

News from the Institute

Scenes from a Two-Week Course in Brazil

In November, Henrike and Craig went to Florianapolis, Brazil, to give the first part of a four-week course (to conclude next November) called “Seeing Nature Whole—Foundations of Goethean Science.”



A New Challenge Grant!

A Nature Institute supporter has generously offered to donate up to \$5,000 as a matching gift. If we match the grant with your help, we will use the funds to support our education programs. This will allow us to give scholarships to course participants, charge reduced fees for programs, and provide fellowships for young researchers.

So every dollar we receive by June 30 will be matched up to \$5,000. You can make a gift by check or credit card using the enclosed envelope, or by credit card through our website.

(<http://natureinstitute.org/friend>)

Thank you!

Mentoring and Fellowships

This winter and spring we've welcomed a number of people at the Institute for mentoring and fellowships.

As many friends of the Institute will know, Craig has built up an extensive bone collection over the years, a collection that has played a significant part in his teaching about animal form and morphology. At times, Craig received those bones already cleaned and, at times, he was given the whole animal and cleaned it himself. This January and February, Erin Corrigan, an intern at Hawthorne Valley School's Earth Program, came in weekly to work with Craig and Henrike in cleaning a number of new specimens for the collection. She also participated in a study of the book, *Goethe's Theory of Knowledge*, by Rudolf Steiner. The study was led by Seth Jordan.

Gopi Krishna Vijaya, a participant in our 2018-2019 year-long program in Goethean science, joined us for the month of March as a fellow at The Nature Institute. During that time, Gopi took up an intensive study of star colors, focused primarily on the stars in the zodiac. He paid attention both to naked-eye and telescopic observations, while also studying the Institute's extensive astronomical literature that we received from the collection of the late Norman Davidson. Davidson was an educator who wrote the book *Sky Phenomena: A Guide to Naked-Eye Observation of the Stars*.

And in May, Maira Ferraz, another participant in the 2018-2019 year-long program, joins us for three months in order to work on the completion of her Ph.D. thesis, dealing with the Goethean approach to science and its relevance for the study of geomorphology.

At Home and Abroad

This past September, we celebrated **the first two decades of our work** at The Nature Institute with a weekend talk and workshop. On Friday evening, September 22, Henrike shared memories of our founding and Craig offered a talk with slides entitled "Where Does an Animal End? The American Bison." (We've since shared this presentation online. You can find out more about it in Publications and Resources on page 6). Then, on Saturday, Craig and Henrike led a day-long workshop on "Learning to See the Animal." One highlight: spending an hour in the afternoon just sitting alongside Hawthorne Valley Farm's herd of cattle and observing as the herd grazed in the field that is neighbor to our own land.

In October, Craig traveled to Middlebury College in Vermont to make an invited presentation as part of a new, innovative course being offered on "**perennial thinking**." The class had already read Craig's book, *Thinking Like a Plant*, and his presentation led to a lively and engaging conversation with the students.

Craig traveled to Kassel, Germany, in December, where he gave four keynote talks on "**Contextual Approaches to Understanding Life**" as part of a week-long conference for Waldorf high school students. Also, Craig and Axel Ziemke, a biology teacher, gave a course on evolution for students with a special interest in biology.

During our winter course (next page), the Institute hosted a celebratory book launch for Wolfgang Schad's *Understanding Mammals*. Both Craig and John Barnes of Adonis Press, the book's publisher in the U.S., gave presentations about Schad's work. See the feature article by Schad on page 8 to learn more about him and his work.

Early in March, Craig and Henrike were in Pasadena, California, to offer a talk and all-day workshop on "**Learning to See the Animal**" for the public and students in the teacher-training program of the Waldorf Institute of Southern California.

Later in March, Craig drove down to the Pfeiffer Center, a biodynamic farm and educational center in Chestnut Ridge, New York, to give a half-day workshop on "**Plants and Animals: Contrasting Ways of Being**."

Then, at the end of March, Henrike and Marisha Plotnik, a long-time colleague who teaches at the Rudolf Steiner School in Manhattan, led a weekend workshop for class and math teachers on "**Negative Numbers and Linear Equations**." It was part of their ongoing series of *Mathematics Alive!* courses.

In early April, Craig traveled back to Kassel, Germany, this time to give a keynote talk about **the American bison** and a course on **evolution** at an International Professional Development week for Waldorf educators and teacher trainees.

Later in April, Jennifer Greene, founder of the Water Research Institute in Blue Hill, Maine, led a special weekend at the Institute, based on her phenomenological approach to understanding the qualities of water. She gave an evening talk, “**Goethean Science and the Native Science of Indigenous Peoples,**” which took up the subject of

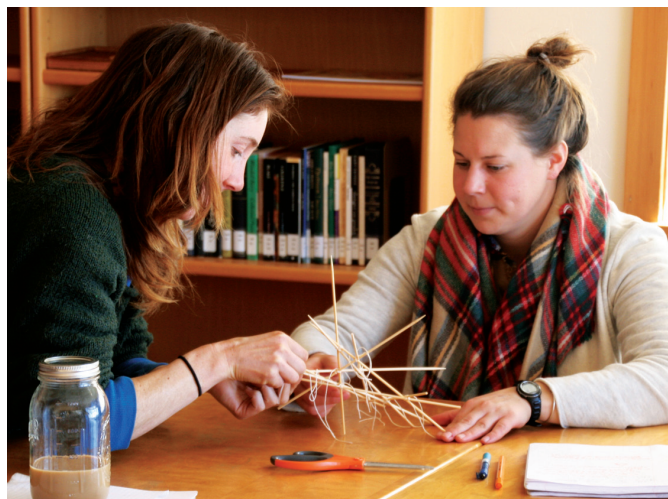
Goethean science more generally. Then she led a weekend workshop that brought participants deeper into the nature of water as an element of our experience that “serves all life without prejudice.” The title of her workshop: “**Moving, Forming, and Rhythm in Water Flow: Experiencing and Understanding the Fluid Event of Water.**”

2019 Winter Course

In February, we again offered a week-long winter course at The Nature Institute, this time on “The Nature of Animals and Developing Dynamic Thinking.” Each morning began with exercises in projective geometry. We then shifted our focus to nature. We considered the qualities of minerals and crystals, and then plants, which helped us to see more clearly the special characteristics of animals. Through the study of animal skulls and spines, we could experience the deep wisdom that lies at the heart of animal form and learn how every part is an expression of the animal as a whole. The perception of form was enhanced each afternoon through exercises in clay modeling that Henrike guided. In reflecting on their experience afterwards, participants shared comments like those below:

Your ability to lead students to grasp their own understandings is a breath of fresh air to a student who has only experienced conventional education systems. All I want now is to learn more. So if that is the intention of your course, you have completely succeeded. I love projective geometry and bones!

One of the things I appreciated the most was the leading nature of the lessons. It was about slowly discovering a concept or idea, piece by piece. This occurred within an individual lesson, but also over the course of the week as a whole. I appreciated how the two areas (geometry and mammals) connected in the clay sculpting of the bones. Having the time to experience the bones really opened my eyes to all sorts of small discoveries. Giving time to just looking and categorizing them in our own way developed the ability to really see the small differences in the skulls and bones. Also the tactile nature, holding the bones, feeling the teeth, etc., grounded the ideas and discoveries in a reality — the physical world — that we all experience. After the evening session when we put together the spinal



Visualizing Girard Desargues' theorem about perspective triangles.

columns of the animals, one being a cow, I went to the farm and looked at the backs of the cows in a whole new light. I began to imagine the internal structure that forms their bodies and recognize the internal structure within the cow as a whole. Thank you so much for the course and for sharing all your knowledge and perspectives with us!



Winter course students modeling animal bones in clay.

Still Ahead

- In June we are co-sponsoring with the Center for Social Research a talk and workshop with social scientist Christopher Schaefer on his forthcoming book, *Looking for Hope in Difficult Times*.
- This June we also begin our second year-long, low-residency foundation course in Goethean science. We are preparing for another very full group of participants and we look forward to beginning this work together!
- And in July we have the final session of our first year-long foundation course. The participants came together for the first time last summer, and since then have been studying and working with mentors on their own individual projects aimed at practicing Goethean methods.

Researching Crop Plants

Craig Holdrege and Judith Madey, a local farmer and long-time student of Goethean science, will begin a two-year research project this spring called “Learning from Plants: The Stories of Two Agricultural Plants.” They will study and portray two important, widely grown crops: alfalfa, a perennial, and corn, an annual. Their project will address questions such as: What are some of the salient features of these two crops? How do they reveal to us different ways of being and ways of interacting with the larger environment? What role do they play and have they played in agriculture? How can we learn from these plants to think and act in more plant-like — that is, transformational and context-sensitive — ways?

This research is being supported by the New Perennials Project, which is housed at the Rockefeller Family Fund. The project’s director, Bill Vitek, conceived the idea of comparing the qualities of a perennial plant with the qualities of an annual after conversations with Craig and Henrike. Bill is Professor of Philosophy at Clarkson University in Potsdam, New York. The New Perennials Project has roots in the work of The Land Institute in Kansas, where Craig and Bill first met. The project, like The Land Institute itself, is not about quick ecological fixes. Instead, it strives to foster the kind of far-sighted thinking that concerns itself with protecting all forms of life on earth for the long term.

The Nature Institute is very glad to have Judith Madey as a colleague in this research. She participated in a three-month course in Goethean science that we offered back in 2006, writing an article for *In Context* based on both her long experience as a cow herdsman and her close study of cows during that course. She has decades of experience in farming. We will keep you abreast of this project in future issues of *In Context*.

Publications and Resources

An addition to our online Ronald H. Brady Archive: Ron Brady was a highly respected friend and colleague, and a professor of philosophy at Ramapo College in New Jersey for over three decades. Since his passing in 2003, we have created an archive of his papers and articles on our website, and have recently added his Ph.D. thesis to the collection. Titled “Towards a Common Morphology for Aesthetics and Natural Science: A Study of Goethe’s Empiricism,” it fleshes out the idea of metamorphosis in Goethe’s thought and looks at historical interpretations of morphology from Linnaeus, Owen, and Darwin, to modern phylogenetic morphology. It also explores the relation between aesthetics and natural science. You will find it on our website at <http://natureinstitute.org/txt/rb>.

A new article in our Biology Worthy of Life Project: As Steve Talbott continues working on his new book, he is posting chapters online. You can find one of them, “The Organism’s Story,” on the Biology Worthy of Life page on our website. Here’s how Steve describes it: “The fact of purposive activity — the obvious play of active agency, the coordination of means toward the realization of countless interwoven and relatively stable ends, and the undeniable evidence that animals perceive a world, interpreting and responding to perceptions according to their own way of life — all this tells us that every organism is narrating a meaningful *life story*.”

Craig quoted in *National Geographic* online: This fall, Craig was contacted by a writer working on an article for *National Geographic*’s website about new research into the spot patterns of giraffes. Craig acknowledged that the research has shown some relationship between the coat patterns of mothers and those of their young. But he also sounded a cautionary note about conjectures that such inherited patterns merely represent mechanisms for survival. You can find the article online by searching for “Baby Giraffes Get Their Spots From Mom.”

And a new video — Craig’s talk on the American bison: This past September at the Institute, Craig shared the fruits of his many years of research into this fascinating animal: its physical constitution, its relationship to its ecosystem, its life as an individual and as part of a herd, and its relationship to Native Americans. Through examining the American bison closely, Craig shed light on the boundaries of animals and how the demarcations aren’t as clear as we might expect. You can find the video on our website at <http://natureinstitute.org/media>.