

News from the Institute

Events

- The institute's senior researcher and educator, Jon McAlice, led a Waldorf teacher workshop in San Francisco last November titled "In Search of the Ineffable." He focused on practices of observation and imagination that enhance a teacher's capacity to live into the learning activity of their students.

- Our staff continues to have an extensive collaboration with the **M.C. Richards Program** — a full-time, yearlong course in trans-disciplinary and holistic learning for young adults run by Free Columbia. Meeting at the institute this past fall and winter, Henrike taught a course on the four elements as well as a course about light and color. Craig introduced the students to the practice of Goethean science in relation to the living world.



- Over the course of this past winter, a collaborative group comprised of institute staff and invited participants (including current and former attendees of our foundation course) met at the institute to investigate the **Phenomenon of Warmth** in its variety of expression. In March a group of invited participants and staff gathered for three and a half days to work further on the topic of warmth. On page 10, Jon McAlice shares some of the discoveries and fruits of this experiential work.



- At the end of January, our staff enjoyed an unexpected visit from Tomáš Daněk, a science professor at **Palacký University of Olomuc, in the Czech Republic**, who was traveling through the states with



his colleague, currently a fellowship student at a university in North Carolina. As an environmental studies teacher exploring holistic approaches to understanding nature, Tomáš first learned of our work from a colleague who interned at the institute. He was eager to see our campus and meet our staff. In conversation, Tomáš cited an all-too-common handicap for his students in environmental studies: Too much time in the classroom, not enough learning from the natural world.

- On March 1st, a new cohort of 15 participants began the institute's foundation course in Goethean science, "**Encountering Nature and the Nature of Things.**"



This intensive, low-residency program, offered since 2018, was extended from 12 to 15 months as of this year to allow students three months of online engagement with our teaching staff before arriving at the institute for their first residency in July. The 2022 cohort includes participants from Germany, Brazil, Malaysia, Egypt, the UK, as well as states throughout the US. Many are teachers themselves seeking a deepened encounter with phenomena and dynamic thinking to enliven their work. Other applicants come from the fields of art, medicine, farming, philosophy, or social work. We look forward to bringing this group together in-person this summer, when they will also be joined by students from a previous cohort who, due to Covid-19, have not yet attended a summer intensive.

- Craig gave a half-day workshop in March at the **Pfeiffer Center** in Spring Valley, NY, for participants in the center's year-long biodynamic agriculture training. Also in March, students in the fourth-grade class at **Hawthorne Valley School** came to the institute to study our extensive bone collection as part of their Human and Animal block.

- Jon McAlice gave a lecture in April on "Different Ways of Being on Earth — A Fourfold Perspective," at the Field Centre in Stroud, England. Later that month he spoke on "Flow, Form, and Imaginative Thinking — Steps Toward a Goethean Understanding of Water," for the **International Flowform Association** in Forest Row, England.

- On April 27, English professor Christina Root of St. Michael's College in Vermont, presented a public talk at the institute on **"Enlivened Seeing: Literary Encounters with the More than Human World."** Christina used two Shakespeare plays (*A Midsummer Night's Dream* and *King Lear*) to illustrate visions of nature that reflect very different kinds of consciousness. Her presentation articulated the importance of how the creative imagination, focused through Goethean practices of a delicate empiricism, allows us to see differently and, as Wordsworth said, "see into the life of things."

- **"Plants and the Living Earth"** was the focus of a four-day course from April 29 – May 1 at the institute led by Henrike Holdrege, Jon McAlice, and Craig Holdrege. The groups' activities included careful sensory observation and equally careful attention to how one learns to *be with* the phenomena being considered in an alive way. The intent of the course mirrored the overriding mission of the institute: to truly see and experience nature as dynamic, interconnected, and whole so that our interactions support a healthier co-evolution of humanity with the natural world.



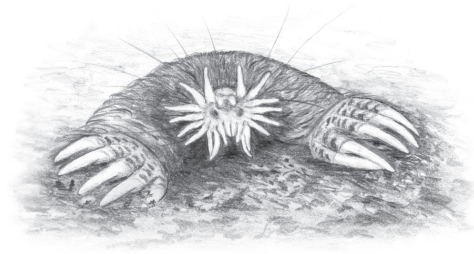
New Podcast Episodes

at *In Dialogue With Nature*



Enjoy our work in audio! At our podcast page (<https://www.natureinstitute.org/podcast/in-dialogue-with-nature>) or wherever you access podcasts, all our episodes are available including recordings of these recent events:

- At the **Annual International Conference of Biodynamic Agriculture** in Dornach, Switzerland, in February, Craig gave a keynote address on the qualitative experience of nature as a conscious practice. The full talk, "Being with the World – A Pathway to Qualitative Insight," is now available at our podcast. (A distilled written version of the presentation by Craig is featured in this issue on page 15.)



IN MEMORIUM



GERTRUDE REIF HUGHES, 1936–2022

We note with sadness the passing on January 4 of Gertrude Reif Hughes, an important friend of The Nature Institute and a member of our Advisory Board. Gertrude was born in Amsterdam, The Netherlands, but in 1940 her family emigrated to New York City. There she was a student at the Rudolf Steiner School. After graduate work, she was a professor for 40 years in the English Department at Wesleyan University, retiring in 2006. She loved teaching and was one of very few women teaching at Wesleyan in the 1960s and 70s. During that time, she also helped found its program in Women's Studies (now Feminist, Gender and Sexuality Studies) and served as its Chair. She had a deep interest in the phenomenology of nature, and we are grateful for her longstanding support.

- The mole was featured in the March episode of our podcast, in a reading by John Gouldthorpe of Craig's article, **"How Does a Mole View the World,"** which first appeared in *In Context* #9 and is excerpted from Craig's new book, *Seeing the Animal Whole – And Why It Matters*. The reading, followed by a conversation between John and Craig, invites you to enter into the dark, cool world of the star-nosed mole and leave behind most of what is familiar to you.

- In a public talk given at the institute last November, senior researcher Steve Talbott shared personal reflections on his more than 20 years investigating quantitative versus qualitative approaches to the study of life. A link to an edited version of the live talk, **"Gestures of a Life,"** is now on our podcast page and a video of the full talk is at <https://www.natureinstitute.org/videos>.

Attending to Warmth

JON MCALICE

“Today the world warmed up to a lovely twelve degrees above zero (Fahrenheit)¹. The wind was still. It was pleasant to stand in the sunlight and feel its warmth on my cheeks.” That was my journal entry for January 22 of this year. The previous days had been colder with temperatures well below zero and biting winds. Those were days we only ventured outside to get another load of wood for the fire, days when the best place to be was next to the woodstove with its friendly mantle of warmth. When the children come in from sledding or skating, they congregate by the stove standing around it with their friends in a loose semi-circle. It is not a rigid semi-circle. It grows as the children warm themselves. Cold children stand closer to the fire than warm children do.

The cold days of winter give us an opportunity to appreciate the nature of warmth differently than a warm summer day does. The contrast between warmth and cold is more present, more immediate. It seems somehow sharper. In the summer we often find ourselves looking for a place to cool down and move from the sunlight into the shade. Although it is only marginally less warm in the shade, we experience a coolness. The opposite is not the case. We don't feel warmed when the temperature rises from -4 to 5 degrees. We may merely feel a little less cold.

Temperature changes in the middle of the summer affect us differently than the winter changes. In the winter we grow accustomed to the lower temperatures and a slightly warmer day feels pleasant even if the temperature remains low. If the temperature drops suddenly in the middle of summer, even a 50-degree day feels decidedly uncomfortable. These differences in how we experience the ambient temperature are illustrated dramatically in Ernest Shackleton's narration of the Endeavor expedition to the South Pole.² After weeks of living under the most primitive conditions at temperatures well below zero, the men would strip down to their t-shirts whenever a day came when the weather was warm enough to even begin to melt the top surface of the ice.

Our relationship to the warmth in the world around us is always dynamic. If I place one hand in cold water and the other in hot water, then lukewarm water feels quite different to the hand that was cooled than to the hand that was warmed. The cool hand is warmed by the lukewarm water while the heated hand is cooled. Something similar is apparent if I observe the movement of the alcohol in a thermometer. If I first place the thermometer in ice water, then in warm water, the alcohol is warmed. It expands and climbs up the capillary tube in the center of the thermometer. I see the temperature rising. The opposite holds true for a thermometer placed first in boiling water. The alcohol is cooled. It contracts and

1. All temperature readings are given in Fahrenheit.

2. Shackleton E. *South*. The Lyons Press; 1998.



Top to bottom:
Submerging hands in water to compare sensing of warmth.
Watching how colored cold water at the bottom of an aquarium rises when it is warmed from below.
Heating a copper pipe with steam and observing how it expands.

sinks in the tube. In each case I perceive a change resulting in a state of equilibrium as the warmth of the object and the medium equalize. If the warm water into which I have placed my hands is close to body temperature, at a certain point I am no longer certain where my hand stops, and the water begins. The warmth boundary, as it were, disappears.

For the past year, we have focused our shared research at The Nature Institute on the phenomena of warmth. Can we do as Goethe did for the phenomenon of light and develop a series of considered experiences of and experiments with warmth that allow us to understand more clearly this presence in the world? The work has taken practical form in weekly studies and observations with local colleagues and two intensive research symposia in November 2021 and March 2022 during which we have been joined by others from further afield. Each time we have focused our work on specific experiments or series of experiments.

Both the weekly studies and the symposia serve as testing grounds for developing collaborative research methodologies.

Why warmth? In conversations over the course of the last two years, we have returned periodically to the question of the role science can and should play in addressing the challenges facing us today. One aspect of a future-bearing science rooted in the experienced present is to recognize what we don't understand. At the moment, much of what we don't understand is of a

paradigmatic nature, meaning that the way we approach understanding blinds us to the nature of what it is we are trying to understand. Warmth is one of the factors in our world that asks to be understood differently. The shift in understanding begins with taking our experiences of warmth seriously. These experiences extend from the sensuous through the psychological into the ideal. In the ideal we experience warmth in relation to an idea. The radiant warmth of the sun, the presence of a much-loved friend, the enthusiasm that gives birth to a new initiative — these all bear the signature of warmth. If you search for synonyms for warmth, enthusiasm is at the top of the list. The current mechanistic model of heat sheds some light on a rather narrow aspect of the way warmth comes to expression in matter. It does nothing to help us understand warmth as we meet it in the world and as it brings itself to expression within us. Nor does it help us understand how what we experience as inner warmth — for instance attentiveness, engagement, compassion — relates to the health and vitality of our surroundings. Is perhaps human warmth, or the lack thereof, also a factor in the shifting of our planet's warmth organism?

From Our Mailbox

To Steve Talbott:

"I just read your excerpt "Genes and the Single Organism" from In Context #46. Your articles have a wonderful effect on me, providing a much needed counter-balance to the patterns of thought I encounter on a daily basis as a professional geneticist and breeder. Keep up the excellent work!" — Jeffrey Endelman, geneticist

To Craig Holdrege:

"I heard a lot of positive responses to your speech. Though it lasted only 50 minutes, you made your points rather clearly and powerfully. In particular, Prof. Lin, the Dean of the School of Education, was deeply impressed with your thoughts. Just two days ago, echoing your discourse, she openly made a claim to all faculty of the university that the School of Education would adopt an ecological vision for its future development. Although I consider her voice to be still unique in the dominant market-oriented higher education realm, at least such a voice is no longer inaudible. I believe more and more people will choose to join the stream of living thinking and to make concrete actions for sustainability. Thanks for your enlightening contributions."

— Hornfay Cherng, Director of Center for Waldorf Education, National Tsing Hua University, Taiwan

To Henrike Holdrege:

"Thank you for leading me down the journey of noticing. Since the start of this course, I have begun to notice so many wonderful phenomenal events and instead of passing them by with explanation, I now stop and observe."

— Ann Pasquinely, teacher

Drawing Closer

ELLA LAPOINTE

In 2021, as part of my distance learning portion of the institute's foundation course in Goethean science, I read Craig Holdrege's book *Thinking like a Plant*. Craig then invited our cohort to take up a weekly practice to observe phenomena of growth and decay in plants and make notes and drawings of our observations. Craig also mentioned we could team up with another course participant and share our impressions.

I sprouted a garlic knob, lemon seeds, and a fava bean and later brought in a few budding twigs to watch leaves or blossoms unfold. I observed and drew the same plants every day for several weeks. A student on the West Coast and I decided we would meet virtually once a week. We tried to describe what our plants were doing and what qualities we noticed, showing each other our drawings. We both experienced, at times, difficulty when describing the plants we observed. Saying "it's growing" or "the bud is opening" fell short when what was essential was not *that* it is growing but the quality and specific gesture of this plant's growth or decay. There were moments in the plant's unfolding that we didn't yet have words for; often, we had to use physical gestures to show what appeared in the plant and utilize *borrowed* words such as "those tight little envelopes," "those tiny fans," and so on, to try to convey what we perceived.

I remember that earlier in the course, I was impressed by the portrayals of natural phenomena in our "course reader." I was amazed by the excerpts from Nan Shepherd's *The Living Mountain*. The capacity to be with the mountain (or nature) so entirely and describe it so faithfully and beautifully seemed a worthy endeavor, almost an existential one. I felt this capacity was quite out of my reach. And I wondered, does being *experienced* in this way matter to the mountain?

Drawing plants began to facilitate an experience of returning to the *same* phenomenon and finding *it* changed. The humble little garlic sprout on my windowsill created its very substance, given a touch of water and enough sunlight. The growing plants displayed a generosity of form

and transformation. Sometimes a change was so subtle I only noticed it once I began drawing, and sometimes, so much happened in just 15 minutes or overnight (my fava bean sprout grew like a magic beanstalk). Drawing also became a way to study — Where does plant growth happen? What changes? What extends and how? Growth appears differently in a fava beanstalk than in a budding forsythia twig. Each plant's unique rhythms and forms, and one leaf to the next in the same plant, felt worthy of attention. It is hard to overstate how nourishing it can be to attend to this mystery of growth and decay in various plants.

In the process of drawing, we attend to the shapes of *things*, but paying close attention to the forms of in-between spaces (negative space) is equally essential for accuracy in a drawing. I think these in-between spaces, of light and the air around and between the leaves, are also vital to the plants' healthy development.

Eventually, the limitations of this indoor investigation became apparent. A bean needs a garden bed, a twig needs the entire bush, a garlic sprout needs deeper soil, and more light than my studio could offer. At first, almost all the plants were thriving, but each one reached a point where they didn't have the environment they needed to continue. I continued to draw some of the plants as they revealed more of this reality of the inadequate environment. Observing and sketching this process of withering and decay was no less inspiring, but this was an uncomfortable side of the process. I realized that what I sprouted could not thrive under these conditions. Perhaps a shift began to happen, away from "What can nature give me?" and toward a more whole encounter.

