to whoever happened to be by: “In three hours it will rain” — and so it did. From the little segment of the sky which was visible from his window he could tell what would happen in the weather in the next few hours. His true thought, remaining in the things, enabled him to sense the later events that were already preparing in the preceding ones.

Reports

Forum for Renewal of Science: Summary

April 13-14, 2019

This was a gathering of researchers and supporters interested in re-enlivening scientific research, organized by Gopi Vijaya, Snetu Karania, and Austin Abigt as a follow up to the Section's *Bridging Natural Science and Spiritual Science* conference last November in Spring Valley, New York. This gathering included presenters actively engaged in research in terms of publications or experimental work, as well as attendees wishing to be there as financial and moral support for such projects.



April 13, 2019. Salt Lake City Public Library, Conf. Room B, 210 E 400 S, Salt Lake City UT 84111

The gathering kicked off with a round of introductions by all participants—16 in person, 4 online. After a break, the sessions began in earnest. The talks were divided into three sessions. Session I was by those engaged in experimental research, Session II was by those engaged in economics and networking, while the last session of the day, Session III, was by those engaged in mainly theoretical studies.

Session I:

Gunther Andersson (Adelaide, Australia): Gunther gave a talk on the relevance of holistic and reductionist thought in modern physics, with examples. He described how both approaches need to complement one another, and described the process in detail with an example from his research: depositing gold atoms on titania.

Michael Shope (Seattle): Described experiments with prisms, flame-driven boats, silver coil's response to the diurnal cycle and some bud research. He stressed the importance of aesthetics and creativity in experimenting.

Mark Gardner (Great Barrington): Further experiments with the same setup, with gold coil instead of silver. He described the setup used and the difficulty of eliminating ambient variables. He followed up with some systematic measurements of branches of different trees, and their variation with the diurnal cycle. Exhaustive data accumulated, in need of systematic statistical analysis.

Session II:

Sebastian Heycke (SF): Interactive session regarding social networking, and its effects on human relationships. Ideas about the right use of this technology.

Sebastian Bilbao (Toronto): Emphasized the need to re-create in the modern world a way to consistently fund research, as was done by the Kommende Tag in the 1920's. A couple of million dollars would be sufficient to kick start a proper renewal of sciences. Importance of making sure funding comes from gifts.

Frank Dauenhauer (Seattle): Described his work for the Center for Anthroposophic Endeavors, the MysTech journal with its website and membership program as a way to fund research. His interest in the local commons as a way of healthy creating economic organizations.

Session III:

Maxeem Konrardy (Phoenix): Description of Simon Shack's TYCHOS model that shows the relationship of Sun and Mars as a binary star system. Similarities between Sirius A and B, and also the symmetry between the two sets of moons: Phobos Deimos and Mercury Venus.

Guest: Heart as an organ of impedance, and not a "pump". Practical examples of this behavior, on the basis of embryonic valve-less heart formation. Heart as a sense organ, that alters its behaviour based on the needs of the body, and a close approximation of its action through the hydraulic ram system.

Gopi Krishna (Salt Lake City): Relationship between colors and stars, and their connection with stellar evolution. Reversed stellar evolution in conventional science. The need to incorporate Goethe's complementary spectrum into science. Relation between the TYCHOS model and Steiner's Old Moon state of Earth.

April 14, 2019. Gopi's house

The speakers on this day were attending through Skype, and the order was arranged based on time-zone.

Remus Poradin (Australia): Work on color theory, and identification of mistakes in differential refrangibility of red and blue in the conventional spectrum. Errors in understanding the so-called subjective spectrum using ray-diagrams, and the corrections necessary to understand the nature of light. Role of prism in revealing the third dimension of light.

Marek Majorek (Switzerland): Brain and consciousness – trends in neuroscience of eliminating free will. Flaws in the argument, and the radio analogy to the brain. Relation between conscious activity and the metabolism. The magical nature of will-movements, and its relation to the nervous system.

Graham Calderwood (Scotland): Importance of Projective Geometry and its applications to the shape of buds, and rhythmical variations of the buds with planetary positions. Angular properties most important for planetary positions, and the importance of 90 degree relations. Effects of electromagnetic radiation on the response of buds to the heavens.

Simon Shack (Italy): Further description of the TYCHOS, and the behavior of earth due to precession. A demonstration of the 3D TYCHOSIUM software, and the motion of the moon displayed in it. Importance of maintaining star alignments as a reality check on the program.

With this, all the presentations came to an end. Further discussions among the group involved directions for further research and collaboration, along with an intent to catch up together as a group online at the earliest opportunity.

This event was sponsored by the Henry Barnes Fund, Natural Science Section, Margaret Shipman, and Anthony Abigt.

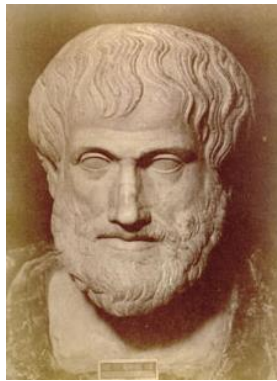
A Report on East-West Dialectic Workshop

Eastern Indian Thought and Western Science

Arimathea Group | August 2018 | Richmond, VA

Joe Serio and Michael Judge

This Anthroposophical Workshop held August 10-11, 2018 was arranged by the Arimathea Group in Richmond VA. John Moses and Jonathan Swan of the Arimathea Group of Richmond were our gracious hosts. The setting was the new and exciting facility of the Richmond Waldorf School.



As our world civilization faces many a crisis on multiple fronts, we can ask the question whether a dialogue between East and West could bring a balance and a way through to coherence.

We can look at the sophistication of historic Indian Thought of the East, which takes its start with “Unmoded” or “Absolute” Consciousness and moves to the states, modes, or modifications that this consciousness takes in its descent into the dichotomy of spirit and matter. If Indian Thought makes its start in the “highest heavens” and works its way down, in the West the starting point has become physical matter. This in turn gives rise to fundamental questions which can start to lead us beyond isolation in

matter: How can dead matter be alive? How can physical matter have sentient consciousness? How can physical matter and self-awareness be reconciled?

Each session started with Eurythmy led by Barbara Schneider-Serio from Eurythmy Spring Valley. We were led through indications for the “Foundation Stone” by Rudolf Steiner, which brought into our awareness the Threefold Nature of the human being. Especially relevant on the final day was the reference to Christian Rosencreutz who, Steiner tells us, traveled to the East to find a balance between Eastern and Western Initiation.

Michael Judge’s presentation (West) offered a counterpoint to Joe Serio’s (East), hoping to

find in the middle a new ground that can help us through our current crisis of Civilization.

Joe Serio a longtime student of both Indian Thought and Anthroposophy handled the perspective of the East and shared the following:

What Aristotle attempted to reach philosophically in his *Metaphysics*, a science of first causes or a science of the absolute, was achieved/experienced in deep contemplation by the Indian Masters starting thousands of years ago. It was *expressed* in scientific/philosophic *form* in Samkhya, Vedanta, and culminated in what became known as Kashmir Shaivism. What was expressed in poetic form in the Bhagavad-Gita and the Vedas was experienced and systematized in the great Schools of Indian Thought. Indian Thought, then, is not philosophy in the Western sense, but is really the first science of the spiritual arrived at through the highest intuitive experience.

A picture of the polarity of Aristotelianism, with its science of the experience-able, and Platonism, with its eternal forms, helps us to see the relationship between Anthroposophy and Indian Thought as well as the problems that arise when each is taken in isolation from the other.

Aristotelianism is raised into the spiritual as initiation science in Anthroposophy, while the science of the eternal forms begun in Samkhya and reaching a culmination in Kashmir Shaivism, is echoed in Platonism. Much rather than seeing one “in the light of the other”, only a living process of dialectic, where each is seen/experienced *through its own light* can do justice to both.

In the process of dialectic with Indian Thought, thesis, and Anthroposophy, anti-thesis, one comes to experience a living synthesis. This is more than simply a thought-out synthesis, as one's whole soul becomes the stage on which the tensions and resolutions are experienced.

The realization comes that this experience of living synthesis is a door toward, a foretaste of, a *future state of being*. When neither dominates, when both the light streaming from the East as well as the well-delineated forms of the West are part of this synthesis, then light is shed on what confronts us in life and solid ground is found beneath our feet. From this can come *renewal* which can only start with the esoteric.

The process of dialectic, especially East-West dialectic, is a means of genuine spiritual research. From one perspective, the symbol of the cross is a primal picture of what is possible, the vertical representing the eternal, the horizontal representing time, and the crossing point of time and eternity, the *state of being*. While this applies to any state of being, the state of being found in this East-West Dialectic is foreshadowed, in its transition from old to new, in Steiner's Group Sculpture. The old is the manner of descent, while the new is the manner of ascent. Descent and ascent manifest as different orientations altogether and the transition is, from one perspective, the turning point.

Indian Thought, with its non-historical perspective, concerns itself primarily with the eternal origins of the universe, or as Steiner says in his lectures on the Bhagavad-Gita, the “eternal law” of the universe, thus the vertical. Even a picture of its cosmology is predominately a vertical picture. The picture from Anthroposophy through the seven planets is historical and predominately horizontal, despite there being a subdued vertical element.

Michael Judge then spoke from a Western scientific perspective starting with that which is perceptible by the physical senses. Western Natural Science was applied to Rudolf Steiner's spiritual scientific picture of evolution, addressing a Western need for physical evidence. So here perhaps, by demonstrating coherence in physical evidence and

evolutionary direction, we can begin to see a possibility of the decent of intelligent spirit into matter.

Spiritual Scientist Rudolf Steiner's "Lemurian", "Atlantean", and "Post Atlantean" evolutionary periods are claimed to be purposeful.

Michael's presentation addressed these from a conventional Natural Scientific point of view. Because these periods have an outer physical reality, methods of Natural Science should be able to analyze them.

Steiner in his most basic research reports that evolution can be looked at as 343 steps. Steps 162 to 185 encompass the three periods referred to above. These periods encompass the geologic periods of the Precambrian all the way through to the present Holocene in the Natural Scientific picture, Michael asserted.

Natural Science has its own specialized scientific vocabulary, as does Steiner as a Spiritual Scientist. Labels are not key in understanding, but observing phenomenon is the key. Natural Science is full of observable phases of developments in the geologic record. Steiner in turn reports on the inner reality of phases/steps in evolution. Rudolf Steiner claims that Natural Science and Spiritual Science done authentically should agree. The presentation plausibly and coherently demonstrated connection between the two, correlating each evolutionary step asserted by Spiritual Science with the periods and phenomenon in the geologic record from Natural Science.

Spiritual Science reports the Earth World has seven big evolutionary ages. The middle three ages are outwardly physical. Michael focused on age three the "Lemurian," age four the "Atlantean," and the 5th age because he could use the geologic record as a reference for analysis.

Additionally, each one of the big evolutionary steps of the Earth is comprised of seven smaller evolutionary steps.

There are seven smaller steps of what is referred to as the "Lemurian age" (Precambrian-Paleozoic-Mesozoic) which are revealed in the appearance of distinct animal forms and a relationship to mineralization (exoskeleton and endoskeleton).

The "Atlantean age" (Tertiary-Pleistocene) reveals its seven smaller steps in the geologic record with the age of mammals and the appearance of Homo (human) species.

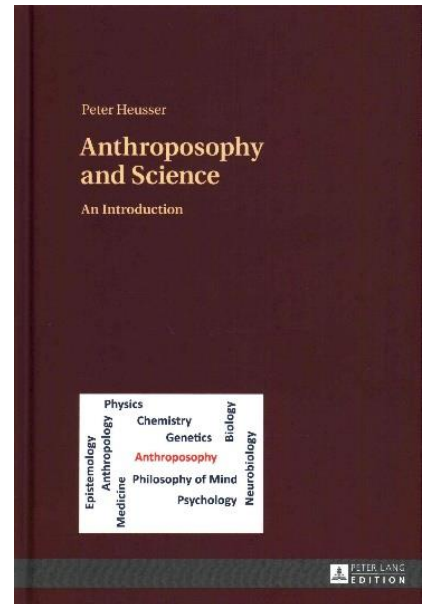
Lastly in the "Post-Atlantean" age, the Holocene/Anthropocene, the archaeology and history of Homo Sapiens reveals its seven smaller steps.

If and when coherence and direction are plausibly established from a material point of view in evolution, then one moves beyond that which is seemingly random. In doing so, intelligence/spirit is indicated. We can then begin to approach meaning and purpose originating beyond physical matter. This seems to be the spiritual path the West is destined to tread.

Video archive of Prof. Dr. Peter Heusser's Public Lectures



BRIDGING NATURAL SCIENCE AND SPIRITUAL SCIENCE



We wish that more of you readers could have joined us for the “Bridging Natural Science and Spiritual Science” conference in Spring Valley in early November 2018.

However, you can now view Prof. Dr. Heusser’s Public Lectures archived on our website.

These four lectures stand as a summary of his book, *Anthroposophy and Science: An Introduction*, and will hopefully serve as the basis of regional workshops continuing this work to promote an understanding of Rudolf Steiner’s epistemology on a modern, scientific basis.

Lecture 1: ***Is there a place for the spirit in physics and chemistry?***
– ***On the importance of epistemology for natural science.***

Lecture 2: ***Is there a chemical or genetic explanation of life?***
– ***A closer look on causality and agency in modern biology.***

Lecture 3: ***Does the brain cause consciousness?***
– ***A way out of neurobiology’s current doctrine.***

Lecture 4: ***From natural science to spiritual science.***
– ***Rudolf Steiner’s contribution to the evolution of science.***

Click [here](#) to register for video access.

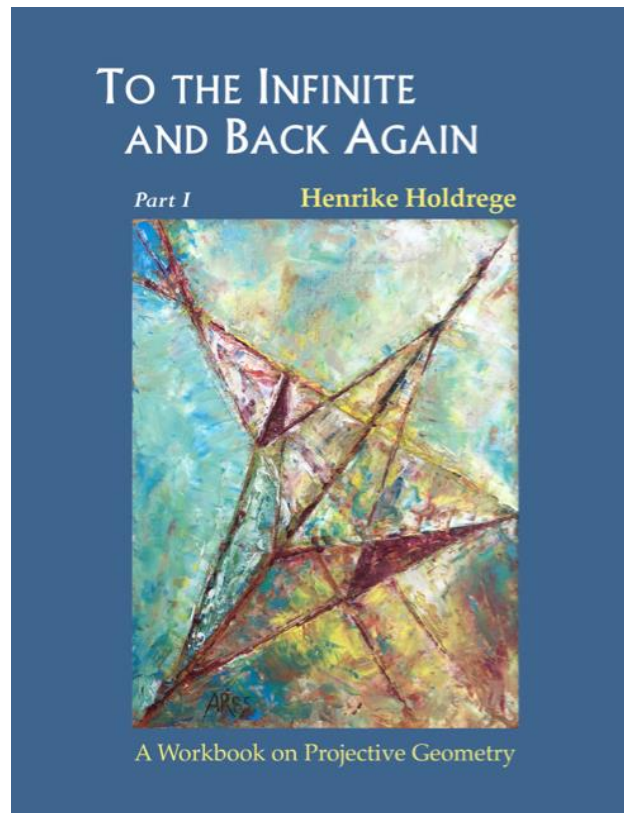
Announcement

To the Infinite and Back Again

By Henrike Holdrege

Great Barrington, MA: The Evolving Science Association, 2019.
Spiral bound workbook, 103 pages, \$18.

[Order from our Bookstore](#)



To the Infinite and Back Again provides numerous exercises that foster clarity of thought and precision in imagination. This richly illustrated book is a practice-oriented introduction to projective geometry. In working through the exercises, we learn to think transformatively and to experience a beautiful thought world in which ideas weave, grow, and metamorphose.

The book leads in a careful step-by-step fashion to the challenging idea of the infinite. We learn to think this mind-expanding concept, a concept that opens up wholly new ways of understanding. We begin to see that everything finite gains wholeness and coherence when we conceive of the infinite.

As a fruit of the author's many years of teaching, this workbook is intended for self-study by the lay-person and is a unique resource for high school and college math teachers.



Events at the Nature Institute

<http://natureinstitute.org/calendar/index.htm>

Friday, September 27, 7:30 pm

The Drama of Knowing – Connecting or Disconnecting?

A talk by Henrike Holdrege

For the past 21 years we have worked at The Nature Institute to develop ways of knowing that allow us to experience our connectedness with the world and to gain insight into the interconnected nature of things. It is no easy matter to overcome the deeply ingrained habits of modern intellectual thought. But that is a crucial task of our times, if we want to have any trust that the world's needs are being witnessed and can be addressed through human striving. Donations welcome.

Saturday, September 28, 9 am – 4 pm

Transformation through Nature Study

A workshop with Craig Holdrege and Henrike Holdrege

"As human beings we know ourselves only insofar as we know the world; we perceive the world only in ourselves, and ourselves only in the world. Every new object, clearly seen, opens up a new organ of perception in us." – Goethe

In this workshop we want to engage with a variety of natural phenomena through direct experience. We will see whether we can discover how each phenomenon opens up new aspects of reality, and in turn stimulates a transformation in our own capacities — what Goethe points to with his expression "a new organ of perception."

No fee. Please bring a contribution to a potluck lunch. *Please pre-register* (call 518-672-0116 or email info@natureinstitute.org).

Friday, October 4, 7:30 pm

An Emily Dickinson Evening

With Polly and Jan Kees Saltet

Emily Dickinson was on a course of constant exploration, unsentimentally probing nature and self. Her enigmatic poems hold untold secrets. They are often elusive, always fascinating. She obviously has "something to say" to modern-day humanity. The aim of this evening will be to enter into a number of poems dealing with nature and the soul —

*This Consciousness that
is aware
Of Neighbors and the Sun*

The evening will be framed with movement in eurythmy by Polly Saltet; Jan Kees Saltet will recite and elucidate the poems. Fee: sliding scale \$5 – 20.

Calendar of Events

October 17-20, 2019: **The Foundation Stone Meditations and the New Mysteries;** The Kolisko Institute Annual Conference (Pewaukee, WI)

<http://www.koliskoinstitute.org/foundation-stone-meditations-new-mysteries/>

November 13-17, 2019: **2019 Natural Science Section Conference: What is the Earth Asking of Us? The Human Soul and the Earth in Crisis** (Rudolf Steiner House, Ann Arbor, MI)

<https://www.naturalsciencesection.org/conferences/>

November 20-24, 2019: **2019 Biodynamic Association Conference: Cultivating Relationships; Earth, Cosmos, Community** (Lake George, NY)

<https://www.biodynamics.com/conference>

For Your Health: Three Free Webinars for practitioners, patients and the public, cosponsored by AAMTA and Friends of PAAM

November 13, 2019 **What to do when your child has an earache**

January 15, 2020 **Finding inner rest in an anxious world**

March 11, 2020 **Hints for a healthy diet and balanced digestion**

<https://anthroposophicmedicine.org/Patient-Resources>



Natural Science Section

www.forschungsinstitut.ch/en/

Mathematics-Astronomy Section

mas.goetheanum.org/en/mas/

School for Spiritual Science

Anthroposophical Society in America

www.naturalsciencesection.org

anthroposophy.org

Correspondence

Issues archive: www.naturalsciencesection.org/correspondence/

Subscriptions: subscriptions@naturalsciencesection.org

Submissions: editor@naturalsciencesection.org

Editor: editor@naturalsciencesection.org

Website issues: info@naturalsciencesection.org

Treasurer: Barry Lia, c/o Anthroposophical Society in America, 1923 Geddes Ave, Ann Arbor, MI 48104

Disclaimer: The opinions expressed are the authors' own and do not necessarily reflect the views of the editor or members of the Natural Science Section of the Anthroposophical Society in America.