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Volume 5 Issue 1

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5th Annual
International
MysTech Conference
Consciousness,
Artificial Intelligence,
and Virtual Reality
August 11-13

In-person & online

Eastside Community School
Issaquah, WA

See [page 3](#).

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

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Editor's Note

We are now in our fifth year of *Correspondence*, but you have not seen an issue since October, 2021. After the activity surrounding the monthly online colloquia we produced last year, I must say I suffered “editor’s block.” At this point, I have to apologize for missing announcements for two geology events this summer. I’ll try get reports on those meetings for upcoming issues. We are working on publishing our first pilot research report next issue.

And now there are only a few days left to register for the 5th Annual International **MysTech Conference** ([page 3](#)). It will be held in hybrid format (online and in-person).

This October in Dornach, the **Autumn Conference of the Natural Science Section** is titled “Dancing with Polarities—The Human Being Between Nature and Technology” ([page 4](#)). The theme arose through a broad collaboration of Section leadership here in the States and in the UK together with the Section leaders in Dornach. Several steering committee members took an active role this year. It has been a significant development that the steering committee has established monthly conversations with the Dornach Section leadership for the past year and more.

In our **Commentary Section**, we have two contributions. The first pertains to the MysTech work and arose out of a somewhat tongue-in-cheek challenge from the editor to Andrew Linnell to comment on an article in the online magazine, *Psyche*, claiming “The sex tech to come could offer more than ‘the real thing’” ([page 7](#)). The topic may repulse some readers, but Andrew treats of the broader issues of our bionic and even transhumanistic future.

The second commentary, pertaining to the Autumn Conference in Dornach, is a ‘reader’s digest’ of an essay which appeared in the online *Emergence Magazine* by David Abram, “Magic and the Machine” ([page 10](#)). It deals with perceptual-participatory roots of both our ecological despondency and technological optimism. You

would, of course, do better to read the entire essay—reading being what Abram would speak of as a transformed protoanimistic skill engaged with the magic of the phonetic alphabet. Admittedly, he deploys this skill through digital technology in asking whether we can maintain our animistic relation with the more-than-human world as we attend more and more to these computer screens and to speaking machines.

Don’t miss another cartoon from our Facebook page ([page 15](#)). And we are always grateful for your generous support ([page 16](#)).

For ease of on-screen navigation, we have set up the **Contents subheadings as internal hyperlinks** (without underline) and put “Back to top” links at the bottom of each page.

As always, 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



MysTech News

5th Annual International MysTech Conference

August 11 through 13

ONLINE & Eastside Community School, Issaquah, WA

Need financial assistance to attend? Email info@cfae.us

Click on the image below for info and to register.

The poster features a dark, swirling, abstract background with vibrant colors like blue, green, and orange, resembling a cosmic or spiritual theme. The text is centered and reads: "5th Annual International MYSTECH CONFERENCE Consciousness, A.I. & Virtual Reality". Below this is a red button with white text that says "For More Info & To Register".

*5th Annual
International*

MYSTECH CONFERENCE

Consciousness,
A.I. & Virtual Reality

For More Info & To Register

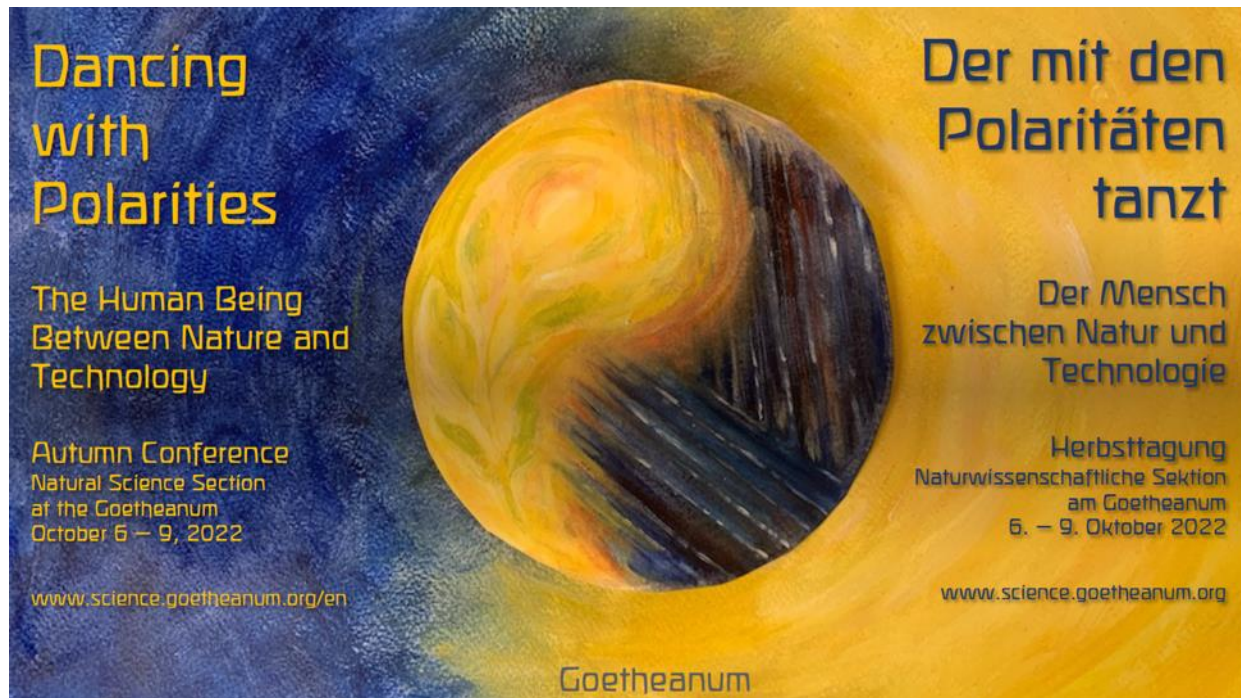
DON'T MISS THE EVENT OF THE SUMMER
3 Days, 20 Speakers
In Person & Online
August 11th thru 13th
events.mystech.org

Gain new insights about the mysteries of technology from the perspective of spiritual science through the original research of distinguished speakers across a broad range of fields of study.

Gain a new appreciation of the impact technology has had on us in our evolution as both physical and spiritual beings while learning new ways of thinking that can help us meet the future challenges of the modern age.

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Goetheanum Section News



Dear Friends of the Natural Science Section at the Goetheanum!

In the 21st century, human beings live in response to contrary impulses such as those provided by the world of Nature and that of technological developments defining our times. Rather than seeing this as a polarity or even as good vs. evil, this conference seeks to illuminate the effects of each on the esoteric physiology of the human being. By carefully observing the consequences of our interactions with digital technology and with nature we will begin discovering the forms and gestures underlying each.

As human beings standing between the heavens and the earth, we embody many types of responses to the polarities within which we exist. A rhythmic alternation between expansion and contraction forms our heartbeat and our breathing, waking and sleeping, birth and death. In contrast, modern digital technology leads to automation and in turn automaton-like thinking. Rudolf Steiner outlines that human beings can develop a spiritual knowledge in which they rise just as high into the supersensible nature as they descend into sub-nature with technical activity. They thereby unfold within themselves the power to resist this risk.

A first step on the way to supersensible-nature is Goethean science. It creates healthy and conscious relations by exercising perception and a living thinking, as well as a field of practice for the reflection of the connection of both in cognition.

We invite you to explore this subject and the crucial role that the human being can play consciously in Nature and Technology.

Format

- We cordially invite you to submit short **presentations of your research projects**, for which will be provided a time frame of 15 min., inclusive of subsequent short discussion (approx. 5 min.). In addition, or alternatively, projects can be exhibited as posters. We ask for titles and short summaries until **September 15, 2022**. Submission is possible [here](#).
- The conference will be held in both **German** and **English**.
- Registration and general information may be found [here](#).
- If participation is not possible for financial reasons, please do not hesitate to contact us: science@goetheanum.ch

We are looking forward to your participation!

*Johannes Kühl, Matthias Rang, Ruth Richter, Johannes Wirz & Mara Born
together with the Friends of the Section Collegium and the Youth Section*

Dancing with Polarities – The Human Being Between Nature and Technology Autumn Conference of the Natural Science Section at the Goetheanum				
Schedule	Thursday, 06.10.22	Friday, 07.10.22	Saturday, 08.10.22	Sunday, 09.10.22
08:30–10:00		Plenary Session	Plenary Session	Plenary Session
10:00–10:45		Workshops	Workshops	SUBNATURE / SUPERSENSIBLE NATURE “I can only – when I look at you – lament, cry.” Ways Out of Polarisation (DE) <i>Ruth Richter & Matthias Rang</i>
10:45–11:15		<i>Coffee Break</i>		
11:15–12:30		Workshops	Workshops	Closing
12:30–15:00		<i>Lunch Break</i>		
15:00–16:15		Research Presentations	Research Presentations	
16:15–16:45		<i>Coffee Break</i>		
16:45–18:30	Beginning at 17:00 Welcome by Matthias Rang	DIGITAL WORLD The Otherworldly Foundations of Digital Technology and the Impact on Childhood & Adolescence (DE) <i>Uwe Buermann</i> Counterbalances for Our Technological Age (EN) <i>Andrew Linnell</i>	AGRICULTURE Caring for an Organism – Dimensions of Agricultural Work (DE) <i>Martin von Mackensen</i> Without Technology No Production, Without Spirit No Farming Culture – Using Subnature to Shape Supernature (DE) <i>Tom Saat</i>	
	NATURE The Goethean Method of Cognition Builds a Bridge from the Plant to the Human Being and Makes Healing Possible (DE) <i>Vesna Foršnerič Lesjak</i>			
18:30–20:00	<i>Evening Break</i>			
20:00–21:00	Designing from Polarities – Using Examples From the Goetheanum Landscape and Architecture (DE) <i>Hansjörg Palm</i>	IMMERSIVE EXPERIENCES <i>Andrea de la Cruz, Jacinta Gorchs, Darius Matthies</i>	IMMERSIVE EXPERIENCES <i>Andrea de la Cruz, Jacinta Gorchs, Darius Matthies</i>	(subject to change)

(see next page)

Keynote Speakers

(titles above; speaker bios and abstracts [here](#))

Evening Immersive Experiences with local artists of the Youth Section

(abstract and artist bio's [here](#))

Workshop titles

(workshop abstracts [here](#))

Bildekräfte oder Gentechnik: Welche Zukunft für die Pflanzenzüchtung?

Michel Haring & Christina Henatsch

A Goethean Study of Nitrogen – Morality matters

Maria E. Morales & Judith Erb

Heilmittel-Entwicklung in der Pharmaindustrie und in der Naturmedizin und die besondere Art des menschlichen Denkens und Vorgehens

Vesna Forštnerič Lesjak & Carsten Gründemann

Wie Technik aus Zusammenhängen isoliert. Können wir durch Technik wirken und gleichzeitig die Zusammenhänge sehen und erleben?

Matthias Rang & Kees Veenman

Towards a Spiritually Empowered Relationship with Technology

Elias Romualdez

Rhythm and Repetition: A Phenomenological Exploration with Water

Simon Charter & Jennifer Greene



Commentary

The Coming of Robots with Artificial Soul

By Andrew Linnell

A recent article in the online magazine *Psyche*¹ discussed the future of sexbots. While this subject may be distasteful for many readers, my point in using it here is that a future of this robotic-use looms, but it likely won't get very far without a market to drive it. In the 1990s, the Porn industry drove the use of eCommerce,² and it will again have a role in showing how robots and virtual reality can be profitable. As Rudolf Steiner pointed out, the Western approach to the Economic Sphere will prevail for the foreseeable future. The rise of Threefolding is seen as necessary to "pull in the reins" of this enterprise. In order to show that sexbots will happen in the coming decade, the article plays right into comments Steiner had about this future.³ The author, an evolutionary biologist, writes:

"Many people find the idea of digital lovers unsettling. Some fear being replaced. For others, there's a concern about how interacting with sexy, friendly robots and VR technologies might change – for the worse – the ways in which people interact with one another. In discussing these concerns, people often reassure themselves by naming something quintessentially human that machines cannot do. They can touch us, but not with human tenderness. They might move and moan with apparent pleasure, but never initiate a new or surprising position. They could fool us into treating them with affection, but never make us think we are in love. But the rate at which sex tech is advancing and the potential for new directions in virtual sex should prompt us to ask: are there any ways in which digital lovers could eventually be as good as (or even better than) real ones?

"For me, the hopeful arguments of digital-lover sceptics bring to mind the human exceptionalism behind anti-evolution thinking. In Charles Darwin's time, opposition to evolution drew on the fear that it displaced humans as paragons of special creation. The 19th-century anatomist Richard Owen fulminated against the so-called bestialization of man, arguing that human brains bore special structures signifying human uniqueness. The young Thomas Henry Huxley located those same structures in gorilla skulls, knocking Owen off his perch as Britain's preeminent anatomist, and humanity from its status as creation's zenith.

"Huxley showed that the differences between gorillas, chimps and humans are matters of degree. Even among scientists today, periodic claims arise that certain traits are uniquely human, only to be dismissed by evidence. Tool use, abstract thought, culture and war have all suffered their own Huxley moments."

The author then provokes us with "Now, those who prognosticate about what machines will never be able to do are due their Huxley moments."

¹ <https://psyche.co/ideas/the-sex-tech-to-come-could-offer-more-than-the-real-thing>

² <https://www.businessinsider.com/the-producer-of-middle-men-talks-to-us-about-how-pornographers-invented-e-commerce-2010-8>

³ "We must admit that science in the present-day sense of the word can reach only to a certain level. It reaches only as far as the mineral element in the mineral, plant, and human kingdoms. Already in the plant kingdom science must change into art, still more so in the animal. It is sheer nonsense to try to understand the animal form in the way the anatomists and physiologists do. And as long as we do not admit that it is nonsense, the shadowy intellect cannot really be transformed into a living, spiritual grasp of the world." - *Materialism and the Task of Anthroposophy*, lecture 14, Dornach, 13May1921, GA 204

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Today, one can easily distinguish what is a robot and what is a human being. But, if a robot is endowed with artificial feelings, will we still be able to distinguish? Some might say, “I don’t need to worry about this in my lifetime!” Yet, such machines are already here with artificial feelings as shown in figures 1 and 2. This once clear distinction will fade as robots are endowed with artificial traits such as warm, sensitive skin and coming soon, in addition to artificial intelligence, artificial emotions.⁴ Yes, eventually we might call it artificial soul.

Do we have a sense to help us distinguish human from machine? Yes! Of our 12 senses, we can sense the presence of an ego. This points to why Spiritual Science is so sorely needed in our times to meet this necessary challenge brought upon us by technology.



Figure 1 Ameca from Engineered Arts



Figure 2 Ameca from Engineered Arts

To help us meet this challenge, no book has been more important than Rudolf Steiner’s *The Philosophy of Freedom*. In that book, he shows Thinking to be a spiritual activity of the soul.

But between birth and death, almost all of our thinking is what Steiner calls dead thinking taking place as a reflection of etheric activity by our brain. As we prepared for our incarnation, our thinking was, at that time, living.

Our everyday thinking is like a corpse of this former thinking.

Now, when we examine artificial intelligence, we find that it is a dead imitation of our dead thinking. You see, machine thinking is more dead than current human thinking which we can also call dead. To write

software, we think about our thinking but in a way to freeze it into some repeatable procedure that is entirely dead – only the data submitted changes. But what about human feeling and willing?

So long as we fail to understand where we are free and where we must submit to necessity, so will we not be able to distinguish between what is human and what is machine. Today machines have artificial intelligence. Emerging now is artificial emotion – eventually this will become artificial soul and after that we’ll attempt to endow them with an artificial life. After this, Transhumanists say we’ll merge with this creation of ours, sometime after 2045.



⁴ Engineered Arts, a UK-based designer and manufacturer of humanoid robots, recently showed off one of its most lifelike creations in a video posted on YouTube. The robot, called Ameca, is shown making a series of incredibly human-like facial expressions.



Will robots become nannies? School teachers? The attempt will be made for the market (and need) is there. But can such robots be able to express soul-warmth? Will even infants detect something is missing? What effect will this have on children? Likewise, it is envisioned that the “nannybot” will later be reprogrammed to be the at-home tutor. Children already sit in front of a TV much of the day “learning” from it. Could an at-home tutorbot be a better alternative? Will children, who imitate their environment, begin to identify with their robot companion?

As our physical body becomes more mechanized by prostheses, the goal of very prolonged lives will seem attainable. Today our etheric body is loosening from its existence within the physical. As this happens, we will not only be crossing the threshold to attain the beginnings of clairvoyance, but our physical body will also be withering. Just as people today elect to have joint replacement surgery, a time will come when humans will opt to remove their withered limbs and replace them with prostheses.

Future prostheses will have sensory feedback. It will detect pressure, an object, and warmth or cold. It may even be able to simulate the experience of pain.

Powering such future robots may seem impossible by the limits of what we know today but perhaps some form of battery or direct energy flow will be possible in the future.



The mission of Earth is the development of Love and Freedom. This begs the question, with whom in the future, will you be able fall in love? What about today as we prepare for this future? Could you fall in love with a person who has a Bionic finger?

- A Bionic arm?
- A Bionic arm & a leg?
- A Transplanted face?
- Can we love a person with a pacemaker? Some will say, “I already do – my grandfather.”

Would you be inhibited from loving someone with bionic body parts? Could you love someone who you know only through their avatar in virtual reality? Can love be engendered for another via their avatar? Could it be real love or would it be lust-love or artificial love? What about love for a spiritual being? For God? Could a transhumanistic future become a kind of training ground for spiritual love (agape)?

A reader's digest of David Abram's essay, "Magic and the Machine"⁵

<https://emergencemagazine.org/essay/magic-and-the-machine/>

by Barry Lia

The "contrary trends" introduced in this essay happen to align with the theme of the upcoming Autumn Conference of the Natural Science Section in Dornach (see [above](#)). It is hoped that this "digest" will spur you to read the full essay to better follow Abram's thoughts and to enjoy his writing. A pdf with the pagination used below is available from the [editor](#).

[The reader may also find interest in select passages from Abram's books, *Becoming Animal* and *The Spell of the Sensuous*, presented in juxtaposition with passages from Owen Barfield's *Saving the Appearances* and from one of the letters in Steiner's *Leading Thoughts* found in our Jan-Feb 2019 issue, pp.6-10, [here](#).]

Abram sets out "to focus on some unnoticed *perceptual* dynamics at play within and between these two contrary trends," the horror of "the rapid deterioration of ecological integrities" and the giddy optimism of "the rapid growth of digital technologies." [p4.6]⁶

Abram "has long been concerned with the human propensity for animistic engagement with every aspect of the perceptual world," noting that for traditionally oral, indigenous cultures all things have agency, are "*alive and (at least potentially) aware.*" [p4.8].



He wishes to argue even for us moderns that "animistic perception is utterly *normal* for the human organism, a kind of default setting (to use a technological metaphor) for our species; that in the absence of intervening technologies, the human senses spontaneously encounter the sensorial surroundings as a field of sensitive and sentient powers. ... of expressive agency, or life.

"To be sure, such participatory experience is very far from our current feel for things in the midst of contemporary, hyper-modern civilization." [p5.1]

Yet he then argues that "the dominant, Western culture has itself been deeply shaped by intensely participatory, animistic forms of experience," albeit of a distinctive nature. [p5.5]

"For animism—the instinctive experience of reciprocity or exchange between the perceiver and the perceived—lies at the heart of all human perception. While such participatory experience may be *displaced* by our engagement with particular tools and technologies, it can never entirely be dispelled. Rather, different technologies tend to capture and channel our instinctive, animistic proclivities in particular ways." [p5.6]

⁵ Of interest, both "magic" and "machine" may be related to the same root: [*magh-](#) "to be able, have power."

⁶ Page numbers refer to a pdf download (available from the [editor](#)). The "decimal points" are actually nonary (base 9) rather than decimal; that is, 1 is at the top of the page, 5 is in the middle, and 9 at the bottom.

Abram first draws our attention to an ancient technology readers may scarce consider, the phonetic alphabet, as one of these shapers, considering that “*Western civilization should more precisely be spoken of as alphabetized civilization.*” [p6.7]

Contrary to most scholars’ conclusion “that reading and writing enable a form of reason that rapidly loosens and breaks free from the superstitious, animistic beliefs to which non-writing, oral cultures are presumably prone (and to which most citizens of European and American civilization are presumably immune),” he will argue “that alphabetic literacy can best be understood as a highly concentrated form of animism.” [p6.9-7.1]

He refers to experiences of indigenous American friends to illustrate that “To the animistic frame of mind, any sound can be a voice, any movement can be a gesture laden with expressive intent.” [p7.2] The one elder, while gathering herbs in the forest, came upon a spider working on a web and “abruptly heard, or rather felt, the spider speaking to her, offering insight into the completion of a project she’d been working on.” The other friend “inadvertently focused his eyes upon a patch of lichen and then suddenly heard the rock addressing him, offering the grounded wisdom of a presence far more ancient than himself.” [p7.5]



We are to consider our own experience with the morning newspaper: “We let our attention be

drawn by a particular article, focusing our eyes upon the inert bits of ink on the page, and suddenly we feel ourselves addressed—we hear spoken words, we see visions. Much as other animals, plants, and even ‘inanimate’ rivers and stones once spoke to our oral ancestors, so the inert letters on the page now speak to us! This is a form of animism that we tend not to notice, but it is animism nonetheless, as mysterious as a talking spider.” [p7.6]

But the land falls silent. “Only as our senses transferred their animating magic to the written word did the other animals fall dumb, the trees and rocks become mute. For, to learn this new magic, we had to break the spontaneous participation of our eyes and ears in the enfolding terrain in order to recouple those senses with the flat surface of the page.” [p7.8]

Abram asks us to notice that “while a thundercloud or a raven might utter strange sounds and communicate strange sensations, *the written letters always speak with a human tongue.*”

“Hence, far from enacting a clear break with animism, alphabetic literacy can be recognized as a particularly potent form of animism, one which shifts the locus of magic—or meaning—away from our interactions with the more-than-human surroundings to the relation between ourselves and our own signs.” [p8.2]

When language becomes an exclusively human property, “The living land is no longer felt to hold and utter forth its own manifold meanings; the surrounding earth soon comes to be viewed as a mostly passive background upon which human history unfolds.” [p8.3]

The alphabet and printing press “paved the way for the many innovations in electronic interchange that burst upon the scene over the last century and a half.” [p9.3]

“How, today, do our new digital technologies make use of, co-opt, or transform the old, instinctive participation between our senses and the sensuous surroundings?

“Consider our curious propensity for designing gadgets that talk to us,” like talking refrigerators and Siri. [p9.4]

“Is it not obvious that by outfitting our devices with ‘natural language user interfaces,’ we are striving to recreate, in a clumsy fashion, something of that old, ancestral sense of living in a world wherein all things have the potential for expressive speech? We’re trying to recreate that magic, but ultimately it doesn’t satisfy. ... Despite the flimsy gesture toward a kind of magical reality, the fact is that we’re still speaking only to ourselves, to things that we have programmed to talk back to us.” [p9.7] There is nothing in this that can “yield a sense that we’re in communication with beings strangely different from ourselves.” [p10.1]

Abram then considers that “The real technotransformation currently underway is the rapid advent of ‘ubiquitous computing,’ otherwise known as the *Internet of Things*, or—appropriately for us here—*Enchanted Objects*.” [p.10.4]

And asks, “But is it not apparent that this whole huge trend, ostensibly motivated by the aim for ever-greater convenience and efficiency, is tacitly driven by an impulse to recreate, somehow, the animistic experience common to virtually all of our indigenous ancestors—the experience of living in a fully sentient world, a reality filled with intelligence? To regenerate the experience of inhabiting a world wherein everything is alive, awake, and aware? Wherein rivers feel the presence of the salmon swimming within them, and the ground registers our steps and the needled trees hear our laughter and the crescent moon is nourished by our prayers?” [p11.2]

The disappointment is that “The difficult magic of animistic perception, the utter weirdness and dark wonder that lives in any deeply place-based relation to the earth, is the felt sense of being in contact with wakeful forms of sentience that are richly *different* from one’s own—the experience of interaction with intelligences that are *radically*

other from one’s own human style of intelligence. Yet when interacting with the smart objects that inhabit the always-online world of the *internet of things*, well, there’s no real *otherness* there.”



Abram’s point is that “it’s all humanly programmed, and it’s inhabited by us humans and our own humanly-built artifacts; it’s all basically a big extension of the human nervous system. As we enter more deeply into the world of ubiquitous computing, we increasingly seal ourselves into an exclusively human zone of interaction. *We enter into a bizarre kind of intraspecies incest.*

“Yet it’s the alterity or otherness of things—the weirdly different awareness of a humpback whale sounding its eerie glissandos through the depths, or an orb-weave spider spinning the cosmos out of her abdomen; or the complex intelligence of an old-growth forest, dank with mushrooms and bracket fungi, humming with insects and haunted by owls—it’s the wild, more-than-human otherness of these powers that makes any attentive relation with such beings a genuine

form of magic, a trancelike negotiation between outrageously divergent worlds.

“Without such radical otherness, there’s no magic. Wandering around inside a huge extension of our own nervous system is not likely to bring a renewal of creaturely wonder, or a recovery of ancestral capacities. It may keep us fascinated for a time but also vaguely unsatisfied and so always thirsty for the next invention, the next gadget that might finally satisfy our craving, might assuage our vague sense that something momentous is missing. Except it won’t.” [p11.3-8]

Abram then discusses GPS and regrets that “by using GPS we no longer experience the delicious delirium of getting lost in the woods or the mountains. And so we no longer experience the great heightening of our animal senses, the keen synaesthetic attention to the land’s every nuance and subtlety that is triggered by getting lost.” [p13.6]



He describes the remarkable abilities of traditional seafaring peoples crossing the broad ocean or trackers visualizing the animal ahead from signs along the trail. “There is nothing ‘extra-sensory’ about this kind of earthly clairvoyance. Rather, *sensory perception functions here as a kind of glue, binding one’s individual nervous system into the larger ecosystem*. When our animal senses are all awake, our skin rippling with sensations as we palpate the surroundings with ears and eyes and flaring nostrils, it sometimes happens that our body becomes part of the larger Body of the land—that our sensate flesh is taken up within the wider Flesh of the breathing Earth—and so we begin to glimpse events unfolding at other locations within the broad Body of the land.” [p15.4]

“What is the difference between these two forms of seeing, or sensing, at a distance? One approach, mediated by the smartphone, works by dissolving distance entirely—detaching us from our sensory embedment in a particular place in order to dialogue with other minds that have similarly withdrawn from their senses. The other, in contrast, works by virtue of our body and our creaturely senses. Instead of divesting ourselves of the place where we find ourselves, this more ancient form of clairvoyance involves tuning one’s body so thoroughly to the terrain that we ourselves become fully a part of the sensate surroundings. The land feels itself within us. Our animal body blends into the wider Body of the animate Earth—this immense, spherical metabolism in which our individual physiologies are embedded, upon which our divergent lives all depend.” [p15.6]

Of our modern technologies, Abram summarizes: “And so we remain transfixed by these tools, searching in and through our digital engagements for an encounter they seem to promise yet never really provide: the consummate encounter with otherness, with radical alterity, with styles of sensibility and intelligence that thoroughly exceed the limits of our own sentience. Yet there’s the paradox: for the more we engage these remarkable tools, the less available we are

for any actual contact outside the purely human estate. In truth, the more we participate with these astonishing technologies, the more we seal ourselves into an exclusively human cocoon, and the more our animal senses—themselves co-evolved with the winds, the waters, and the many-voiced terrain—are blunted, rendering us ever more blind, ever more deaf, ever more impervious to the more-than-human Earth.” [p16.1]

Thus, Abram comes back to the present contrast between technological optimism and ecological despondency. He admits that “As a writer who uses digital technology, I can affirm that these tools are enabling many useful, astounding, and even magical possibilities. But all this virtual magic is taking a steep toll.” [p16.4]

“Today, caught up in our fascination with countless screen-fitted gadgets, we’re far more aloof from the life of the land around us, and hence much less likely to notice the steady plundering of these woodlands and wetlands, the choking of the winds and the waters by the

noxious by-products of the many industries we now rely on. As these insults to the elemental earth pile up—as the waters are rendered lifeless by more chemical runoff, by more oil spills, by giant patches of plastic rotating in huge gyres; as more glaciers melt and more forests succumb to the stresses of a destabilized climate—the sensorial world of our carnal experience is increasingly filled with horrific wounds, wounds that we feel in our flesh whenever we dare to taste the world with our creaturely senses. It’s too damned painful. Hence there’s ever more reason to *retreat from the body’s world, to avoid the sensuous terrain with its droughts and its floods and its flaring wildfires, taking refuge in ever more mediated and virtual spaces*. Thus do we render ourselves ever more numb. Ever more deaf to the anguished cries of other creatures, ever more oblivious to the vanishing of species, ever more inured to the steady flattening of the Real. Ever more calloused and closed to the shuddering pain of the biosphere, breathing.” [p16.6]



Calendar of Events

August 11-13: 5th Annual International MysTech Conference, online & Issaquah, WA

"Consciousness, AI, and Virtual Reality." Information [here](#).

September 28: *A Biography of the Living Earth*, online; Linnean Society of London, 6pm UK

The story of life on our planet through 47 organisms and how even the smallest organisms can have a fundamental impact on life itself. Information [here](#).

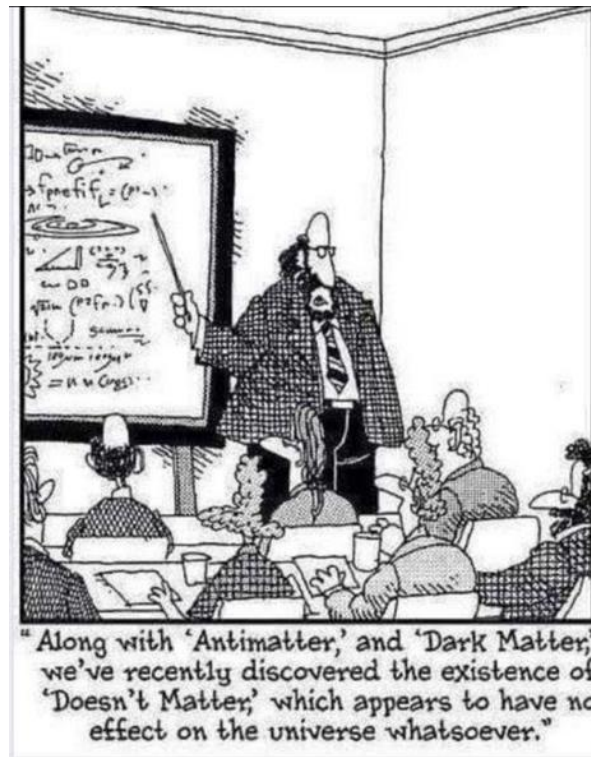
October 6: *Jared Diamond on the Marvel of New Guinea Birds*, hybrid; Linnean Society of London, 6pm UK

New Guinea is an ornithological treasure. Jared Diamond will take us through the extraordinary biological phenomena that make it so. Information [here](#).

October 6-9: *Autumn Conference of the Natural Science Section*, Goetheanum, Dornach

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The epistemological foundation of anthroposophy is not only a matter of scientific method. Having a strong foundation in the scientific basis for a monistic science of spirit-matter is important for a healthy attitude towards conventional science today and to overcome its materialistic bias. 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.

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