I went through Hell to get to the Goetheanum for the Natural Science Section's *Evolving Science 2015* conference, September 30 through October 4. No, not the airport security lines and overnight flight from Seattle, but through a small picturesque train stop, on the trip from Oslo to Trondheim, named Hell¹. I was on my way to visit Soili Turunen at Camphill Rotvoll. After a day of Michaelmas festivities, Soili told me the biography of Lili Kolisko—which she is writing—as she showed me many of Kolisko's original Steigbilder first-hand.

Then just a couple days later at the conference in Dornach, I sat in the Glashaus with leading European representatives of the Steigbilder as well as the sensitive crystallization and drop picture methods. I had the opportunity to speak to Jürgen Fritz of a possible application of cognitive science to the picture work. This working group on Picture Forming Methods was a great help in my own preparation for our upcoming conference in Chicago on the subject, co-sponsored by the Biodynamic Association and the Natural Science Section in North America.

My steering committee colleagues from the Section in America attended other working groups: John Barnes joined the group considering how the life sciences and *Goetheanismus* are approaching one another, Andrew Linnell was with the group contemplating etheric and astral perception, and Jennifer Greene co-led the working group on water phenomena with European colleagues from the Institut für Strömungswissenschaften in Herrischried.

During a preparatory conference in 2014, the three-part theme of this year's *Evolving Science* was explored and defined: "*Shaping Goethean Science in relation to Nature, to Society, and to Anthroposophy*." To this end the Glashaus team—Johannes Kühl, Laura Liska, Matthias Rang, and Johannes Wirz—organized keynote speakers, panel discussions, professional meetings, research presentations by participants, World Café discussions on the three related themes, various working groups—from the more scientific to the solely intuitive—and artistic courses and local tours. We were able to survey the three themes as listeners, co-workers, and participants. That made for a very rewarding and thought-provoking conference. Personally, I came away spurred to elaborate on my own short presentation—the

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¹ The Norwegian word "hell" comes from Old Norse for "cave," but can also mean "luck."

ontophyletics of the "occult" [literally "hidden"] morphology of the retina at the back of the human eye—inspired by the Goethean spirit of evolutionary biology shared by so many presenters.

Living as I do in the far Northwest corner of America, I see our Goethean "center of gravity" weighted situated toward the east. In the Southwest, Mark Riegner and Martin Lockley apply Wolfgang Schad's three-fold theme in their acadamic work on birds and dinosaurs. In the Midwest, Walter Goldstein does vital seed work at the Mandaamin Institute and True Botanica employs Lili Kolisko's germination experiments in validating potencies. But in New York State there is The Nature Institute and the Saratoga Experiential Natural Science Research Institute. And up in Maine there is The Water Research Institute of Blue Hill. Most of our Section members live in the East as well. Even so, America is yet a frontier in the Goethean work.

Meeting participants at the conference gave me a further look, across the "Pond" to England. There one finds Margaret Colquhoun's Life Science Trust at Pishwanton Wood, the Field Centre of Ruskin Mill Trust near Stroud, and many other active sites. Goetheanism inspires Judyth Sassoon's work in paleontology at the University of Bristol. Alasdair Gordon strives to inspire Waldorf science education with a morphological thinking approach. I was able to participate as an American visitor in a professional group which met during the conference to work on the Collaborative Research Programme under the aegis of the Natural Science Section in the UK and the Ruskin Mill Field Centre. Their aim is to build a research collegium in the English-speaking world in collaboration with the Research Institute at the Goetheanum.

And finally, towering even higher over the horizon, is all the long-established fundamental work emanating from the Goetheanum since Rudolf Steiner's time and continuing in numerous other research centers across Europe as well. Standing in the Glashaus library, looking at stacks of reports and books, I felt like any of my questions have probably already been addressed! Nowhere in America or England do we have anything like the Research Institute at the Goetheanum, the Ita Wegman Klinic, the Universität Witten/Herdeke, or the Louis Bolk Institute. Although there are a few excellent academic researchers studing biodynamic agriculture in the US, there exists no university department as at Kassel. I was thrilled by the number and quality of intriguing doctoral theses from the Institut für Evolutionsbiologie outlined by Wolfgang Schad in the closing presentation Sunday morning.

All in all, it made quite an impression on an American to see so many people gathered in the historic Schreinerei in support of Goethean and anthroposophical science.

Throughout the conference, a balance of German and English presentations was ably translated by Bernard Jarman and Jara von Lupke, making for a truly international event accessible to all participants. English-speakers—and we slow German-readers—often find ourselves on the periphery, eagerly awaiting translations of the few books that make it our way. On that note, I am pleased to announce that just after the conference Adonis Press released Johannes Kühl's book in English, *Rainbows, Halos, Dawn and Dusk*. And our Natural Science Section in America is planning an academic conference to follow the upcoming publication by Adonis Press of an English edition of Wolfgang Schad's expanded *Man and Mammals*.

Indeed, it happened to be a mammal from the American backwoods which figured in the English keynote speech by Craig Holdrege from The Nature Institute. Craig related naturalist Aldo Leopold's experience of the "fierce green fire" in the eye of a dying wolf shot in the wilds of the American West—one of the experiences in Nature which led Leopold from a conventional scientific stance to eventually call for a "land ethic" in which we become members of the larger community of life. The experience of that wolf-presence was a step for Leopold as a scientist on a Goethean path of transformation of experience, which Craig characterized as moving from 'thinking about' to 'thinking with,' then to 'pictorial thinking,' and ultimately to 'perceiving-thinking.'

The next English keynote speaker, Diana Pauli (daughter of Goethean color scientist, Michael Wilson) referred to Craig's four levels of thinking, and told us how her own meditative work led to insight about autism. Considering the weakness of ego in these persons, she finds that *changes* in the color of the illumination of the room can free up the astral body at key points during intensive work with the therapist. Diana emphasized the practical application of such anthroposophical science; she suggested that if we are to work within Society, such observation and meditation needs to be followed by conventional validation.

Fred Amrine, from the University of Michigan, then stood up for the last English keynote speech only to challenge what is conventionally held valid itself. He brought thoughts from American philosopher Thomas Nagel's succinct and important book: *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is almost certainly false.*²

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² Reviewed by Amrine in the US Society newsletter, *being human*, Fall 2015, pp. 46-50.

Diplomatically, Nagel writes: "My aim is not so much to argue against reductionism as to investigate the consequences of rejecting it—to present the problem rather than to propose a solution" (p.15). Towards such a solution, Fred then led us through a "genealogy" of scientists and philosophers—Spinoza, Goethe, Jakob von Uexküll, Maurice Merleau-Ponty, Jesper Hoffmeyer, Victor Zuckerkandl, Ronald Brady— and on to Rudolf Steiner's *Grundlinien einer Erkenntnistheorie der Goetheschen Weltanschauung*. Fred declared that this foundational work of Anthroposophy, unrecognized in contemporary scholarship, lays out a much needed epistemology for the contemporary search for understanding the "emergence" of life and consciousness, which Nagel shows reductionism cannot. Fred barely sat down before he then had to leave for New York to speak at a conference of the Goethe Society of North America—devoted this year in fact to Goethe's scientific work.

My steering committee colleagues and I are also now back home in the US, resuming our weekly conference calls, feeling inspired for greater ambition, and striving to build stronger connections with the Goethean activity in Europe.

But Goethean inspiration *can* be found in America! Soon after returning, I watched a clever car commercial on TV during the Sunday football game, which portrayed a crash test engineer carefully and concernedly loading the test car with dummies that look just like himself and his family members. Yet he confidently presses the launch button. Then as the car speeds towards the crash wall, we are shown the usual face-less crash test dummies. Extolling the safety of their cars, we hear: "When you don't think of them as dummies, something amazing happens." I was struck by the accidental analogy to reductionist science—how phenomena *are* conventionally treated like mere crash test dummies, but that something amazing *could* happen if we *didn't* think of them so.

Barry Lia

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³ https://www.youtube.com/watch?v=DfvpF4RRGAE