spirit

soul

life

State of MysTech

Work to be Done

Social MysTech

With Andrew Linnell

MYSTECH

Center for Anthroposophical Endeavors

Lecture Schedule

Friday, February 21

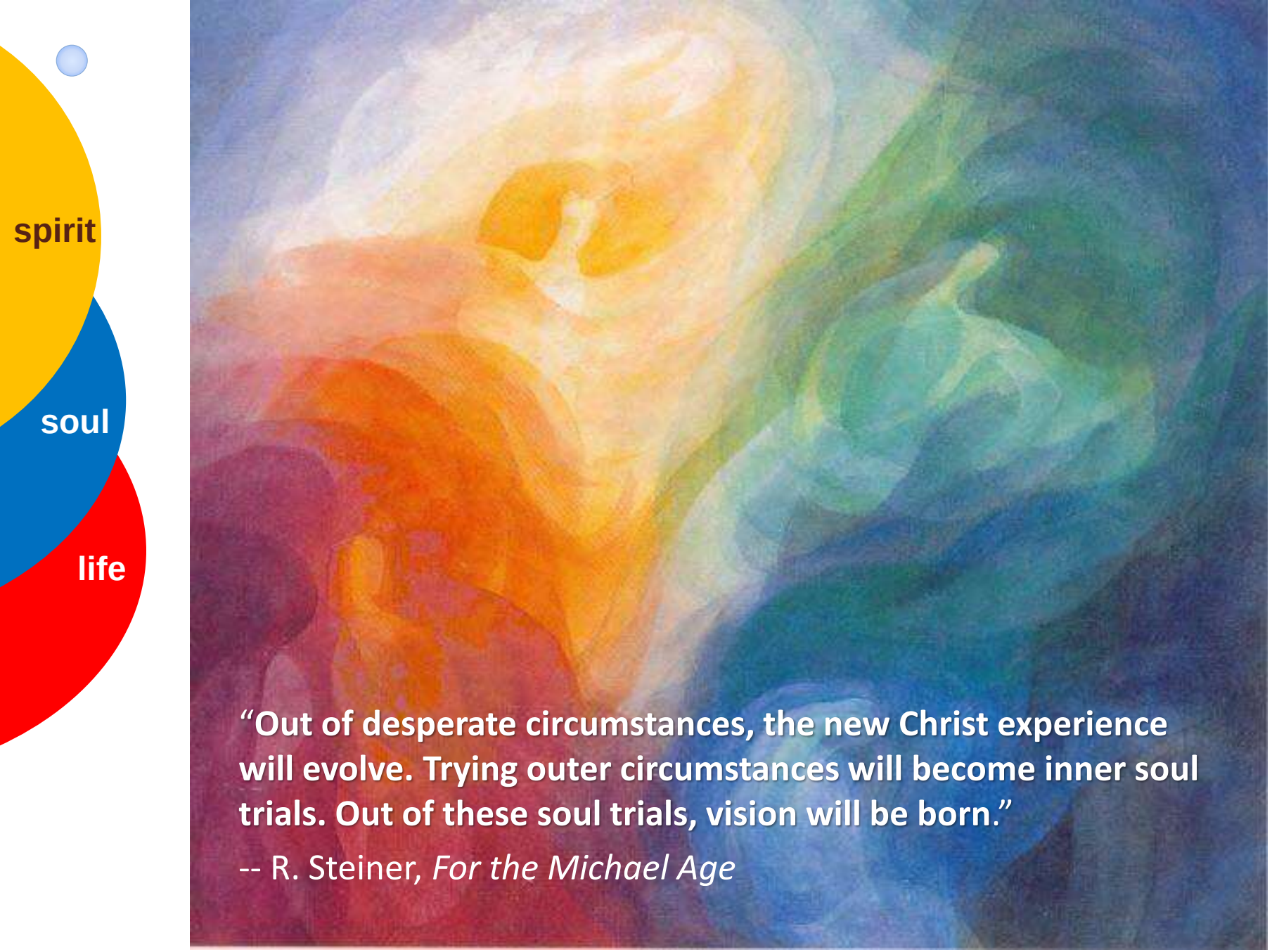
- 8:00—9:30 pm: *The Iron Necessity of Our Technological Age*

Saturday, February 22

- 9:45–10:45 am: *The Human Double and Its Future*
- 2:30—3:30 pm: *Ahriman's Gift—Emancipation from Dead Thinking*
- **4:45—5:45 pm: *State of MysTech, Work to be Done, Social MysTech***

Sunday, February 23

- 9:00—10:15 am: *Greek Mythology and its Relationship to Our Technological Age*



"Out of desperate circumstances, the new Christ experience will evolve. Trying outer circumstances will become inner soul trials. Out of these soul trials, vision will be born."

-- R. Steiner, *For the Michael Age*

About MysTech

CFAE | MysTech: cfae.us > CFAEndeavors > MysTech
- Signup for online courses
- All info on MysTech

Social MysTech: social.mystech.org
- Signup for the social site.

MysTech Journal: rudolfsteinerbookstore.com > BOOKS > Journals & Publications
- Purchase single issues
- Purchase subscription

MysTech Membership: rudolfsteinerbookstore.com > About Us > Membership
- Purchase Membership

MysTech Events: cfae.us > Community Events
- Past and upcoming events & webinars

Goals of MysTech

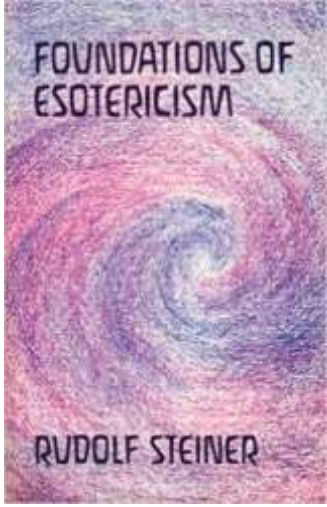
- The Who and the How
  - Research
- Education (overcome fears)
  - Online study groups, study guide books available
  - Lectures, workshops, webinars, Facebook, website(s)
  - Journal, newsletter
- Deeds & Seeds
  - Social.mystech.org (social media without data tracking)
  - Counter-forces (3 Occultisms), health, age, 5G, screentime, etc.
  - Threefold Social Organism
- Outreach
  - Other organizations (ETI, Sections, Waldorf, Humane Tech,…)

MysTech: Mysteries of Technology

- Sponsored by The Center of Anthroposophical Endeavors (CFAE) of Seattle, WA.
  - Non-profit, started in 1982 as Friends of Anthroposophy
  - Founded other Anthroposophical organizations
  - Hosted hundreds of lectures, workshops, and performances
- MysTech Membership to support R&D
  - Journal, website, classes – outreach, building awareness
  - Inner development – inreach, becoming builders
  - Moral interface to machines – cultivate
- MysTech.co: devoted to cultivating moral technologies
  - Founding meeting June 12, 2017, 10 founding members
  - Exploring waves, resonance, harmonics, boundaries, more

More info at: http://rudolfsteinerbookstore.com/product/mystech-membership/

Cultivating Moral Technology



- Soon electric machines interfaced to human
- Future machines driven by spiritual morality
- “In the future machines will be driven not only by water and steam, but by spiritual force, by spiritual morality. Such a **driving force** which can only be **moral**, that is the idea of the future.”
- “We will find it to be a most important force, with which culture must be inoculated, if it is not to fall back on itself.”
- “The mechanical and the moral must interpenetrate each other, because the mechanical is nothing without the moral [from a spiritual perspective].”

Meaning of the Tau

- “Just as now human circumstances conform to fundamental laws of Nature, so in the future will they conform to what is moral. They will be graded in accordance with the stages of Karma, seven degrees of morality.”
- Tau and Holy Grail
- This is a far distant technology

- Become a master craftsman of the living

spirit

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life

State of MysTech

Work to be Done, Social.MysTech.org

With Andrew Linnell

MYSTECH

Center for Anthroposophical Endeavors

Impulses for MysTech

- Future machines will be driven by spiritual morality
  - Moral impulse as driving force
- The mechanical & moral must interpenetrate each other
  - The mechanical is nothing without the moral
- Symbolized by the Tau sign – Holy Grail
  - From master craftsman of the inanimate
  - To master craftsman of the living

How to Receive Ahriman's Gifts?

- "And how can we train ourselves to do this? By **permeating** what takes **ahrimanic** form within us with a strongly **luciferic** element.
- What is it that arises in modern people in an Ahrimanic form? It is his knowledge of the outer world. There is nothing more ahrimanic than this **knowledge of the material world**, for it is sheer **illusion**.
- Nevertheless if the fata morgana that arises out of chemistry, out of physics, out of astronomy and the like can fill us with **fiery enthusiasm** and interest, then through our interest — which is itself luciferic — **we can wrest from Ahriman what is his own**."
  - *Influences of Lucifer/Ahriman*, Lecture Two, GA191

Freedom must be Real

"He, for the salvation of mankind, has united His own living Being with the deadness of divine existence in the kingdom of Ahriman. Mankind have thus the twofold possibility, which is the pledge of their freedom: Either to

1. **Turn to Christ** in that mind and spirit which was theirs subconsciously when they came down from the vision of supersensible life in the Spirit until they could use Intelligence, — but to **do this now** in consciousness.
2. **Detach from Spirit-life** to seek to enjoy the sense of themselves — and thereby fall a prey to the Powers of Ahriman and be carried in the **Ahrimanic direction of evolution**."

- *Michael Mystery*, Chapter IV, Michael's Task in the Sphere of Ahriman, GA 26

Social.mystech.org

- Pilot launched October 2019
- Common Social Media Features
  - You and others
  - Friends and events
  - Groups
    - Postings and comments
- No data tracking
  - Revenue: Donations alone? Advertisements?
- Perfect for Anthroposophical orgs
- Extend to (who?)

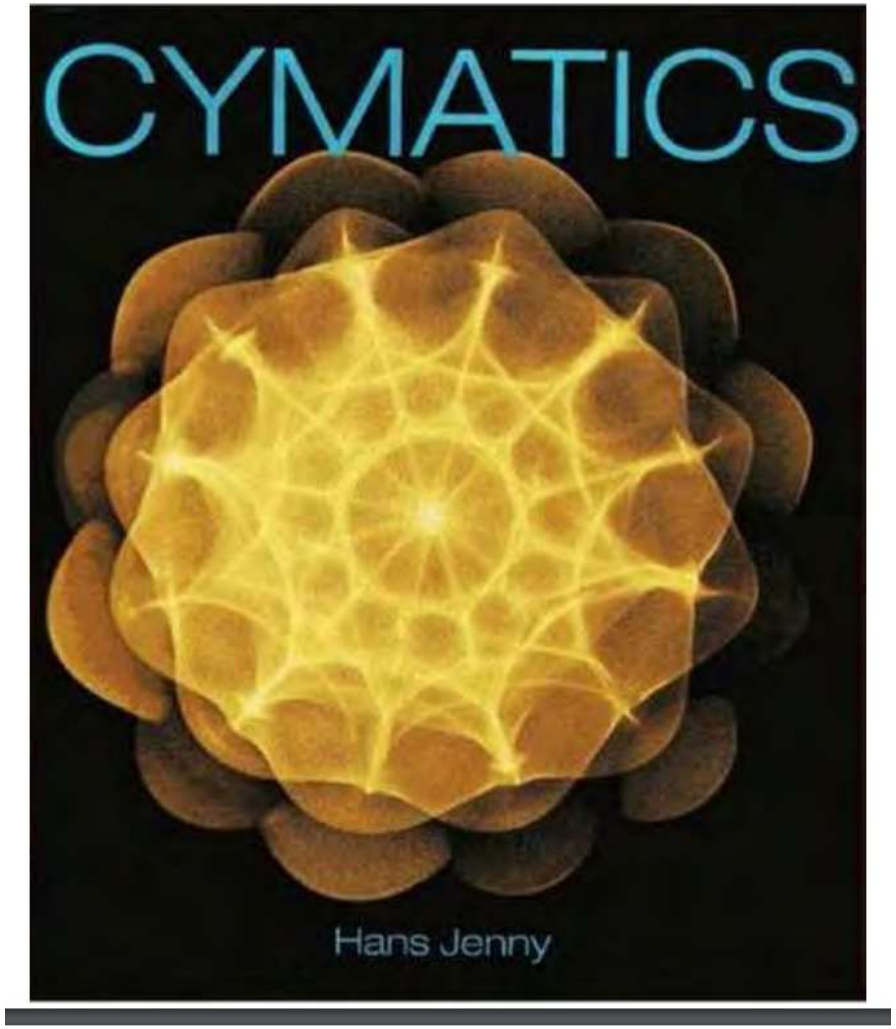
spirit

soul

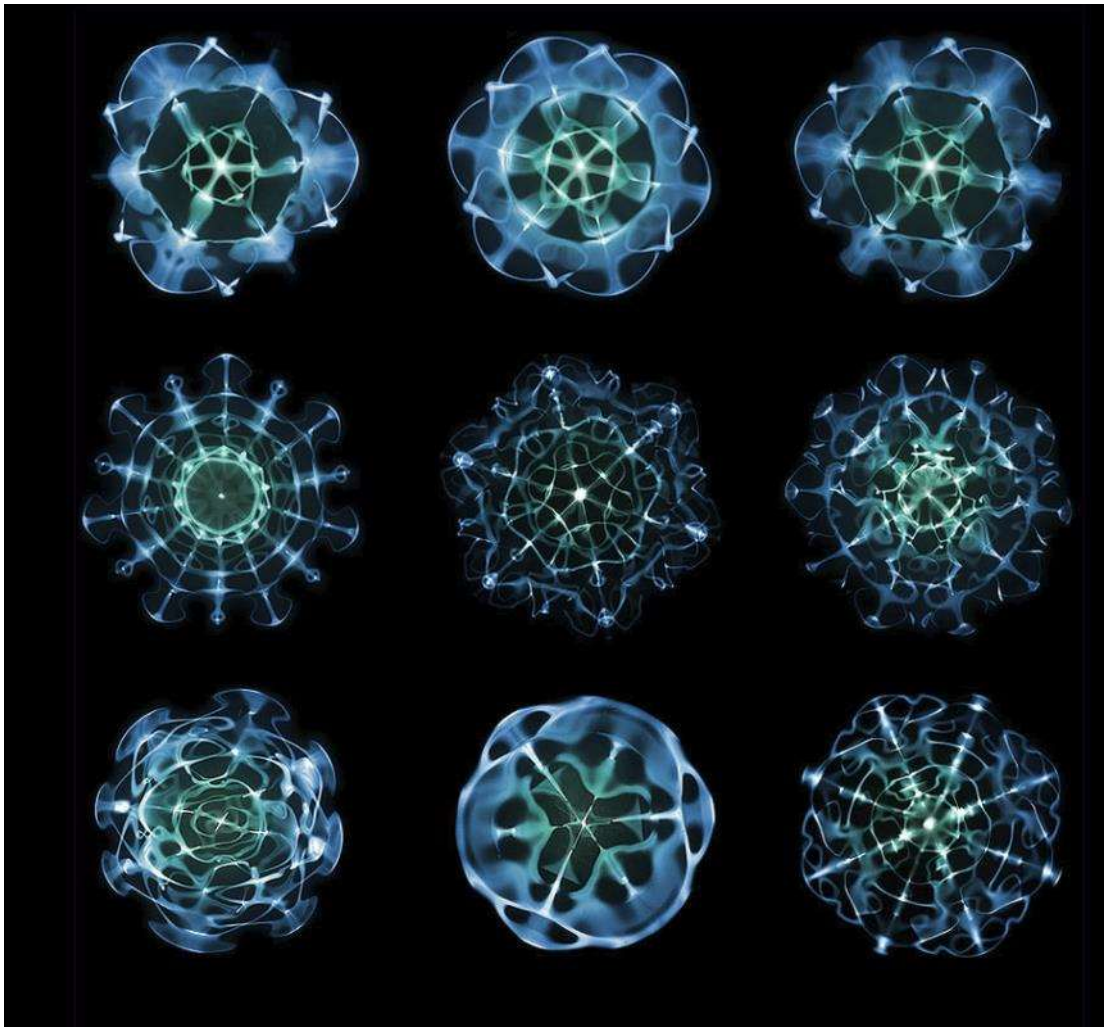
life

RESEARCH AVENUES

MysTech Pioneer: Hans Jenny

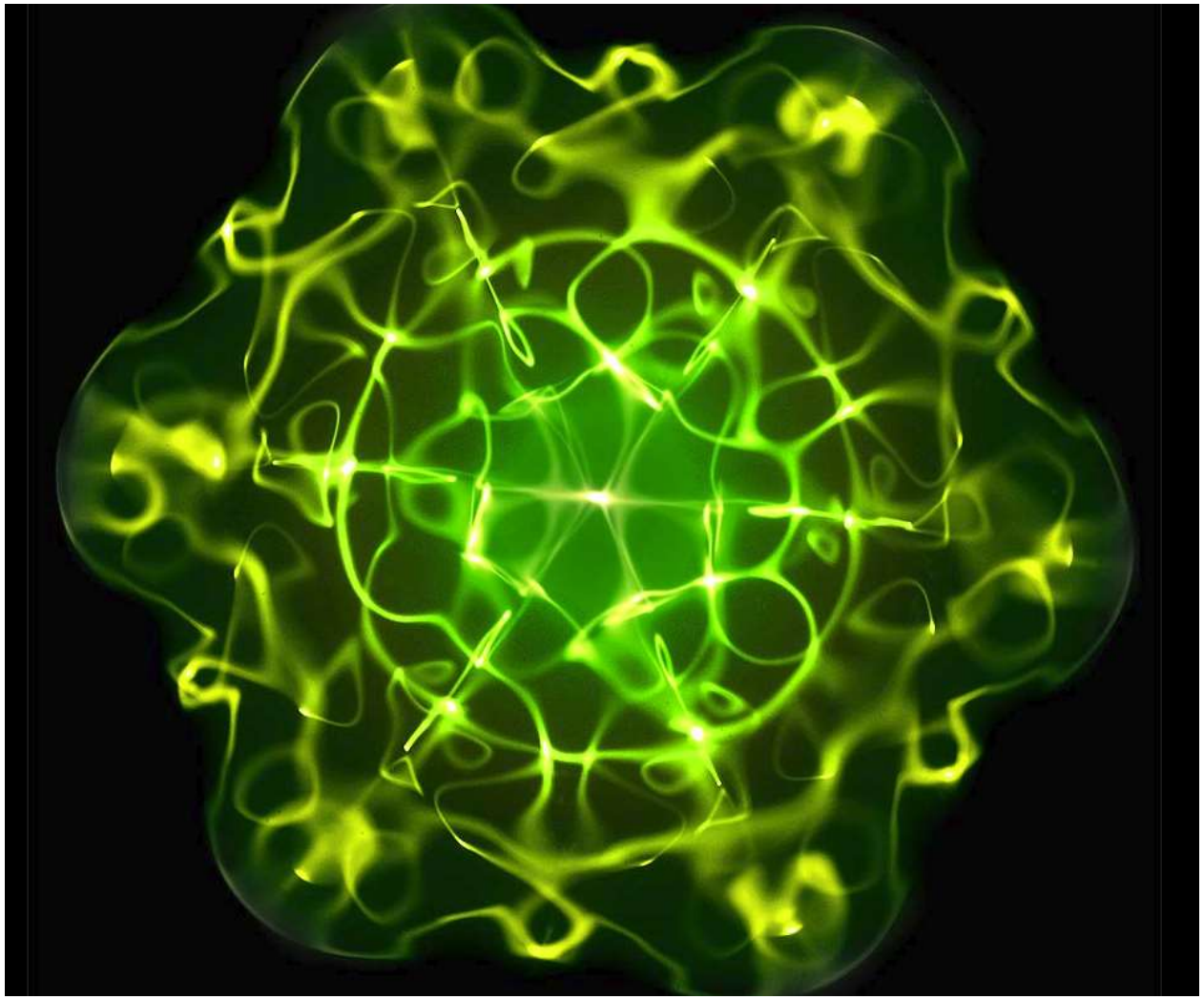


Cymatics.org



14hz to 30hz sweep. Square wave

Cymatics.org



Sine wave & alcohol

When is Modern Technology OK to Use?

- Transition Era: are children differently ‘equipped’?
- Let the foundations be constructed first
  - From where does a baby come?
- When the human “motor system” is ready (after)
  - Age 0: physical body born. Age 7: etheric body. 14: astral body
  - Importance of Play, Imitation of the Human
    - Lead by example like a god
- When what is built from above is ready for Earthly life
  - Puberty [Saturn&Sun then Moon&Earth]
- Importance of Movement
  - Postural alignment. Eurythmy. Rhythms. Harmonic oscillations.

Known but unspoken tech problems

Source: HuffingtonPost

1. Rapid brain growth continues until age 21
   - Delayed development results from insufficient movement
   - Epidemic obesity correlates with video game use
2. Sleep deprivation
   - 60% of parents do not supervise their child's technology usage, and 75% of children are allowed technology in their bedrooms
3. Mental illness
   - Technology overuse as a causal factor in rising rates of child depression, anxiety, attachment disorder, attention deficit, autism, bipolar disorder, psychosis
4. Aggression from violent media content
   - Poor manners, irreverent
5. Digital dementia: decreased concentration ability
6. Addiction
7. EMR emissions (cordless phone, WiFi router)

Children and Technology

Source: HuffingtonPost

Developmental Age	How Much?	Non-violent TV	Handheld devices	Non-violent video games	Violent video games	Online violent video games and or pornography
0-2 years	none	never	never	never	never	never
3-5 years	1 hour/day	✓	never	never	never	never
6-12 years	2 hours/day	✓	never	never	never	never
13-18 years	2 hours/day	✓	✓	limit to 30 minutes/day		never

Children and Technology

- **Screen (blue light) time**
  - Disrupts sleep, desynchs circadian rhythm
  - Desensitized the brain's reward system
  - Light-at-night linked to depression
  - Stress reactions, hormonal, irritability, addiction
  - Overloads sensory system, fractures attention, depletes mental reserves
  - Limits movement, physical activity, and "green time"
- "Screentime is Making Kids Moody, Crazy, and Lazy"
  - Psychology Today, Victoria Dunckley, M.D.
  - ***"Wired and tired"***
  - Chronic high arousal levels impact memory and relations
- Digital Heroin, Glow Kids
- Let them **recapitulate** human history
  - Up to grade 8

Passive VS Active Screentime

From http://education.penelopetrunk.com/2013/04/11/kids-who-play-video-games-do-better-as-adults/

- Video games are mentally active
- Research showing:
  - Gamers are better at jobs that are intellectual
  - Gamers do better in jobs that are active
  - Gamers are happier over the long run
- TV is a bigger culprit (of passive, captured mind)

Cell Phone Safety

- Limit your cell phone use
  - Especially when reception is weak
  - Intensity ~ 1/distance^2
- Keep your phone distant, especially from organs
  - Where do you keep your phone?
  - Use the speaker phone or use a headset
    - Wireless and wired headsets emit EMFs even when you are not using your phone: Bluetooth vs 5G
  - Send text messages
  - Do not **sleep** with your cell phone near – keep sleep sacred
- No Children Allowed: Cocaine for Kids
  - https://www.facebook.com/HealthForAllKids/videos/301316260295203/

EMR Sources

- Wireless (Wi-Fi) networks
- Smart meters
- Cell Phones
- Bluetooth devices
- Power lines
- Computers and printers
- Microwave ovens
- MRIs

Protections

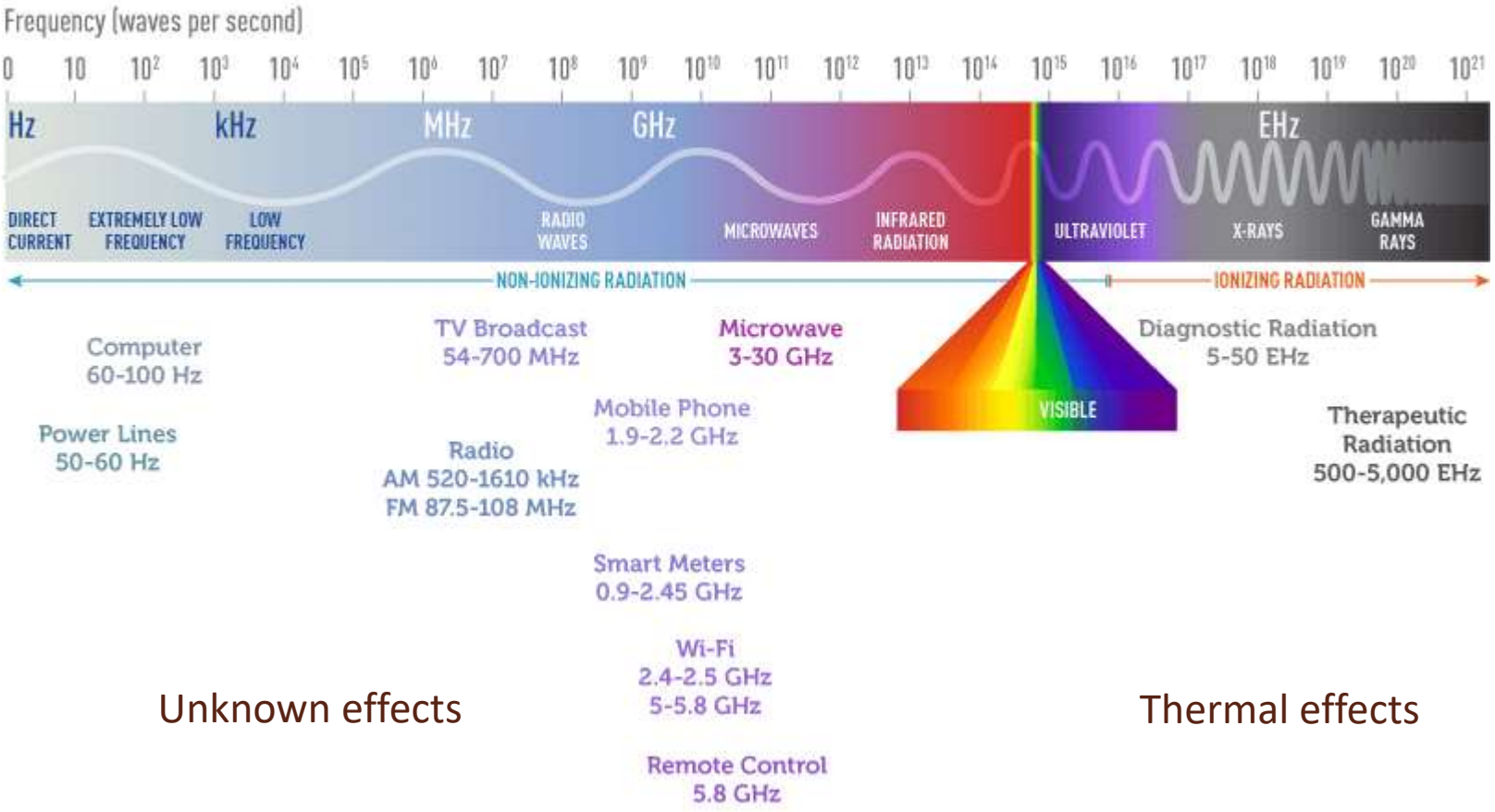
- Time of exposure
- Distance from source
- Shielding
- Spiritual development(?)

Types

- **ELF: Extremely low frequencies**
  - Time-varying electromagnetic fields e.g. produced by electrical appliances
  - Frequencies up to 300 Hz
  - Electricity power supply (60 or 50 Hz)
- **IF: Intermediate Frequencies**
  - 300 Hz to 10 MHz
  - Computer screens, anti-theft devices and security systems
- **RF: Radio frequencies**
  - 10 MHz to 300 GHz
  - Radio, television, radar, cell & cordless phones, microwaves

Governments mandate what frequency can be used

Electromagnetic Spectrum



Unknown effects

Thermal effects

Steiner indicated that this EMR linear spectrum is invalid.

Electromagnetic Hypersensitivity

Study describes a science-based protocol for evaluating patients for electromagnetic hypersensitivity (EHS)

- **EHS** has been *mischaracterized as a psychological issue*, resulting in profound suffering and violations of basic human rights
- "These different tests can be performed under less polluted, environmentally controlled conditions to diagnose chemical and electrical sensitivity precisely"
- Takes the guess work out of the diagnosis
  - Performed in 30,000 patients seen at the EHC-D in the last 35 years
- "The pitfalls of ignoring the principles and facts developed,...can lead to errors in diagnosis and treatment"

Source: Dr. William Rea of the American Academy of Environmental Medicine article: *History of Chemical Sensitivity and Diagnosis*

- http://www.degruyter.com/ downloadpdf/j/reveh.ahead-of- print/reveh-2015-0021/reveh- 2015-0021.xml

Possible Issues

- Rarely immediate health issue (other than headache)
  - 2016: Risk of Glioma (tumor in “gluey” tissue of the brain)
- Neurological (NDD) – contributor to dementia
  - Dr. Nora D. Volkow, National Institute on Drug Abuse: “changes in brain glucose metabolism after cell phone use”
- Cancer (especially breast)
  - 2011: WHO listed cell phone radiation as a 2B carcinogen
- Immune system & blood-filters (toxins pass through ‘holes’)
- References
  - https://draxe.com/electromagnetic-radiation/
  - http://www.trueactivist.com/10-ways-to-protect-against-emf-emissions/
  - https://www.globalhealingcenter.com/natural-health/protect-your-house-emf-pollution/
  - http://articles.mercola.com/sites/articles/archive/2009/08/25/simple-inexpensive-solution-to-radically-lower-emf-exposure.aspx

Remedies

- Generational differences
- EMR-“free” zones in your home
  - Children’s bedroom (no wireless monitors)
  - Ethernet cables or turn off Wi-Fi at night
- Where you carry it (mobile phone)
  - High EMR while talking – use speakerphone
  - Don’t sleep with your phone or carry close to body
- Movement (vs longing for comfort)
  - Mind/Soul – passive vs active
  - Body and posture – wholeness in movement, standing desks
  - Senses – move your focus, variation (temperature, distance, …)
  - Etheric exercises
- Lifestyle (longing to be entertained vs to do)
  - Fasting, friends, food, nature, …
  - Diet: High Oxygen Radical Absorbance Capacity (ORAC) foods

Recommendations

1. Measure your home's EMR
   - Android app (Kirlian Photography)
   - iPhone app (Fallen Angel Creations)
2. Place screen near window – look outside often
   - 20-20-20 rule: Every 20 minutes, look at something at least 20 feet away for 20 seconds
   - Go everyday, same time, for an hour walk
3. Get up once per hour, 10K steps per day
   - Move, get tea
   - Barefoot on the earth
4. Shut down at night
   - And at dinner, make it engaging
5. Annual blood tests

Jennifer Gidley

- Australian psychologist and educator
- University of Technology, Sydney
  - Institute of Sustainable Futures
- President of the *World Futures Studies Federation*
- On Australian **Steiner** National Curriculum Project team
- "We are at a critical point today in research into human futures. **Two divergent streams** show up in the human futures conversations. Which direction we choose will also decide the fate of earth futures in the sense of **Earth's dual role as home for humans, and habitat for life**. …

Comparing our 2 Views of Us

1. **Scientistic:** dehumanising and atomistic
   - based on a mechanistic, behaviourist **model of the human being**, with a thin cybernetic view of intelligence.
   - **Transhumanist** ambition to create future techno-humans is anti-human and anti-evolutionary.
   - Involves technological, biological, & genetic enhancement of us
2. **Humanitarian:** philosophical and ecological
   - based on a view of humans as kind, fair, consciously evolving
   - peaceful agents of change with a responsibility to maintain the ecological balance between humans, Earth, and cosmos"

-- Contrasting Futures for Humanity: Technotopian or Human-Centred?
Paradigm Explorer, Sept. 2017

Other Work and Groups

- Advocates for Safe Technology
- **Women's Initiative to Reduce Electro-Smog**
- Dr Mary Redmayne

TECH AND EDUCATION

Eliant Position Paper on Digital Media and Childhood

What Constitutes Good Education?

- Draws out from within
- Many Studies, e.g. John Hattie (2008, 2011)
- The teacher's inner being, character, love, wisdom
- Learning without a teacher – ineffective
  - App on screen as teacher – very ineffective
  - Robot as teacher – ?
- Teacher's role
  - Activator of the inner (soul), respectful & loving
  - Coach, grading & grating

Hand-Eye SensoriMotor Skills

- 2-D surface lacks depth
- Eye movement restricted to the plane
- Sensory wholeness not active, not practiced
  - 12 Senses work together
  - What is absorbed through the senses?
  - Experience of wind, warmth, and light
- Compare:
  - Experience of images while outdoors or in classroom
    - Recess
  - Experience of images while online
    - Computer gaming

Learning thru Bodily Interaction

- Balance while in movement
- Experience of whole body during movement
  - Resistance, support, surface, texture, viscosity, moisture
  - Separateness (ego), agency, ability to alter, change environment
- Experiences before their abstraction
- Affect on cognitive and social learning
  - Impairments (Leonard 2016)
- ADHD training ground
  - Computer gaming: very rapid mental reaction
  - No past or future, total absorption in the game
  - Addiction, dopamine stimulation

Effects of Digital Exposure

- Diminished eye contact, social interaction, interaffectivity
- Undeveloped social skills: collaboration, group-work
  - Ekeocha & Brennan (2008): individual memory of an event was significantly worse after watching a movie on computer screen alone than at a theatre with 2 or more others (thought to be due to group discussion afterward)
- Fear of social exclusion

Extensive Digital Media Use

- Zimmerman (2007): Impairs language acquisition, attention disorders
- Weis & Cerankosky (2010): Impairs reading and writing, behavior at school
- Richards et al. (2010): Impairs empathy
- Sanders et al. (2000) and Lepp et al. (2014): Depression, less satisfaction, impairs school performance
- Zheng et al. (2014): Increases ADD
- Hancox et al. (2004): Increases obesity
- BLIKK (2017, 5500 children): impairs concentration, play ability, language, and increases hyperactivity & obsesity

Empathy

Konrath et al. (2011)

- Drew from 72 studies between 1979 and 2009
- Decline of 40% in American college-aged students
- Most of the decline from 2000 to 2009.

Conclusions

- Use of digital media during childhood negatively affects
  - Cognition
  - Emotional skills
  - Social skills
- Well-being with a warm human being as teacher
- Childhood sensory experiences cannot be replaced by computer images – play time
- Education of the child must include teacher and
  - Exploration and acting (imitation)
  - Feeling/emotional coupling (variety)
  - Understanding through the body before using abstractions

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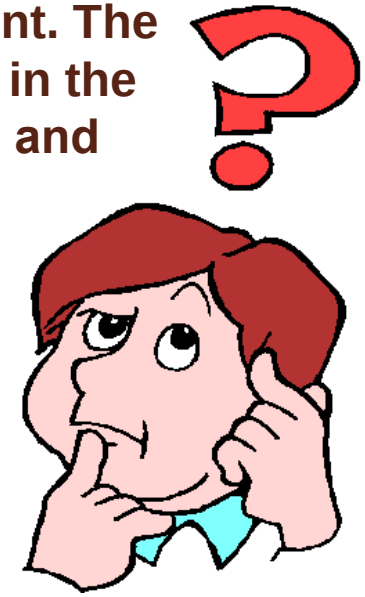
"Pleasure and joy are founded on pain; without it they cannot exist. Just like the pleasure of satiety depends on hunger, so do knowledge and joy originate in pain. That is also the reason why, in a tragedy, the sense of an expected redemption fills us with satisfaction. Everything that will have fullness in the future endures states of sadness and pain at present. The knowledge that what is now pain and suffering will in the future turn to plenitude comforts us." Occult Signs and Symbols, 28Oct1907, Berlin, GA 101



Q&A

"Out of desperate circumstances, the new Christ experience will evolve.

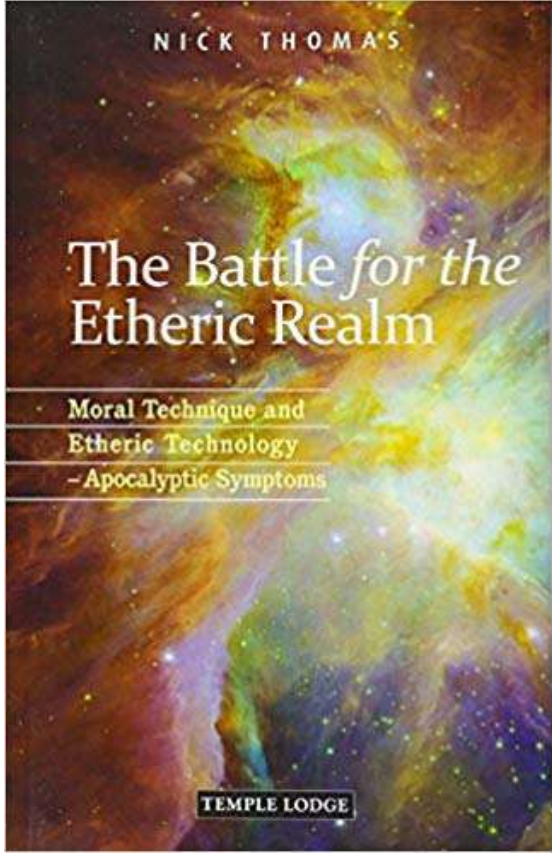
Trying outer circumstances will become inner soul trials.

Out of these soul trials, vision will be born." -- R. Steiner, *For the Michael Age*

The Second Fall

- "Ahrimanic powers will intervene more and more and Ahrimanic spirits will also use human bodies for other things. A time will come when Christians will have to ask themselves seriously when they meet this or that human being: Is that really a human being or is it a very loose mantle for Ahrimanic spirits? In the future one will have to make this distinction in addition to the other ones one has to make today. This will be the second fall, and the beast and his herald will take possession of human bodies. Thereby these demons will have fallen. So first we have the fall of corrupt human beings and then the fall of certain corrupt spirits, who are close to men. These spirits take a tumble in the second fall." – Apocalypse, lecture 11, September 15, 1924, GA 346
https://wn.rsarchive.org/Lectures/GA346/English/UNK1995/19240915v02.html
- One interpretation is that the time is coming when robotics will succeed in creating a machine that looks very much like a human being.

Battle for the Etheric



- Merge Physical but also Etheric?
  - What etherics belong to our Double?
  - Mirror of the etheric
  - Loosening of Etheric body
- Christ in Etheric
  - Lucifer and Ahriman? Michael?
  - The Important Event of Our PACA
  - Living Thinking. Hearts begin to have thoughts.
  - Recognize the HB, good and evil
  - 1933 onwards
  - Evolution

Vibratory Goal

- “Well, the whole way in which people construct machines varies greatly according to the nature of the machine in question; but everything tends towards the gradual development of these still imperfect, primitive machines into a kind of **machine which depends upon vibrations**, and where the aim is to make the machines effective by means of vibrations or oscillations, by means of movements which run a periodic course.”
  - Rudolf Steiner, *Man as Symphony of the Creative Word*, lecture 2

What Could Go Wrong?

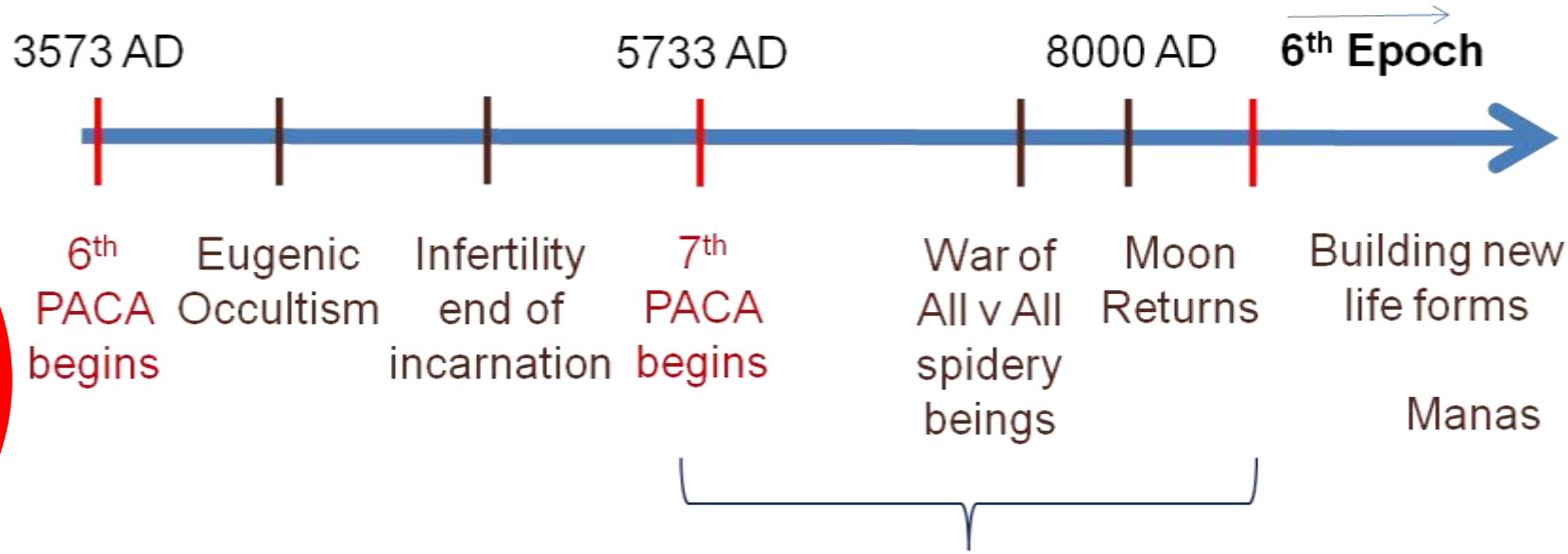
- "But if once these machines in their coordinated activity could be constructed in such a way as can be learned from the distribution of foodstuffs in the organization of the **cow**, then the **vibrations** which would be **conjured up** on the earth-globe through the machines, these small earth-vibrations, would so run their course that what is above the earth would sound together with, **vibrate together** with what is happening on the earth; so that our planetary system in its movements would be **compelled to vibrate** with our earth-system, just as a string tuned to a certain pitch vibrates in sympathy when another one is struck in the same room."
  - - Rudolf Steiner, *Man as Symphony of the Creative Word*, lecture 2

Screen Time

- Human Screenome Project could inform academics, health professionals, educators, parents, advocacy groups, tech companies and policymakers about how to maximize the potential of media and remedy its most pernicious effects.
- https://theconversation.com/screen-time-conclusions-about-the-effects-of-digital-media-are-often-incomplete-irrelevant-or-wrong-129960

Timeline for a Future `Welding'

Conquer the Mineral Kingdom



No physical bodies

Will we use robotic bodies?

- How will we prevent hackers taking over our body?
- How will we prevent our astrality and egoism from doing terrible destructive acts? Ans: moral tech

Prior Tragedies and Future Ones

- Separation of the sun
- The Fall
- Separation of the moon
- End of Lemuria
- Black Magic of Atlantis
- The Flood
- The Plague
- WAAA
- Return of the Moon
- Return of the Sun

A Task for Humanity

- Moral & Mechanical: Must **Interpenetrate**
  - Why?
  - History – Future (to Jupiter)
- Moral on Jupiter?
  - Moral in Nature on Earth
  - https://www.weforum.org/agenda/2018/03/autonomous-robot-bees-are-being-patented-by-walmart

Human Soul and Christ

- Thinking: Seek and you shall find
- Feeling: Ask and you shall receive
- Willing: Open the door and the I shall enter

Overview of our Body & Soul

- Every 7 years
  - All cells replaced, teeth change, puberty, adulthood, …
  - From birth, the child is head and "as time goes on, the head-organism needs to move itself further away from the immediate earth-forces. The head rises; consequently, we grow."
  - "In looking at the body, we are really looking at our Ahrimanic part, and this is all that modern scientific anthropology describes in man"
  - "We see our physical part materialized, densified by Ahriman; our soul-spiritual part rarified by Lucifer"
  - "on the one side the physical-corporeal Ahrimanic phantom, on the other the soul-spiritual Luciferic phantom; two doubles" = human
    - *The Being and Evolution of Man*, Berlin, 23Jul1918, GA 181
- Application to evolution
  - Cultural Ages and Epochs
  - All gifts from the gods overcome, replaced through our own efforts
- Something is inwardly active within us – our I

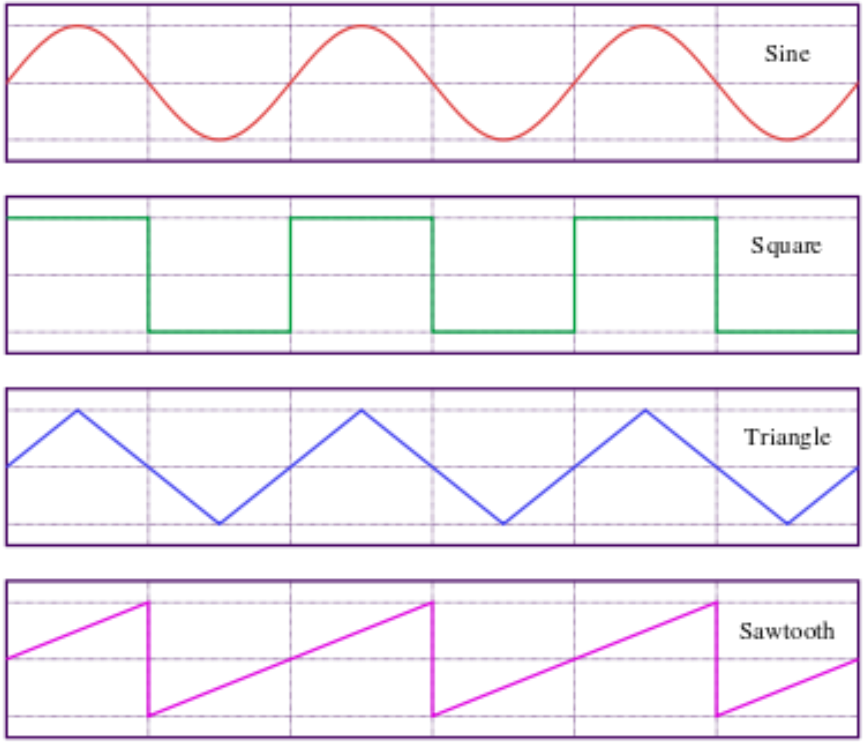
How To Know You're Modern

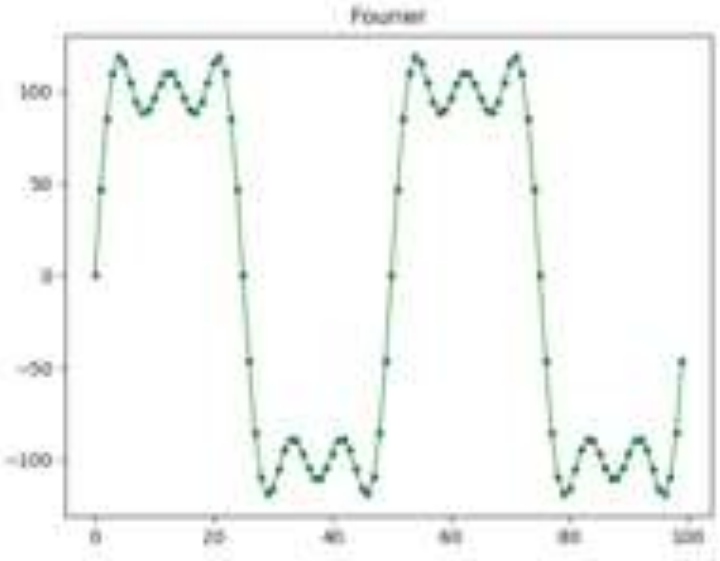
- Food – Fatless
- Desserts – Sugarless
- Cooking – Fireless
- Cars – Keyless
- Tires –Tubeless
- Phones – Wireless
- Dress – Sleeveless
- Youth – Jobless
- Attitudes – Careless

- Are we – humanless?

- Relationships – Meaningless
- Feelings – Heartless
- Babies – Fatherless
- Education – Valueless
- Government – Clueless
- Leaders – Shameless & Worthless
- You are – Speechless

Approximating a Square Wave





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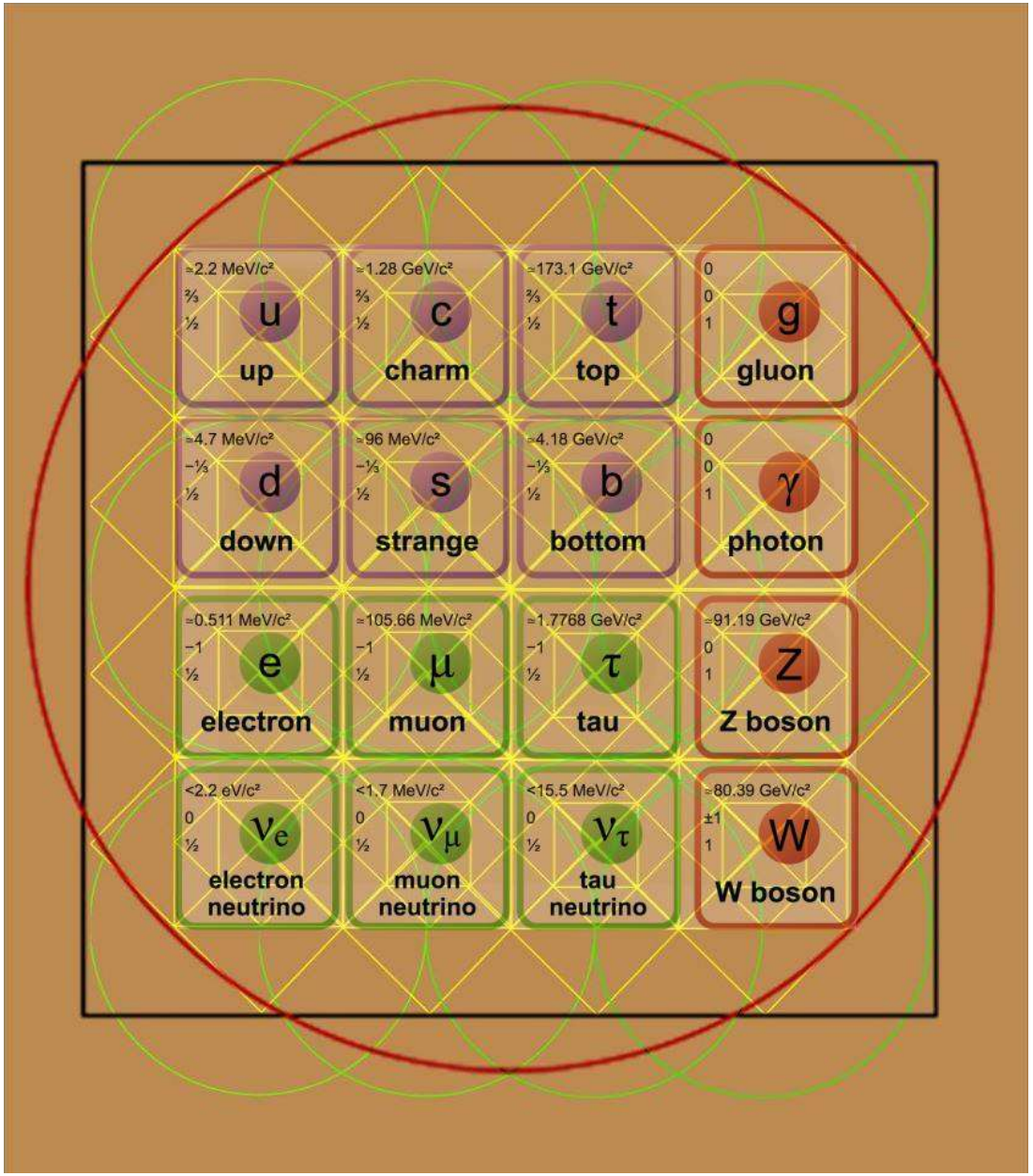
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≈0.511 MeV/c²
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0
½
νe
electron neutrino
<1.7 MeV/c²
0
½
νμ
muon neutrino
<15.5 MeV/c²
0
½
ντ
tau neutrino
≈80.39 GeV/c²
±1
1
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W boson

Science and Engineering

	Seeks	Results in	Today
Science	Truth	Knowledge	Models
Knowledge	Wholeness	Engineering	Theory
Engineering	Emancipation	Technology	Machines

What is Technology?

- Tools, limb extenders
- Sense extenders
- Mechanical Machine
- Computer

Who Triumphed?

Lecture Schedule

Friday, February 21

- 8:00—9:30 pm: *The Iron Necessity of Our Technological Age*

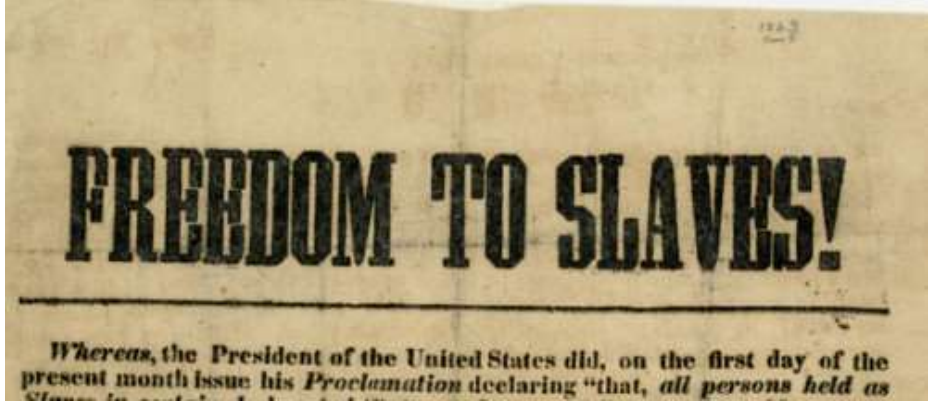
Saturday, February 22

- 9:45–10:45 am: *The Human Double and Its Future*
- **2:30–3:30 pm: *Ahriman's Gift–Emancipation from Dead Thinking***
- 4:45—5:45 pm: *State of MysTech, Work to be Done, Social MysTech*

Sunday, February 23

- 9:00—10:15 am: *Greek Mythology and its Relationship to Our Technological Age*

EMANCIPATION


FREEDOM TO SLAVES!

Whereas, the President of the United States did, on the first day of the present month issue his *Proclamation* declaring "that, *all persons held as*

- Past
  - From Nature
  - Physical labor
- Present
  - Has Freedom been attained?
  - Mental labor
  - From dead thinking
- Future
  - Illness, Old Age, even Death
  - Immortality (in a cyber world)
  - My Kingdom is not of this world (or that one!)

What is Humanity's Goal?

&

Do we need Tech for these goals?

- "Anthroposophy is the preparation for everything that will come in the future. Those who take the process of man's evolution seriously resolve not to allow the soul's development to come to a standstill but to ensure that its development will eventually enable the spiritual part of the earth to become free, leaving the grosser part to fall away like a corpse — for human beings could frustrate the whole process. Those who desire evolution to succeed must acquire understanding of the spiritual life through what we today call anthroposophy. The cultivation of anthroposophy thus becomes a duty; knowledge becomes something that we actually experience, something toward which we have responsibility. When we are inwardly aware of this responsibility and have this resolve, when we experience the mysteries of the world so as to arouse in us the wish to become anthroposophists, then our experience is right. Anthroposophy must not, however, be something that merely satisfies our curiosity; it must rather be something without which we cannot live. Only when this is the case do we experience in the right sense; only then do we live as living building stones in that great construction that must be carried out in human souls and that can embrace all humanity..." – Etherization of the blood, 1Oct1911

Transhumanism and Love

- As technology philosophers have been pointing out for years, now, the transhumanist vision too easily reduces all of reality to data, concluding that "humans are nothing but information-processing objects."
- The reduction of human evolution to a video game that someone wins by finding the escape hatch and then letting a few of his BFFs come along for the ride.
- Will it be Musk, Bezos, Thiel…Zuckerberg? These billionaires are the presumptive winners of the digital economy — the same survival-of-the-fittest business landscape that's fueling most of this speculation to begin with.
- Technology development became less a story of collective flourishing than personal survival. -- https://onezero.medium.com/survival-of-the-richest-9ef6cddd0cc1

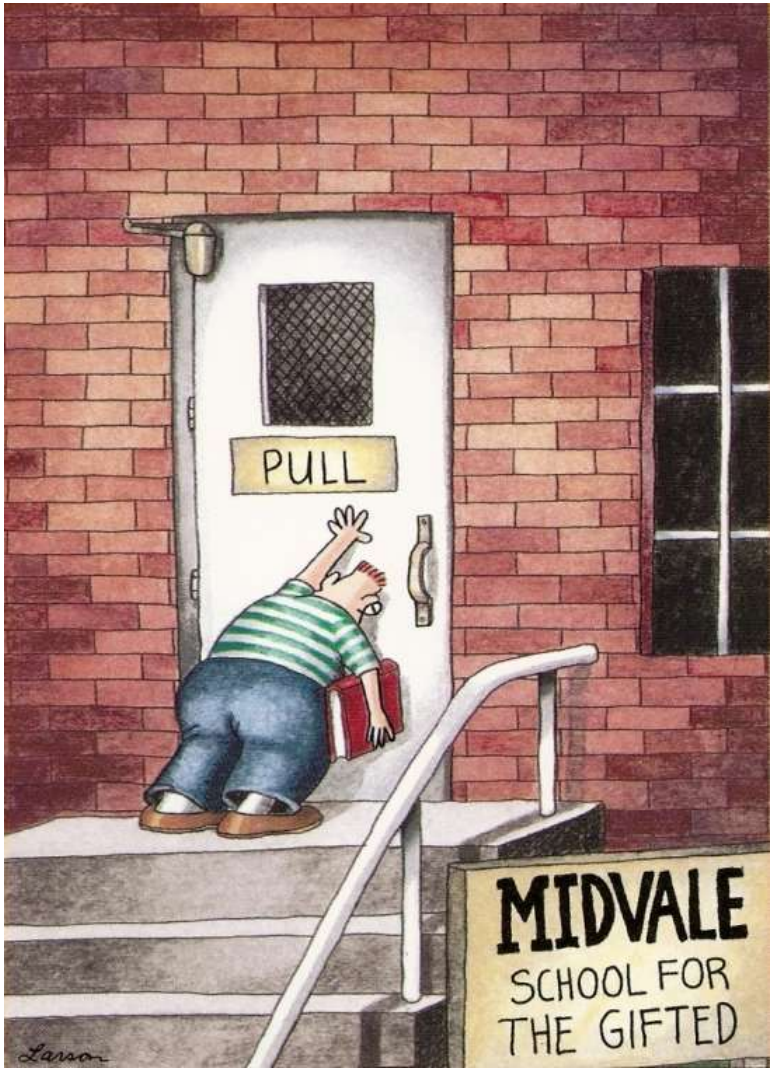
Have Machines Been Helpful In Attaining our Goal?

- Labor Emancipation
  - Physical
  - Mental
- More time to learn?

- Robotics
- AI
- Birthing
- Human & Cosmic?

How Do we learn?

- Soul: thinking, feeling, willing
- Wisdom?
  - From suffering?
  - Temptation and Evil?
- Stunted or Strong Angels?



Will We Ever Learn?

- "But as civilization goes into its **decline**, from the fifth post-Atlantean period onwards, this element has to come in again, so that **catastrophe may be brought about**.
- Human beings **must use** these powers themselves.
- Ahriman's messengers are therefore an **iron necessity**; they have to bring about the **destruction** that will lead to the **next step forward** in civilization.
- This is a **terrible truth**, but it is so.
- And nothing will avail where this truth is concerned but to **get to know it and to see it clearly**.
  - *Fall of the Spirits of Darkness,* lecture 4, 6Oct1917, GA 177

Screens, Parenting, and Education

Screen Time (by Victoria Dunkley):

- Disrupts sleep and desynchronizes the body clock
- Desensitizes the brain's reward system
- Linked to depression and suicide (light at night)
- Induces stress reactions, increase irritability
- Brain chemistry shows addiction and hyperarousal
- Overloads sensory system fracturing attention → explosive
- Reduces physical play time needed for muscles, bone, health
- https://www.psychologytoday.com/us/blog/mental-wealth/201508/screentime-is-making-kids-moody-crazy-and-lazy

How many disasters do we face?

Just to name a few:

- Fukushima Nuclear
- Honeybees
- 5G and Safety of Life
- Climate Change
- Robotics and Work
- AI Accidents
- AI Effects on Humanity

“What is Truth?” - Pilate

Fear as Food

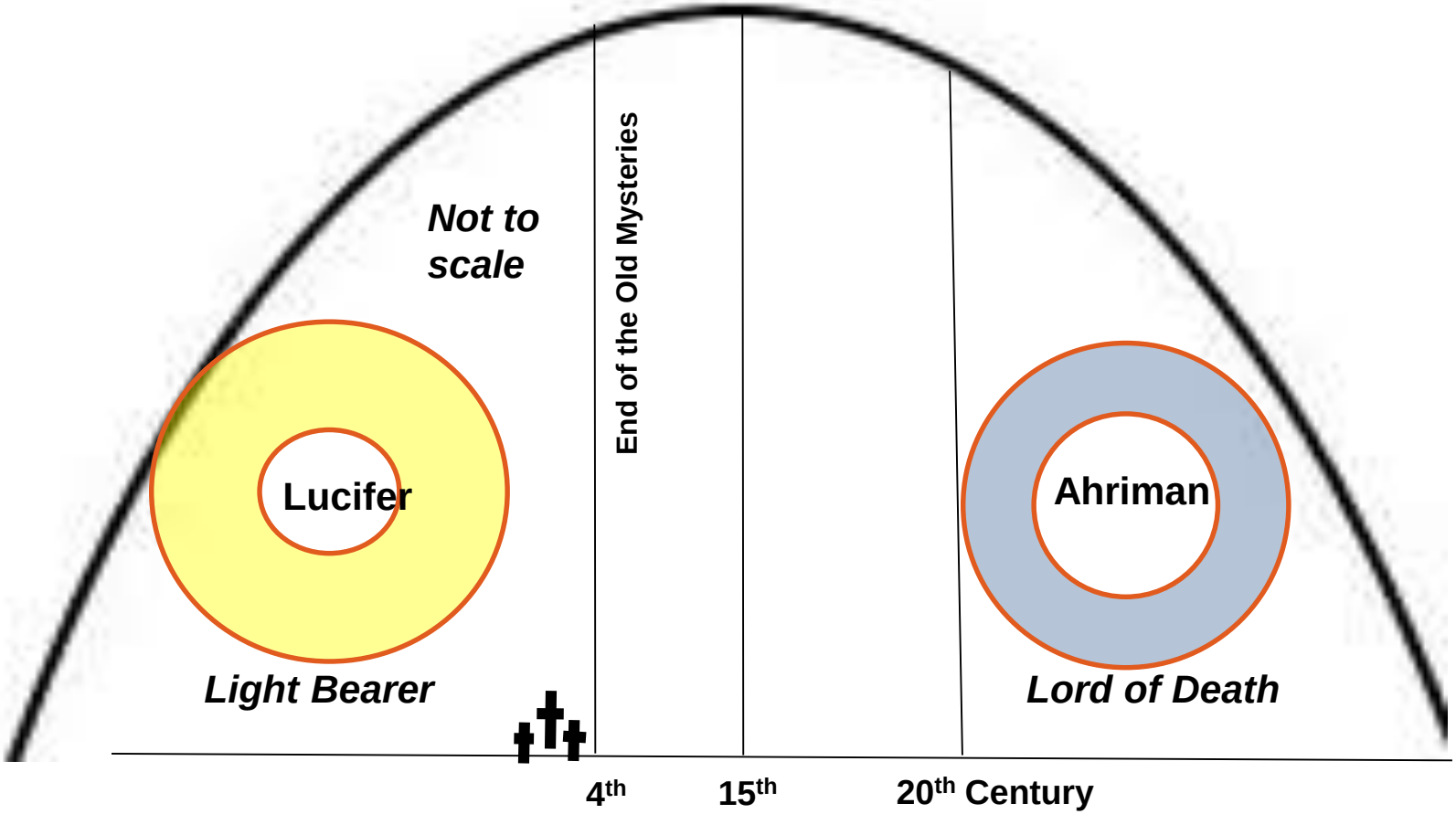
- "There are beings in the spiritual realms for whom anxiety and fear emanating from human beings offer welcome food. When humans have no anxiety and fear, then these creatures starve. People not yet sufficiently convinced of this statement could understand it to be meant comparatively only. But for those who are familiar with this phenomenon, it is a reality.
- If fear and anxiety radiate from people and they break out in panic, then these creatures find welcome nutrition and they become more and more powerful. These beings are hostile towards humanity. Everything that feeds on negative feelings, on anxiety, fear and superstition, despair or doubt, are in reality hostile forces in supersensible worlds, launching cruel attacks on human beings, while they are being fed.
- Therefore, it is above all necessary to begin with that the person who enters the spiritual world overcome fear, feelings of helplessness, despair and anxiety. But these are exactly the feelings that belong to contemporary culture and materialism; because it estranges people from the spiritual world, it is especially suited to evoke hopelessness and fear of the unknown in people, thereby calling up the above mentioned hostile forces against them."
  - Rudolf Steiner – GA 56 – Die Erkenntnis der Seele und des Geistes – Berlin, 12Dec1907

Facing the Future

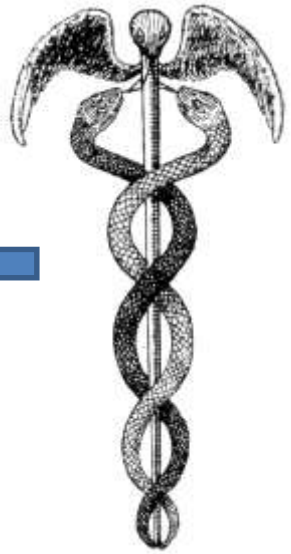
- We must **eradicate** from the soul **all fear** and terror of what comes towards Mankind, out of the **future**. We must look forward with absolute **equanimity** to whatever comes, and we must think only that whatever comes **is given us** by a world direction full of **wisdom**.
- It is part of what we **must learn** during **this age**, namely to act out of pure **trust** in the ever present help of the spiritual world; truly nothing else will do if our courage is not to fail us.
- Therefore let us **discipline our will**, and let us seek the **awakening** from within ourselves, every morning and every evening.

  – Rudolf Steiner (indirectly from a lecture)

Ahriman Must Have His Incarnation for Cosmic Balance

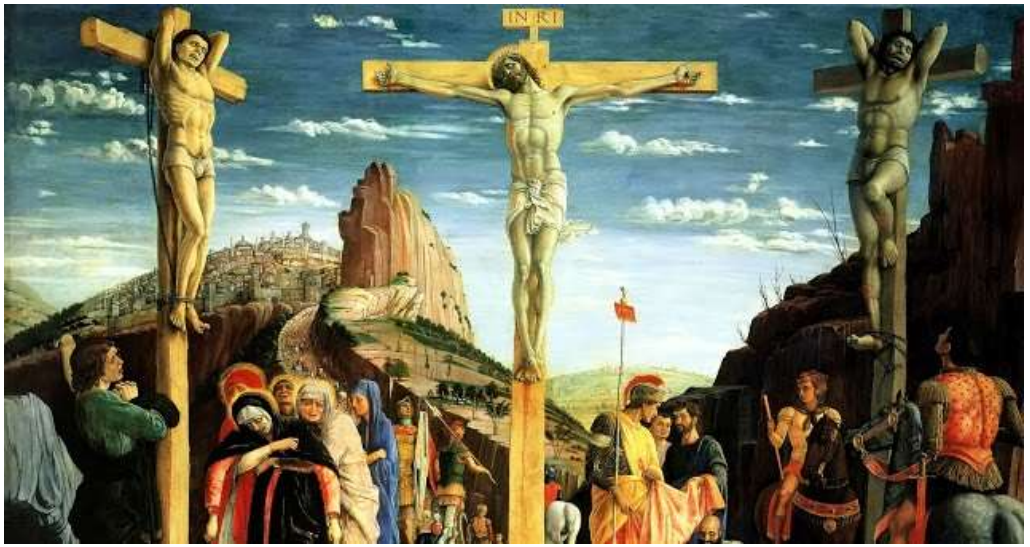


Lucifer and Ahriman

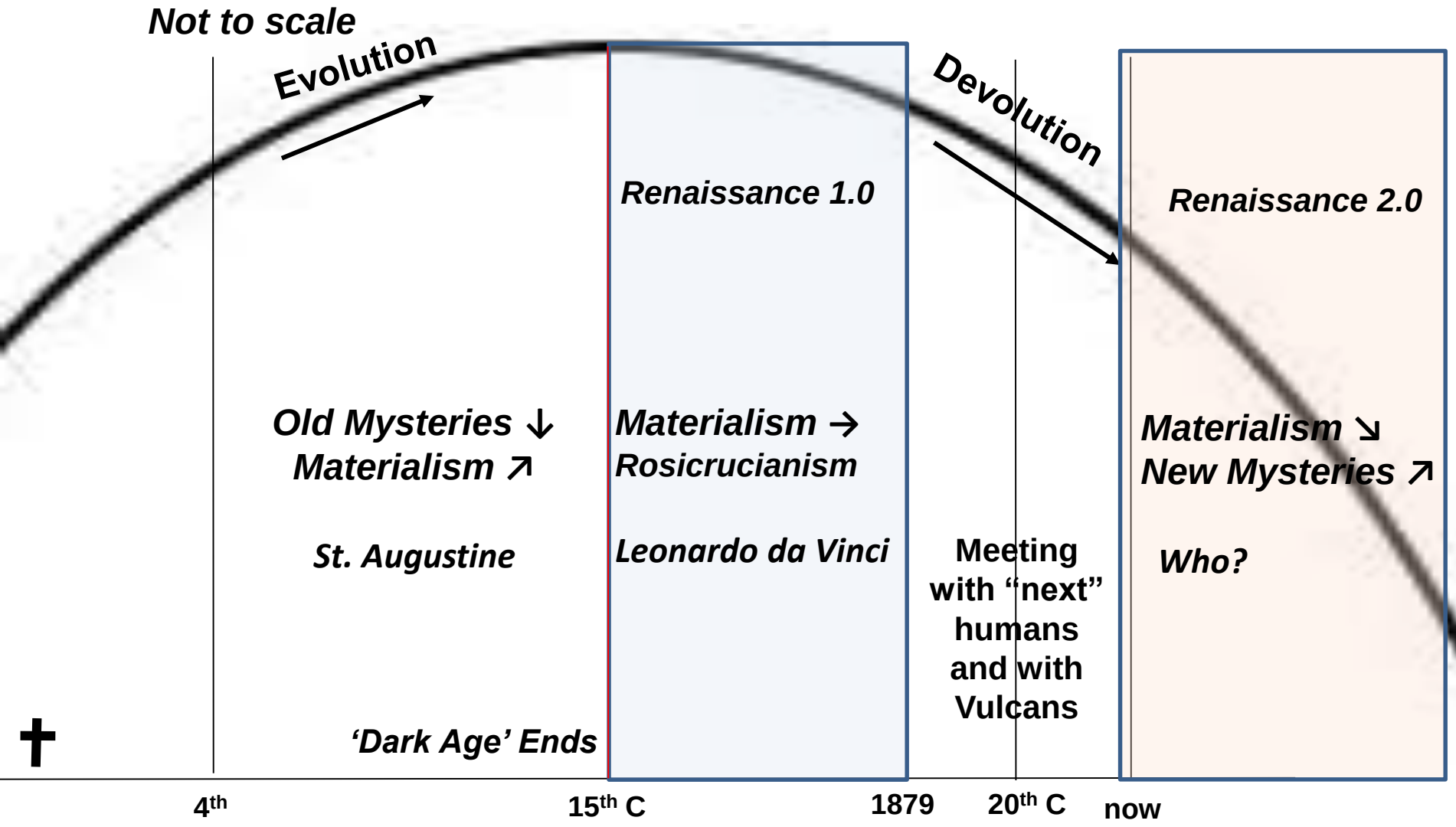


- Drama on Earth's Human Stage:
  - Downfall of Luciferic — Rise of Ahrimanic
  - **Power of thought** — **Human power of will**
- Must recognize arrival of Ahrimanic beings within the evolution of mankind
  - We shall not comprehend the human race without taking these beings into consideration

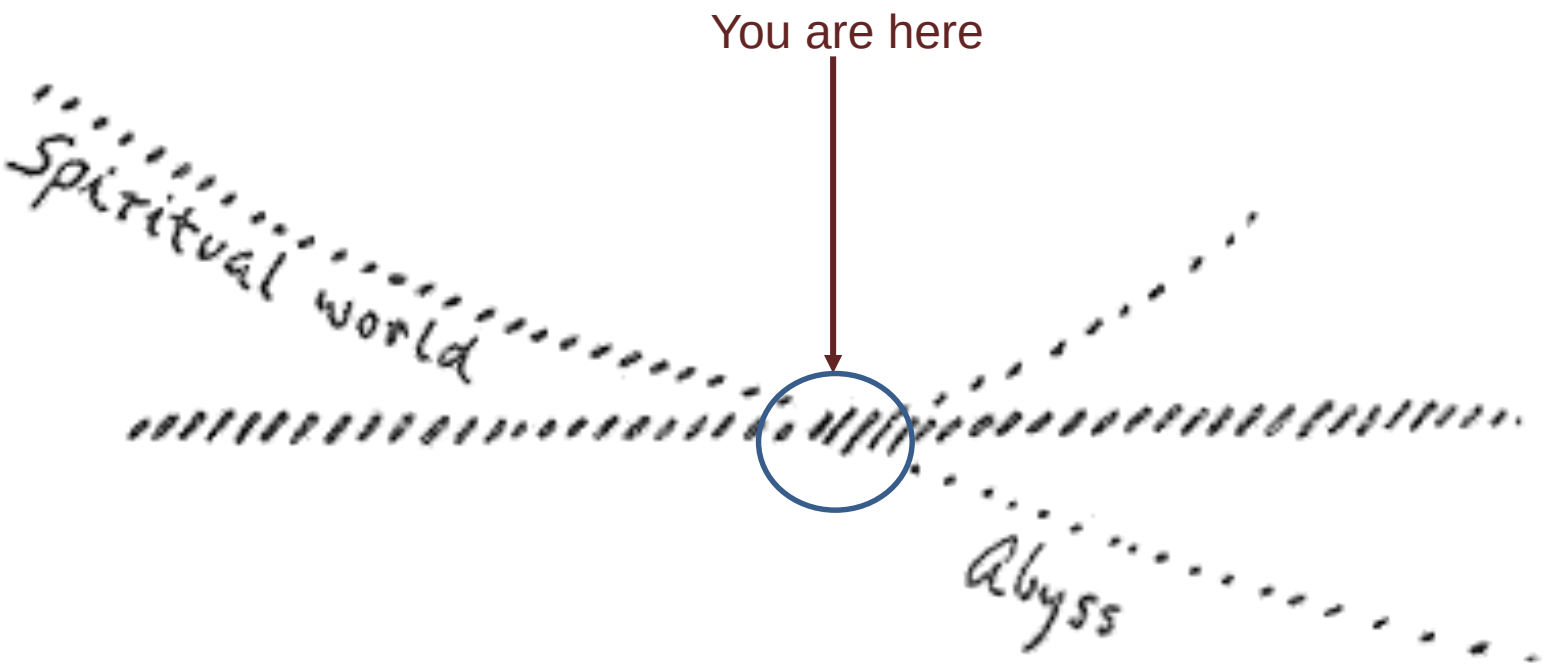
R. Steiner, *The Mission of the Archangel Michael*, The Michael Deed and the Michael Influence as Counter-pole of the Ahrimanic Influence, 29Nov1919, GA 194

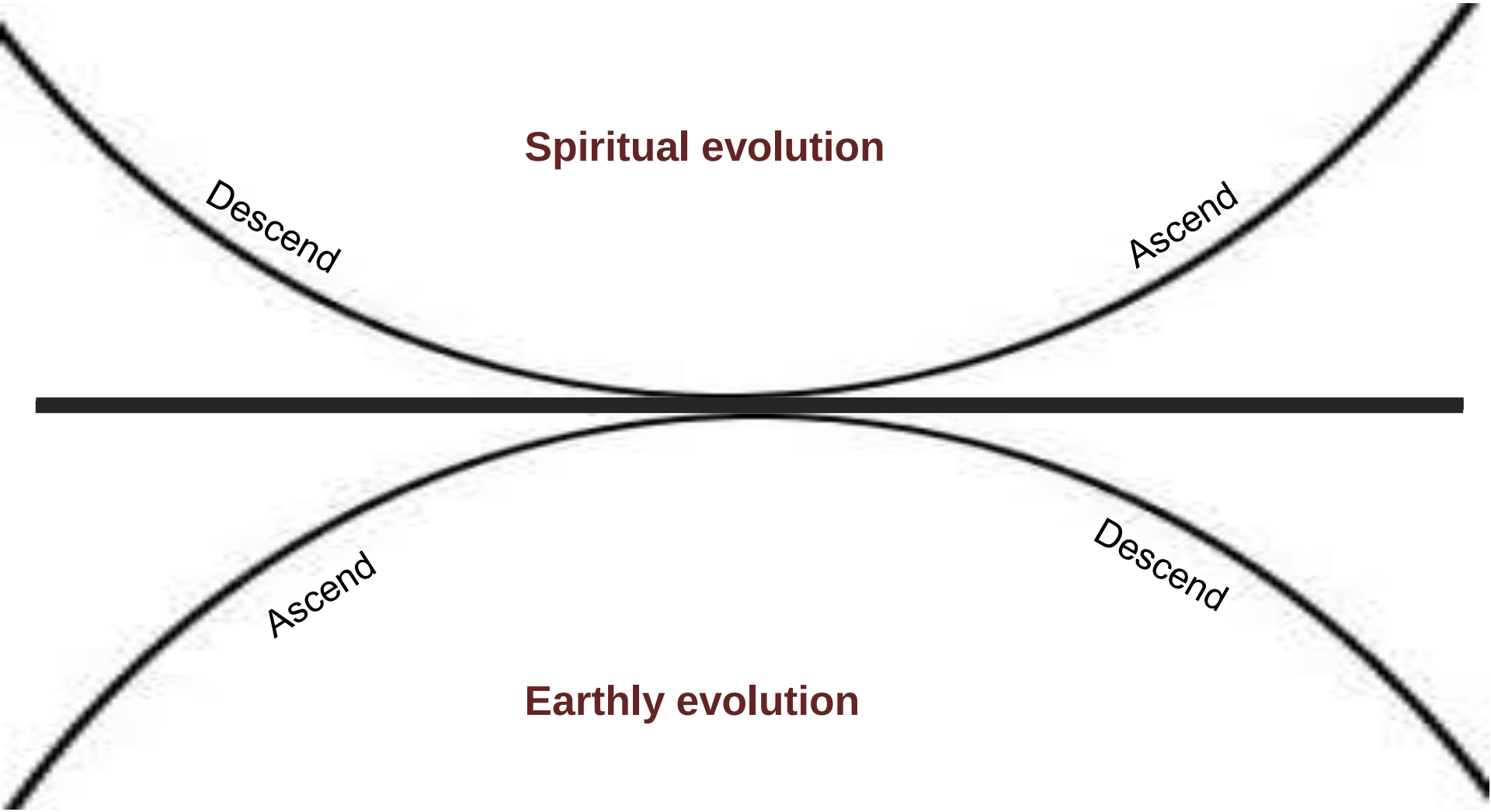


Closeup: Post Atlantean Evolution



Apocalypse: Critical Point in Evolution



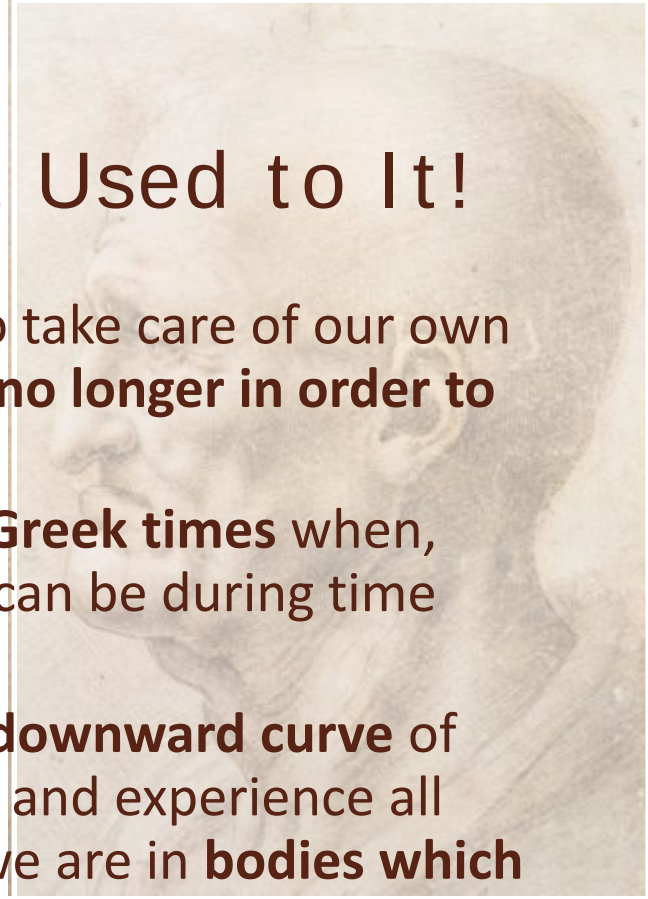

Spiritual evolution
Descend
Ascend
Ascend
Descend
Earthly evolution

Mid-Point Changing of the Guard

- After 15th Century – beings ascending, finished work
- Spirits of Personality (Archai) to level of Exusiai (Form)
- Archai do not intercede but wait for us to rise to them
- **Cosmic:**
- **Freedom**
- Michael
- 1879 on
- Vulcans

- *Evolution towards Jupiter has begun!*

Now in Devolution – Get Used to It!

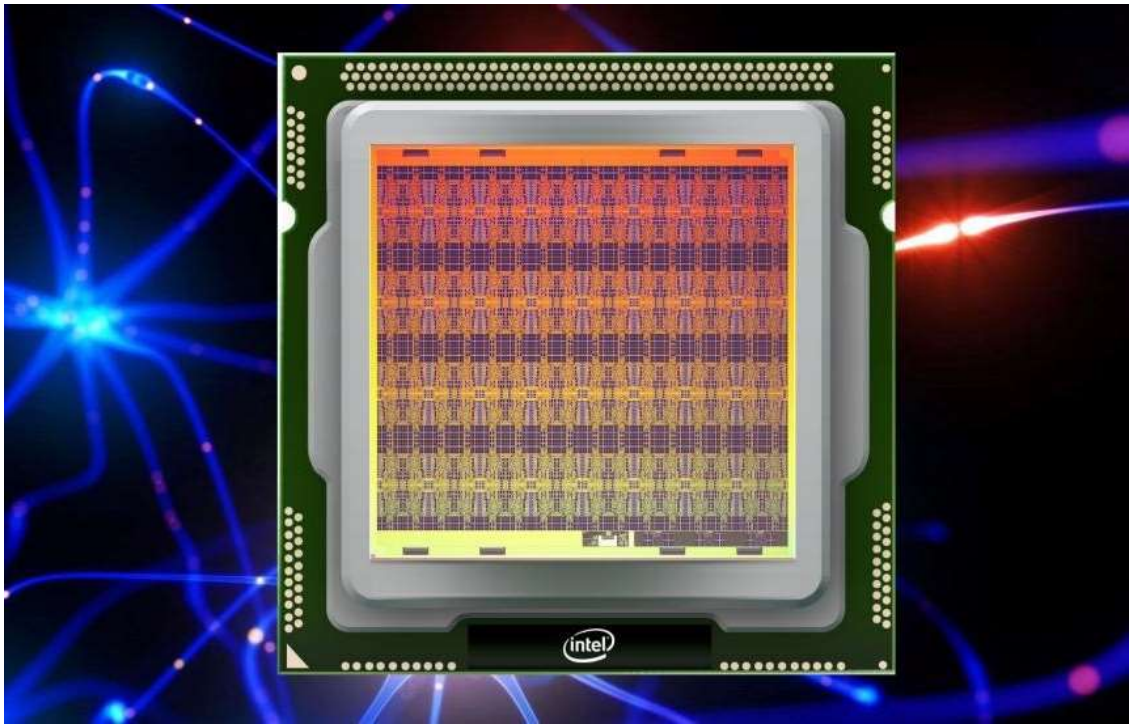


- "We really are no longer in this world to take care of our own organization; we do **still incarnate**, **but no longer in order to take care of our own organization**
- This organization evolved until ancient **Greek times** when, **human bodies were as perfect** as they can be during time spent on earth
- Now, we are really here to be part of a **downward curve** of evolution, to incarnate in order to learn and experience all manner of things by the very fact that we are in **bodies which are dying, increasingly crumbling and withering** away
- The fact is that anything we **inwardly develop** and inwardly are, will **no longer** become ***part of*** the **outer physical body**
  - The Exusiai are moving on, the Archai are taking over …
- Consequence will be **all kinds of changes in development"**

R. Steiner, *Fall of the Spirits of Darkness*, lecture 5, 7Oct1917, GA 177

Imitating the Human Brain

- Loihi by Intel
- Neuromorphic
- AI with on-chip learning
- Programmable synaptic learning



Arrival of Next Humans

- They will be on the **human stage of Jupiter**
  - **As we were to those on the human stage of Old Moon**
- "Behind them there stands the Ahrimanic power which endows them **with their strong will power**
  - Pours into them their directive forces, pushes from behind
  - Sub-human beings controlled by higher Ahrimanic spirits
  - They contain something which far surpasses their own nature and being
- "They show something in their appearance which, if it takes the human being **captive**, acts very much more strongly than that which the weak human being can control today
  - **Only by spiritual strengthen can we confront this**"

- R. Steiner, *The Mission of the Archangel Michael*, The Michael Deed and the Michael Influence as Counter-pole of the Ahrimanic Influence, 29Nov19

Aim of These Ahrimanic Beings

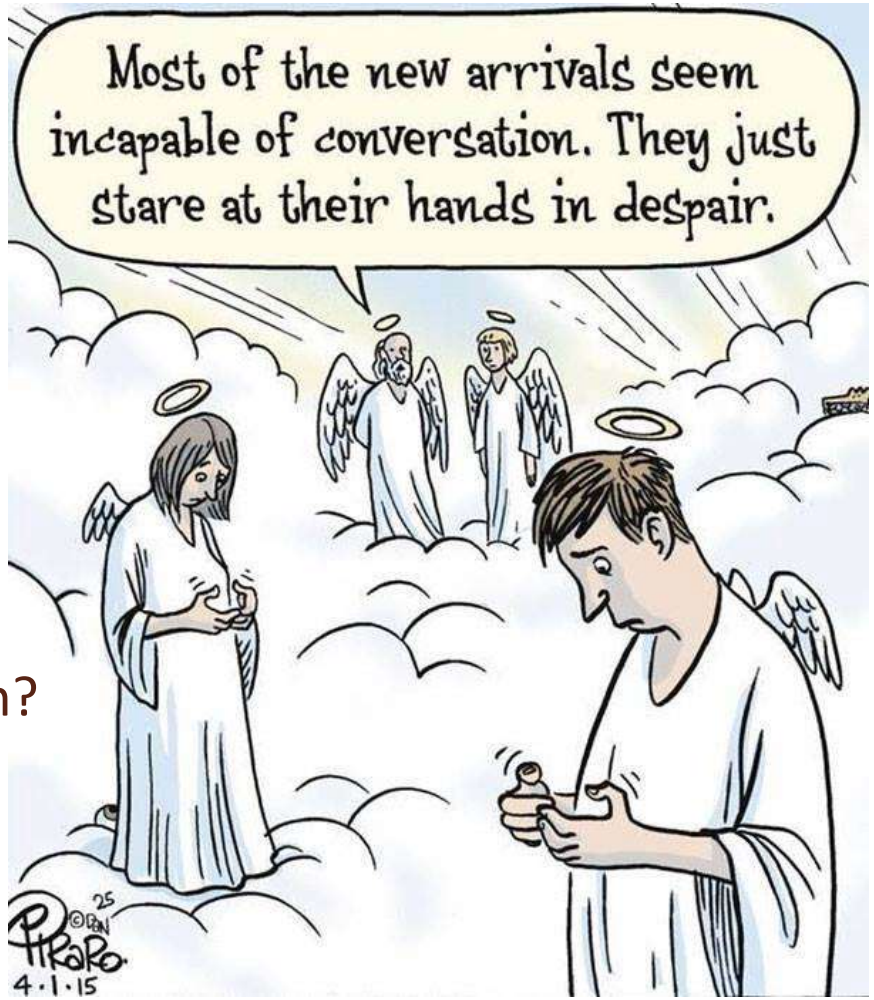
- What is the aim of this Ahrimanic host?
  - Permeation of **human willing**
    - As the Luciferic hosts, which Michael has pushed down, have aimed at **human illumination**, at permeation with reason
- And what do they want? To explore being human!
  - They burrow, as it were, in the deepest stratum of consciousness in which the human being is still asleep today in his waking state – human will
  - Man does not notice **how** these beings **enter his soul and also his body**
  - Here they suck in everything that has remained Luciferic, that has not become Christ-permeated
  - This they can reach: this they can take possession of

- R. Steiner, *The Mission of the Archangel Michael*, The Michael Deed and the Michael Influence as Counter-pole of the Ahrimanic Influence, 29Nov19

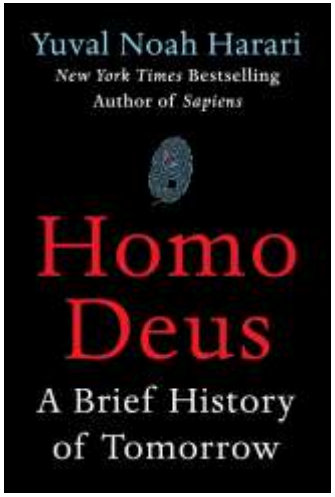
Becoming Stunted Angels?

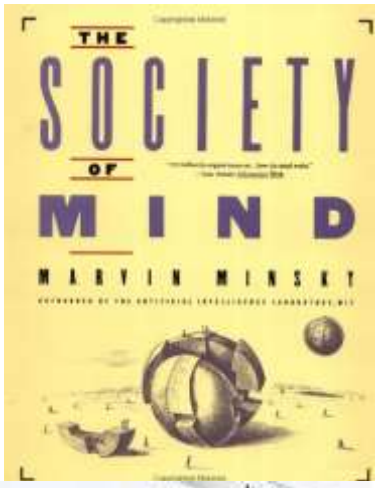
- Arriving too soon?
  - Right speed, fullness, strength
  - Opportunities to attain higher members from Ahriman
- How do we develop strength?
  - Overcome obstacles
- God instructed Dynamis
  - For Old Moon
  - War in Heaven – asteroid belt
  - Some angels ‘fell’
- Old Moon different from Earth?
  - Hardening, matter
  - Why? Development of the Ego

- From *Universe, Earth, and Man, GA 105*

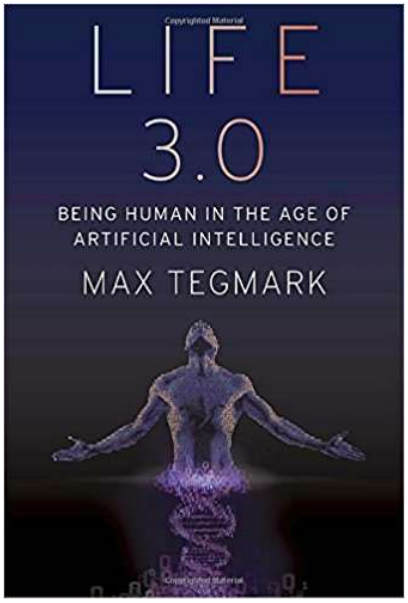


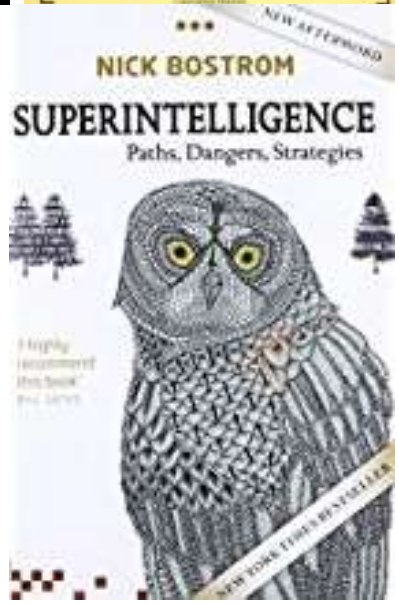
Who is Speaking About the Future?





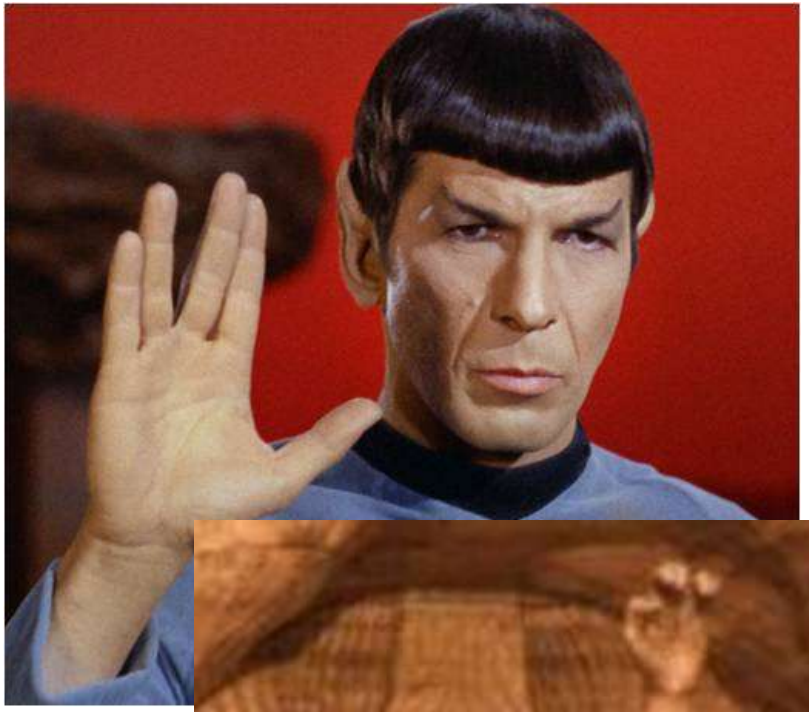
Tr ism

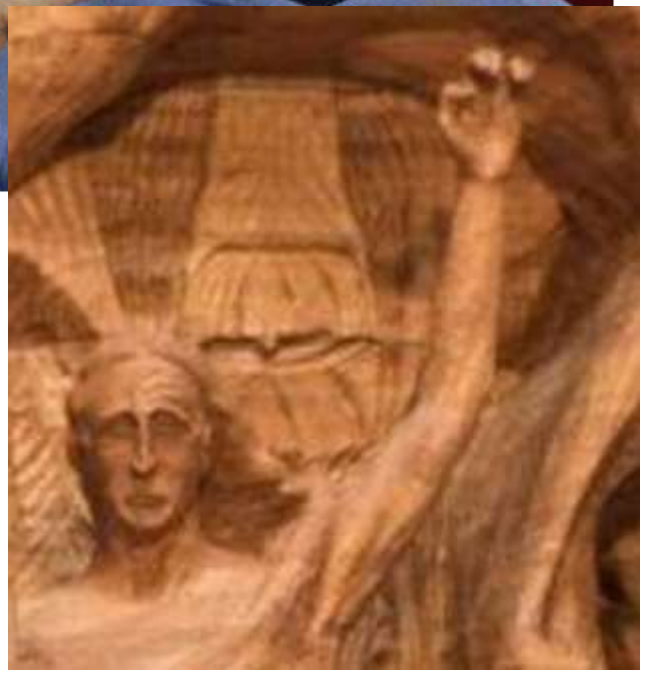




Science Fiction

- Preparer for our future?
- Return of the moon
- Sexual procreation ends
- Hephaestus = Vulcan
- Arrival of Vulcan beings
  - Began 1880
  - Spiritual Science content
  - Their evolution
  - Forced entry if ignored





What Will People Do?

- 90% of current jobs will be done by robots in 25 years
- What is the role of Education?
- Job readiness?

Using Gamers to Make AI Weapons

- They'll then use the information they glean from the gamers to build an advanced AI — so that it can then coordinate the actions of entire fleets of autonomous military robots.
- Giving the fleet the ability to autonomously navigate unpredictable environments
- What could go wrong?

https://futurism.com/the-byte/darpa-gamers-brain-waves-train-robots-swarms

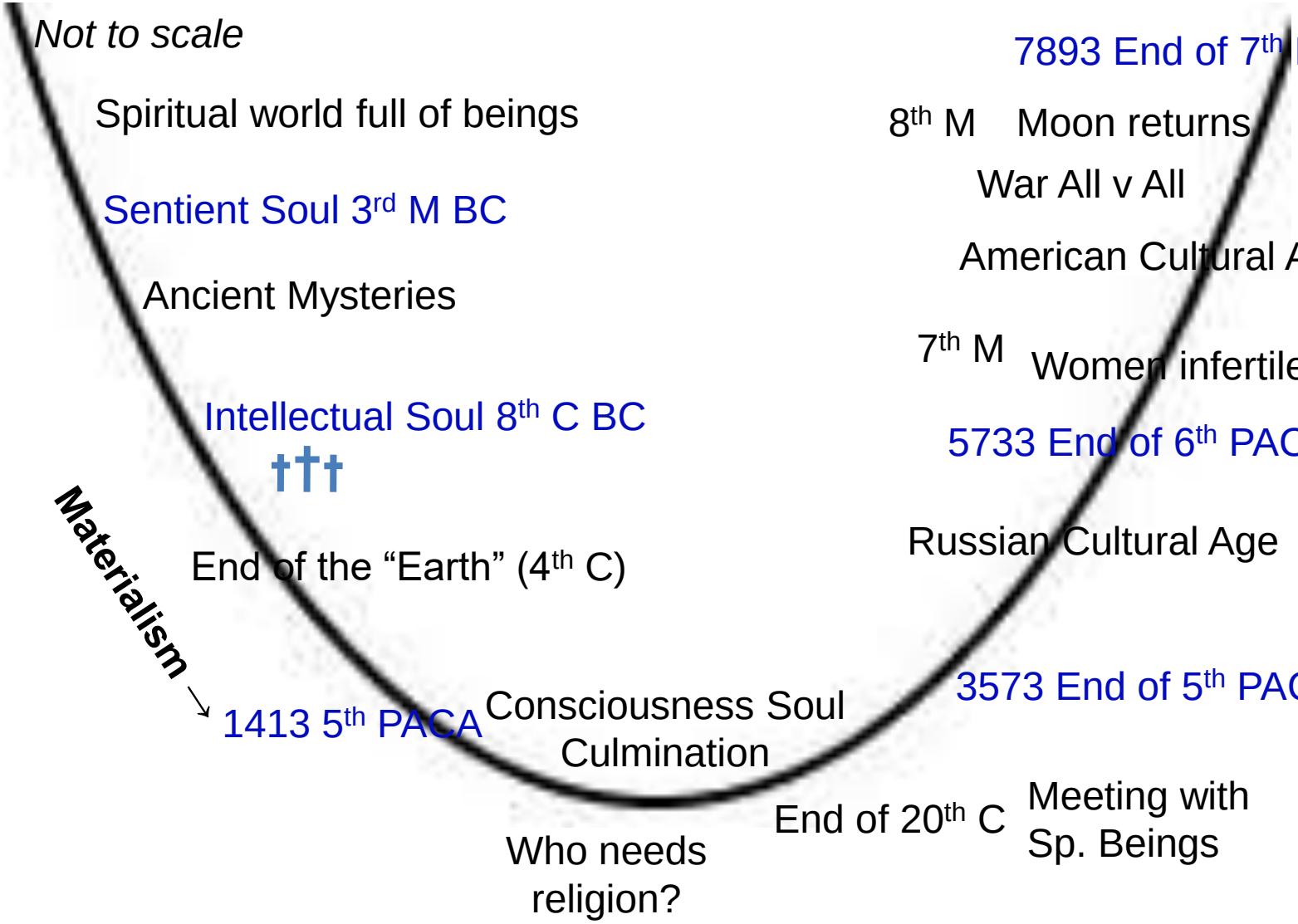
Modern Technology & the Role of Evil

- In the 5th PACA, **illusion**, Maya itself, will be **seized upon by Evil**; it will all be permeated by cleverness, intelligence (VR)
- It sounds paradoxical when one asserts that it is good for men that they can learn to know all these things
  - But the fact is, the human being can only come to **spiritual freedom** by growing **strong against resistance**
  - Moreover, precisely that which is connected with the number Five is always connected in this way with the unfolding of Evil
- We must not regard Evil from the outset as one would who, in the fullness of his egoism, merely wanted to get away, to flee from it
  - **We must penetrate it with consciousness**; we must really learn to know it
- Above all, in our time already a force is preparing in the realm of human beings — a force which tends to create illusions that are harmful and destructive (again Virtual Reality)
-
- – R. Steiner, *The Problem of Faust,* lecture 6, 4Nov17

Evolving Human Consciousness

- Permanent stamp is made upon the general consciousness
  - Whenever you unite the spirit in you with the mineral world
    - For example, make a machine
  - You even change the atom
- "Everything that is performed **without regard to self**, that is connected with the **interests of another**, helps to intensify and to **strengthen our consciousness for the future struggles for existence**
  - For example, you build a church for others, not for yourself
- "Whatever is achieved in the way of development of consciousness in the world does something to further the evolution of the consciousness of **every single being**, even if such a being has not actually worked at the development of his own consciousness"
  - *The Atom as Coagulated Electricity, GA93*

Evolution of conscious awareness



transcending through technology

Transhumanism, *Anthroposophy Worldwide* Sept. 2018

- Kurzweil's stages: evolution in six epochs
- The 5th epoch begins in 2030
  - Merging of human beings and machines
  - Beginning of the singularity
- 6th epoch when we'll be "quite close to God"
  - "Once we saturate the matter and energy in the universe with intelligence, it will be conscious and sublimely intelligent" p. 375
- Life as a computing operation
- Placing the universe into the hands of humanity

Paradise Soon? Does Steiner Agree?

Out of pain, out of the destruction of life → consciousness

- "When a being works against disintegration and decay then it is a living being. If it is able to **let death arise** within it and to transform this death continually into life, then **consciousness** arises. Consciousness is the **strongest** of all forces that we encounter.
- Consciousness, or conscious spirit, is that force which **out of death**, which must be created in the midst of life, eternally makes life arise again. **Life** is a process which is concerned with an **outer world and an inner world**. **Consciousness**, however, is a process which has to do **only** with an **inner world**. An entity which can die externally cannot become conscious. An entity can only become conscious that creates death in its own center and overcomes it." -- *Origin of Suffering*, 8Nov1906, Berlin, GA 55

"One must comprehend such necessities, but one must also not allow oneself to be depressed by them. For this reason, one must be very clear that the **time of awakening has come** and that one must **take an active part in this awakening**, that events often hurry ahead of knowledge and one will not understand the events that take place around us unless one accustoms oneself to knowledge." – Rudolf Steiner, *Individual Spirit Beings and the Undivided Foundation of the World*: Part 3, 25th November, 1917, Dornach, GA0178 (*Reappearance of Christ in the Etheric*)

ISSUES TODAY

"These mysteries of **birth and death** presuppose likewise that mankind will first come to experience a certain maturity; they presuppose that **man will really be able to confront Ahriman** and Lucifer consciously. -- *Three Streams in Human Evolution*, Lecture 5, 12Oct1918, Dornach, GA 184

Dawning of Renaissance 2.0

- "We are standing at a definite point in the evolution of humanity in the sphere of art and in many other spheres of spiritual life — at a point where the Spirit speaks clearly to us of **new riddles**.
- And just as in the time of the [1st] Renaissance man was destined primarily to orientate himself to the ***past*** in order to work his way through to the new, so it is with our own external knowledge and perception of the universe.
- All that has been produced by the modern age since the 16th century is only the ***preparation*** for a ***living*** experience of the universe in its forms and ***movements*** which now stand before us as ***riddles***."
- *Ways to a New Style in Architecture,* lecture 3, 28Jun1914, Dornach, GA 286

Renaissance 2.0 in Education

A COUNTERBALANCE TO TODAY'S TECHNOLOGICAL THRUST

- "The essence of the human being can be understood only in connection with the cosmos"
  - "The human being is directly coupled to the cosmos"

Now! Experiencing the Etheric Christ

- Separation of etheric and physical at death
- It is only in the twentieth century that a renewal of the Christ-Event will begin, for this is when a certain general heightening of human powers of cognition begins. It brings with it the possibility that in the course of the **next 3,000 years**, and without special clairvoyant preparation, more and more persons will be able to attain a **direct vision of Christ Jesus** [but not with the physical eyes]
- Christ becomes the Lord of Karma, so that in the future it will rest with Him to decide what our karmic account is

  -- *From Jesus to Christ*, lecture 3, GA 131
- Year 2000 + 3000 = Year 5000 as end of Christ's Appearance in the Etheric – what will this mean for human physical and etheric bodies?

Renaissance 2.0

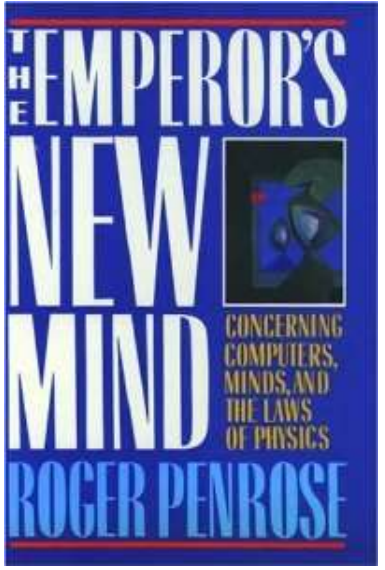
- Has already begun, a revolution within Science
- Begin with the Human Being
  - Epistemology: How do we know that we know
    - Or what we know?
    - What must be at the first gate for all Science?
    - Thinking about thinking, cognition as a mental process
  - What of the human being is earthly?
  - What is heavenly? What is our relationship to the stars?
  - 3-Fold Human: Head (nerve-sense), Heart/Lungs (rhythmic), Limbs (metabolic) – Thinking, Feeling, Willing
    - Fixed Stars, Moving Stars, Earth : Spirit, Soul, Body
  - 4-Fold Human: Elements and Ethers (and sub-physical ethers)

Emergent Sciences

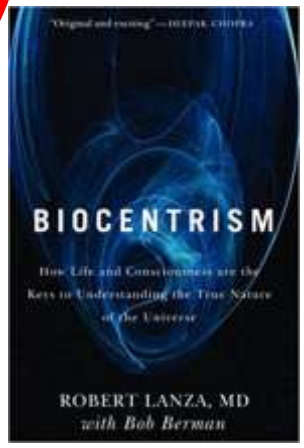
"The actual state of our knowledge is always provisional … and there must be, beyond what is actually known, immense new regions to discover."

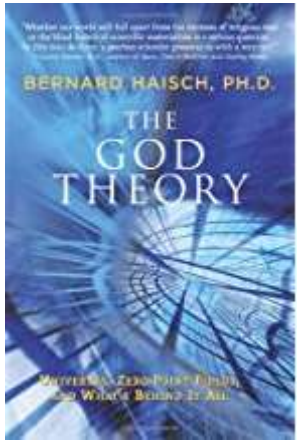
- Louis de Broglie
  - Quantum physicist
  - Nobel Prize 1929
  - all matter has wave properties

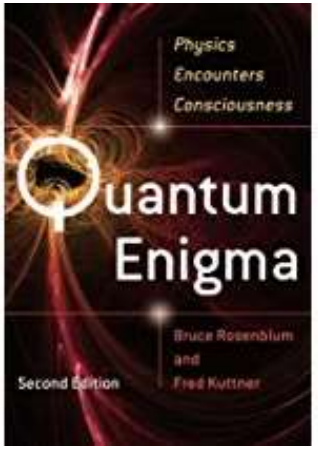
A Revolution in Science is Underway!

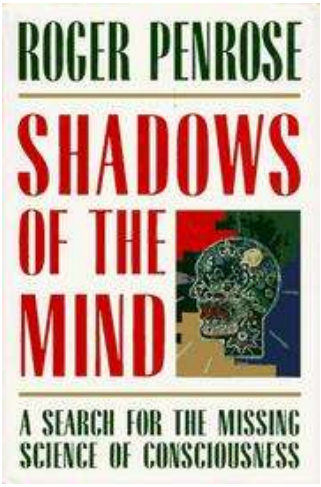


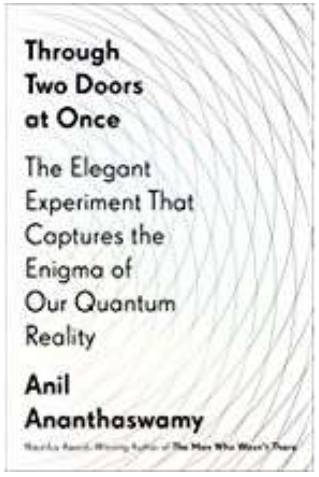
- Materialism still rules
  - but its strength is eroding rapidly
- A new paradigm, a new view of reality
- A new model of the human being is desperately needed
- We have about 20 more years to ensure Renaissance 2.0 is established -- Steiner's goal





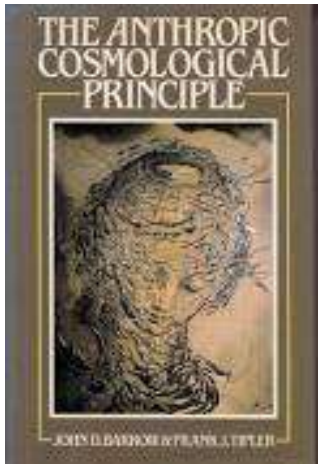


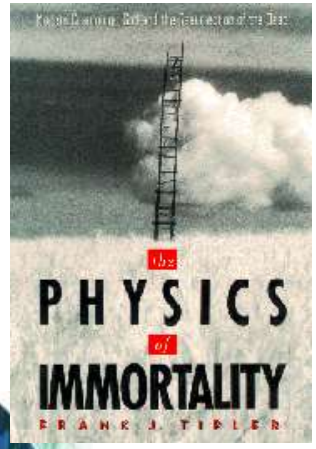


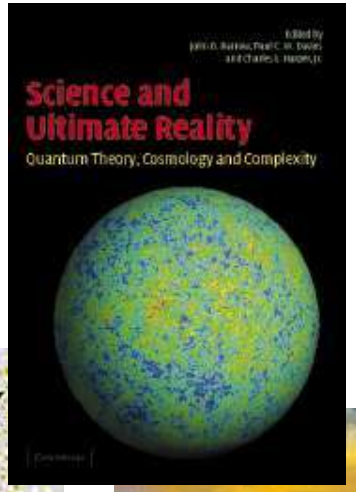


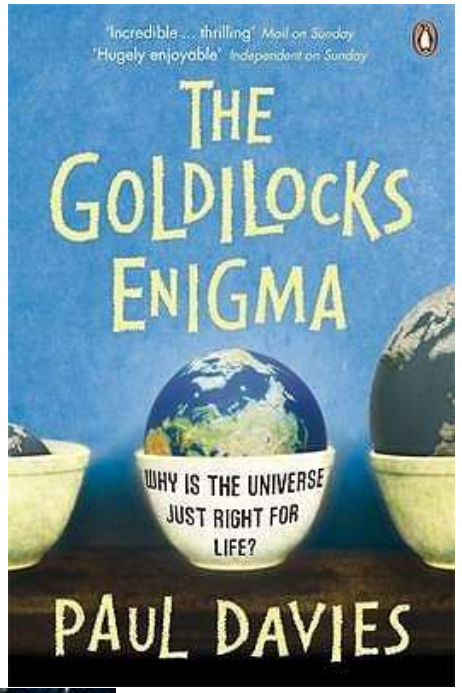
Astro-Physics

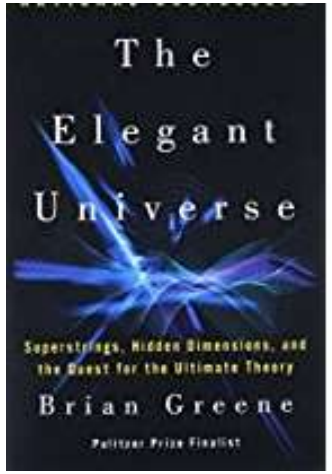
- *The Anthropic Cosmological Principle* by John D. Barrow

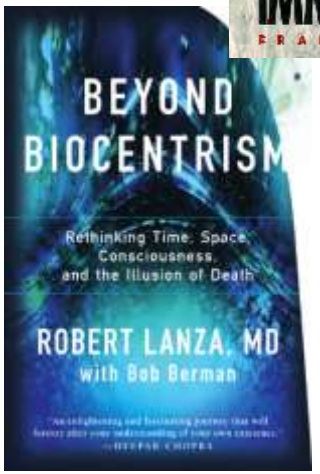


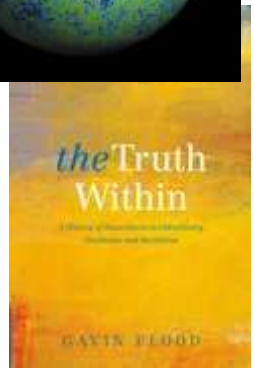






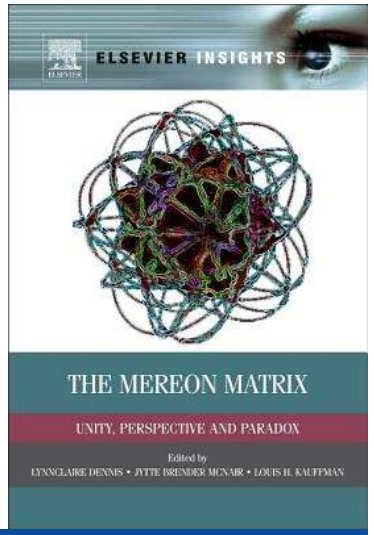


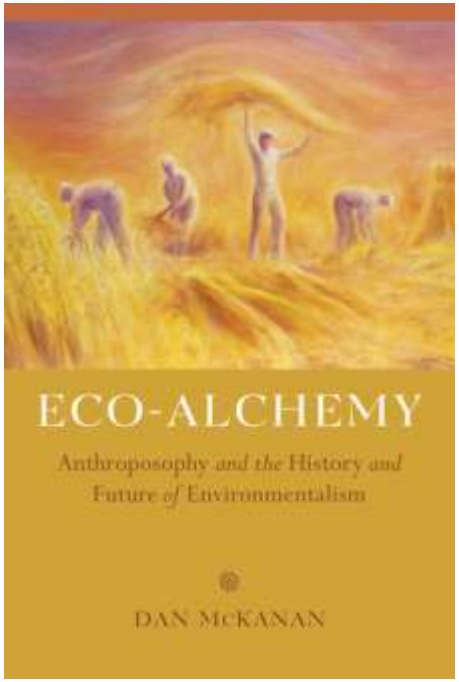


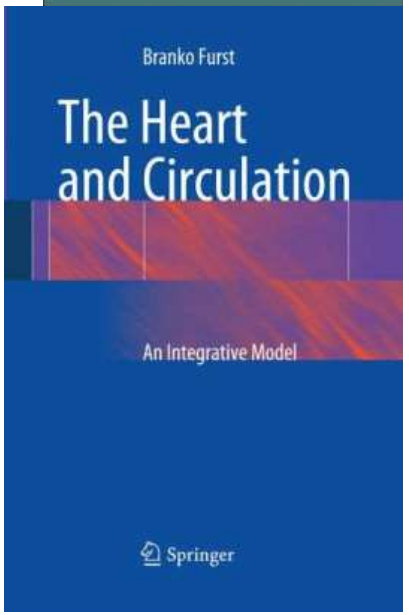


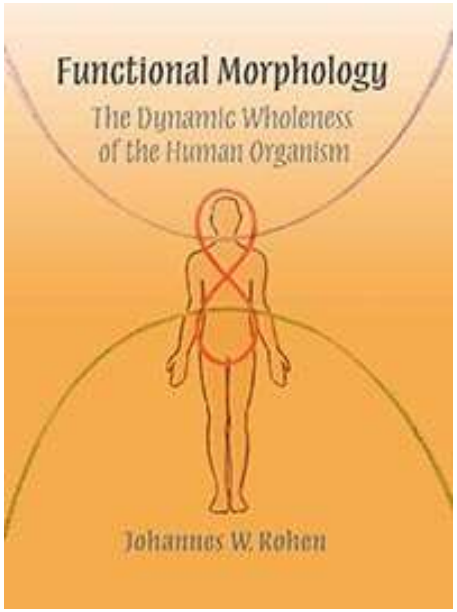
Many Fields of the Revoluti

- Ecology
- Agriculture and Nutrition
- Botany, Zoology, and Biosciences
- Medicine
- Anatomy
- Optics, Color, and Light
- Fluid Dynamics
- Education
- More …







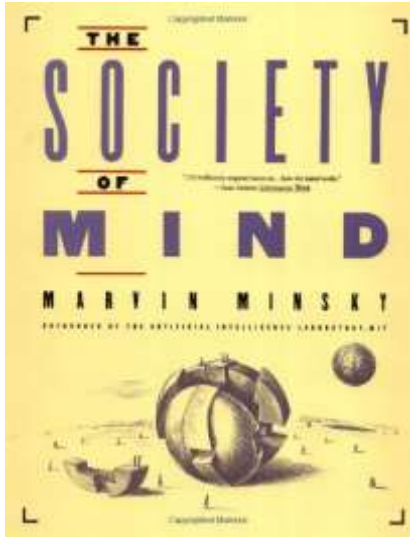


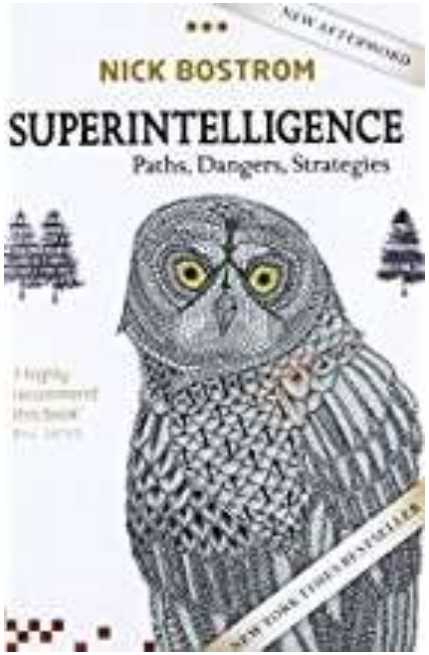
What is Needed to Guide Renaissance 2.0

- Epistemology: fundamental to science
- “It is due to our mental organization that the outer world is given to us, at first without its corresponding concepts.”
- “Intuition adds that part of the reality—the concept—which is lacking in the percept.” “From every real thing the relevant elements come to us from two sides, from perceiving and from thinking.”
- “The moment a perception rises up on the horizon of my observation, thinking also becomes active through me. An entity within my system of thoughts, a particular intuition, a concept, joins itself to the perception.”
- “The act of knowing or cognition is the synthesis of percept and concept.” – R. Steiner, *The Philosophy of Freedom*
- **Thinking is a spiritual activity**

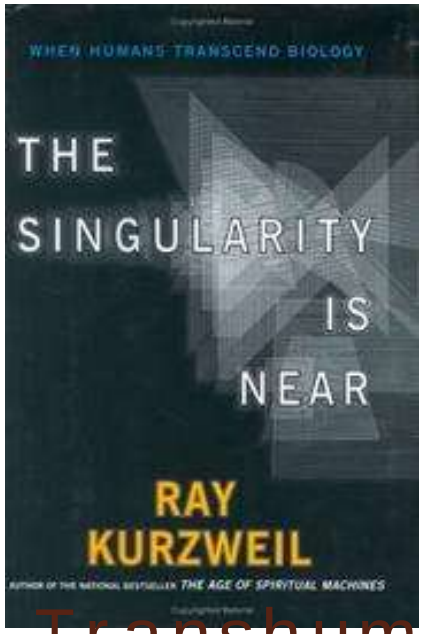
Are There Dangers Ahead?

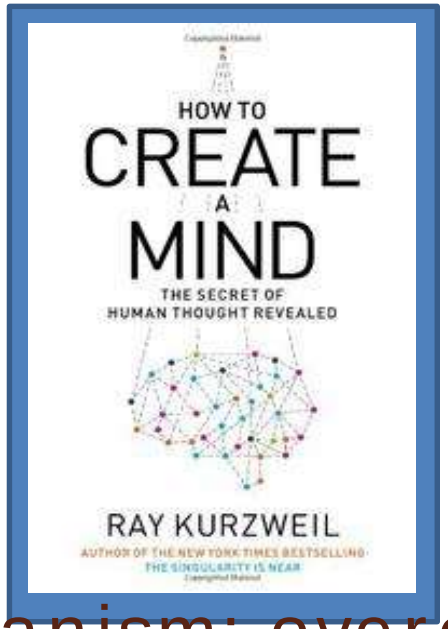
- Mind is a "society" of tiny components that are themselves mindless
- If machine brains surpass human brains in general intelligence, then this new super-intelligence could replace humans as the dominant life form on Earth.
- Sufficiently intelligent machines could improve their own capabilities faster than human computer scientists, and the outcome could be an existential catastrophe for humans.
- Superintelligence would be difficult to control or restrain

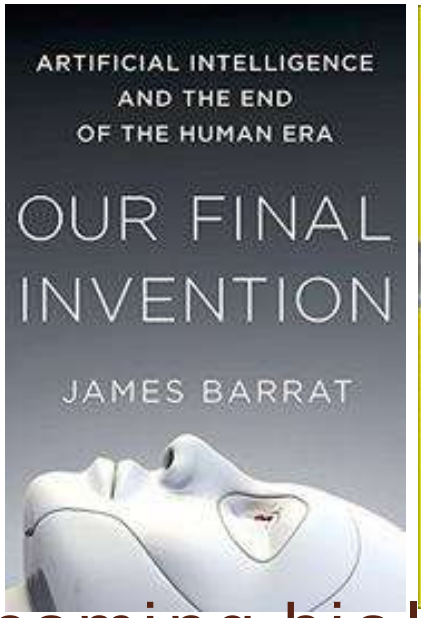


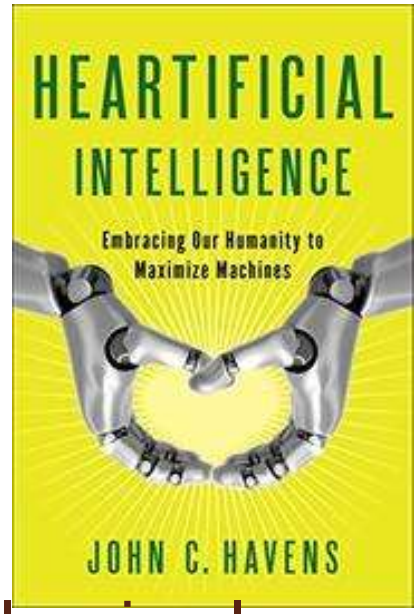


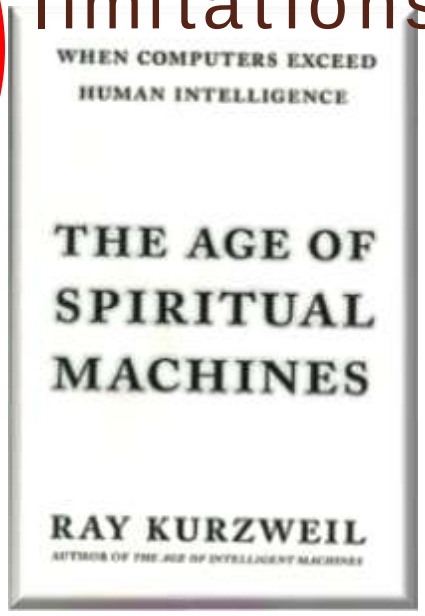
Transhumanism: overcoming biological limitations

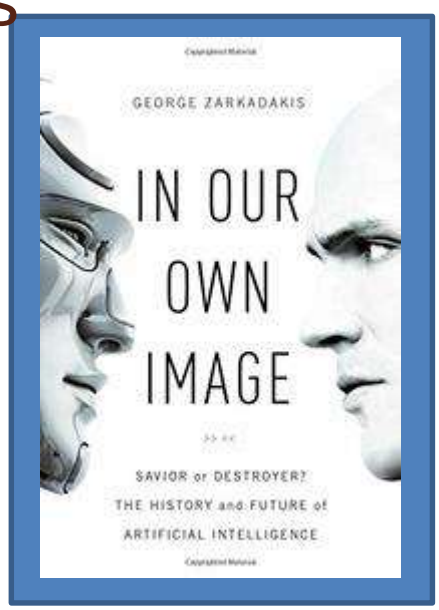


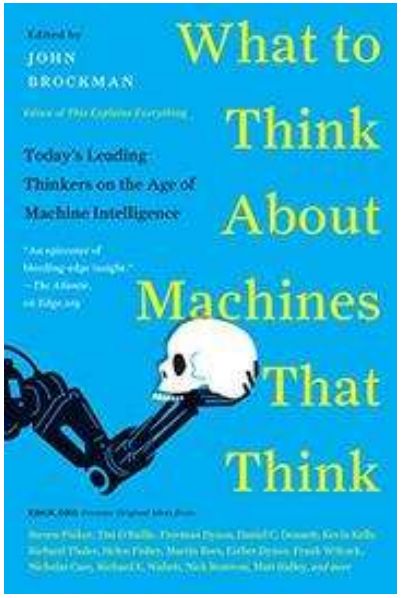


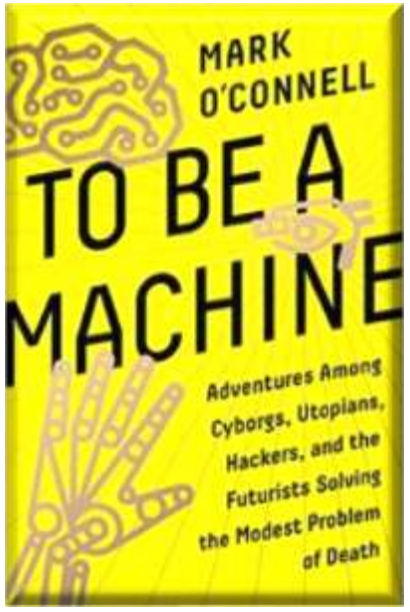












Comparing Visions of the Future

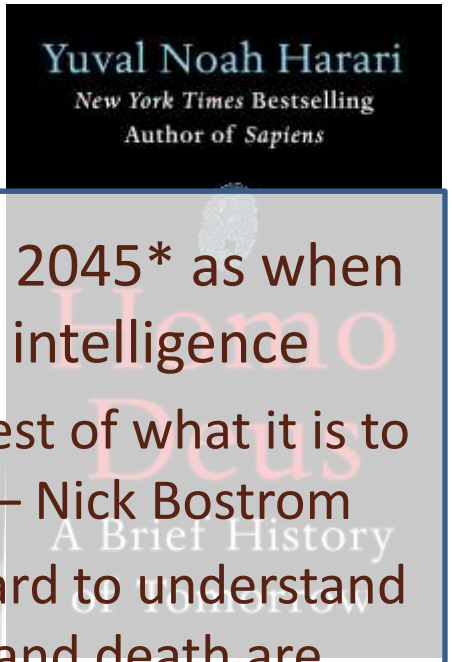
Ray Kurzweil

- Transcend biology by merging with non-biological systems
- Merger of our biological thinking and existence with our technology
- By 2030 man will be less human and more machine, with bodies filled with nano-robots and artificially enhanced to be much stronger and billions of times more intelligent
- "2045: The Year Man Becomes Immortal" *Time*

Rudolf Steiner

- "The **welding** together of human beings with machines will be a great and important problem for the rest of the earth-evolution." -- *The Wrong and Right Use of Esoteric Knowledge,* lecture 3
- "Man will chain a **second being** to him … feel the urge to think materialistic thoughts, to think, not through his own being, but through the second being who is his companion" *GA158*
- "Our **science** must lead the way, must prepare for what has to happen with the bodily essence in the future."
- "What you think today, that you will be tomorrow" – *The Temple Legend*, lecture 13

Transhumanism Overview



- Futurologists such as Ray Kurzweil predict 2045* as when AI robotic intelligence will surpass human intelligence
  - [Before then] "we want to preserve the best of what it is to be human and maybe even amplify that" – Nick Bostrom
  - "Transhumanism will lead humanity forward to understand a simple truth: that the spectre of ageing and death are unwanted, and we should strive to control and eliminate them" – Zoltan Istvan
- Why is this imagination important for Anthroposophists?
  - The role of human imaginations for our future

Christian Kromme

Transhumanism

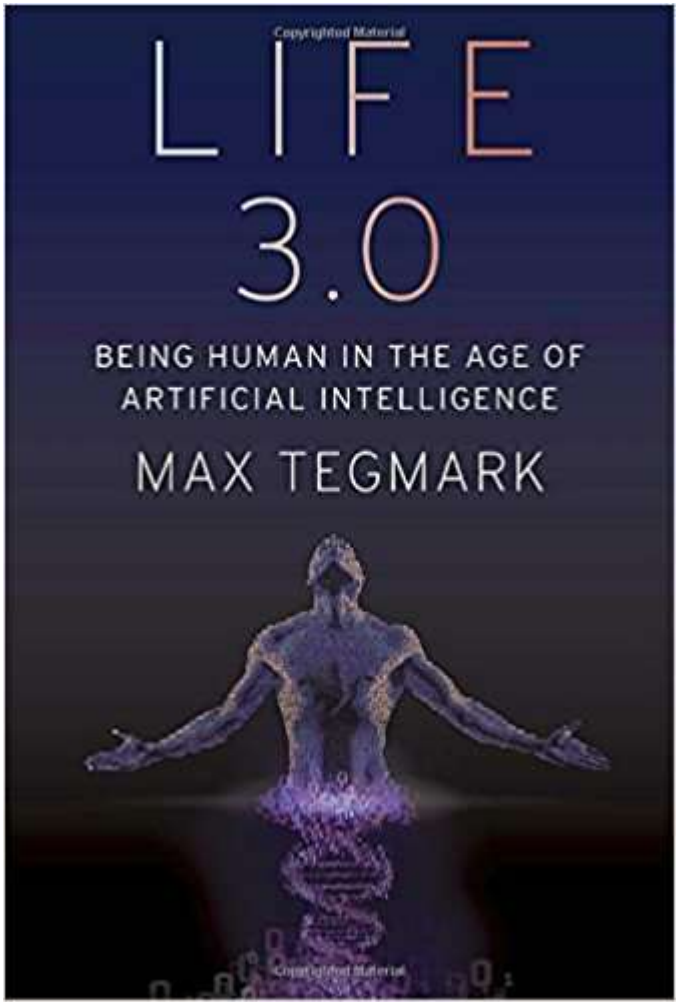
- This not only reveals the whole hubris behind these ideas, it also lacks logic because how can human beings hold anything in their hands when they no longer exist as such.
- The whole gigantic scenario is supported by scientists, entrepreneurs and governments all over the world. Not only in the us but in China, India and Europe, too, incredible sums of money are being invested in research projects.
- Transhumanism has also fully arrived in politics and religion. In 2014, Zoltan Istvan founded a Transhumanist Party in the United States, Germany has its Transhumane Partei Deutschlands (TPD) – will robots vote?
- In 2015 Anthony Levandowski founded the religious organization Way of the Future, which wants to create a deity based on Artificial Intelligence.

In the Near Future, Michio Kaku @ WGS Dubai

- The word ‘computer’ will disappear because the devices will be ubiquitous: along our streets, clothing, and in us
- “There will be nothing that is *not* a computer”
- 3D printing: if you can imagine it, you can create it
  - Shoes, jewelry, rain gear, tools, parts, toys
  - Download and print it at home
- Medical monitoring, medical nanobots you swallow
- Smart meters, smart toilets, smart walls
  - Built-in screen(s) for TV, laptops, phones, security, AR
- https://futurism.com/michio-kaku-life-20-years-future/

Being Human
In the Age of Artificial Intelligence

- Founder of the Future of Life Institute, MIT professor
- How will Artificial Intelligence affect jobs, justice, crime, war, society and our very sense of being human?
- “AI will transform our economy, our culture, our politics and even our own bodies and minds in ways most people can hardly imagine.“
- What would Steiner say?



Tech Impact On Our Teens

- Depression
  - "8th graders who spend 10 or more hours a week on social media are 56% more likely to say they are unhappy than w/less.
  - 8th graders who are heavy users of social media increase their risk of depression by 27%.
  - Teens who spend 3+ hours a day on electronic devices are 35% more likely to have a risk factor for suicide.
  - Girls, especially hard hit, have experienced a 50% rise in depressive symptoms."
  - https://www.nytimes.com/2017/11/20/opinion/how-evil-is-tech.html
- Addiction: dopamine surges, hijacking techniques
  - Shame campaign like tobacco and car seats needed?
  - *Wait Until 8th* urges parents regarding smartphones
    - https://phys.org/news/2017-12-kid-smartphone.html

Intended Addiction

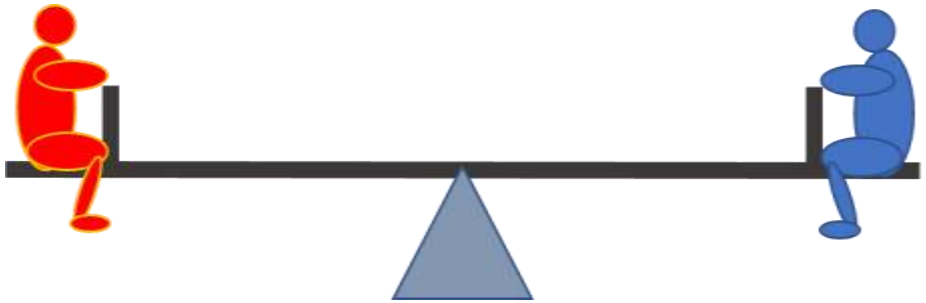
- Chamath Palihapitiya
- Former Facebook VP
- Conference at Stanford
- CBS News 12/12/2017
- “The short-term, dopamine-driven feedback loops that we have created are destroying how society works. No civil discourse. No cooperation. Misinformation. Mistruth. And it's not an American problem. This is not about Russian ads. This is a global problem. So we are in a really bad state of affairs right now, in my opinion."

Tech Impact On The Rest Of Us

- American Psychiatric Assoc.:
  - "Half of millennials worry about the negative effects of social media on their mental and physical health"
- A recent Pew Research Center survey noted that more than 70 percent of Americans were worried about automation's impact on jobs (Steiner: 90% of jobs gone)
- "Got to regulate AI/robotics like we do food, drugs, aircraft & cars" – Elon Musk
- Annals of Technology, October 23, 2017 Issue
  - **Welcoming Our New Robot Overlords**
  - *"Once, robots assisted human workers. Now it's the other way around."* by Sheelah Kolhatkar

What is Missing?

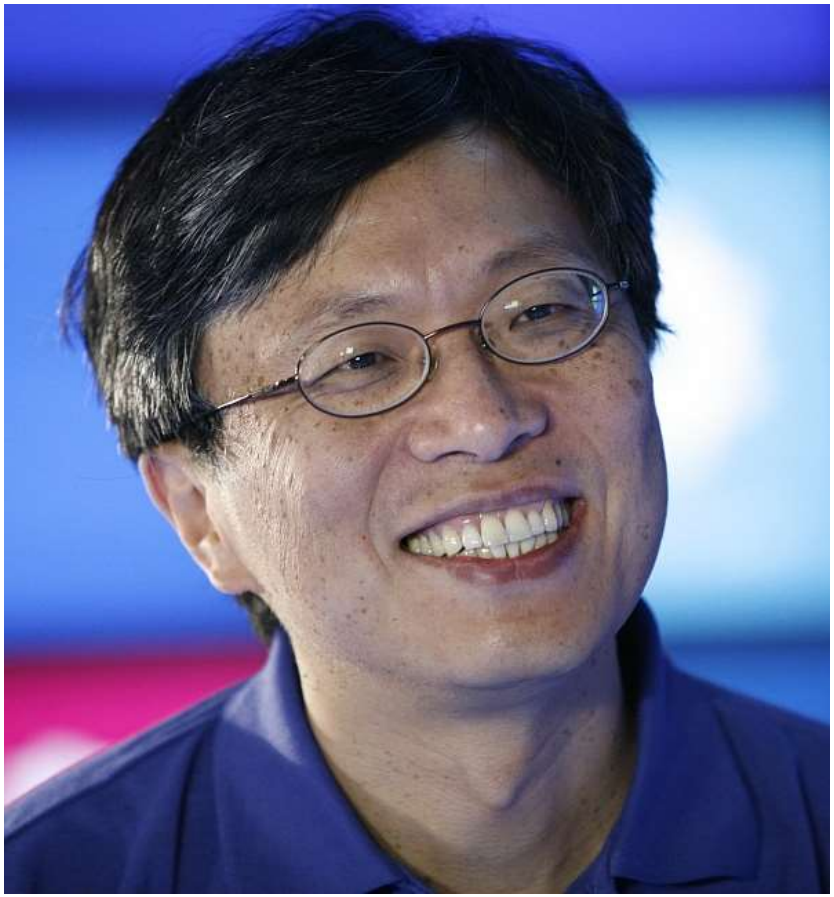
- Knowledge of the Human Being
- In order to create needed counterbalances



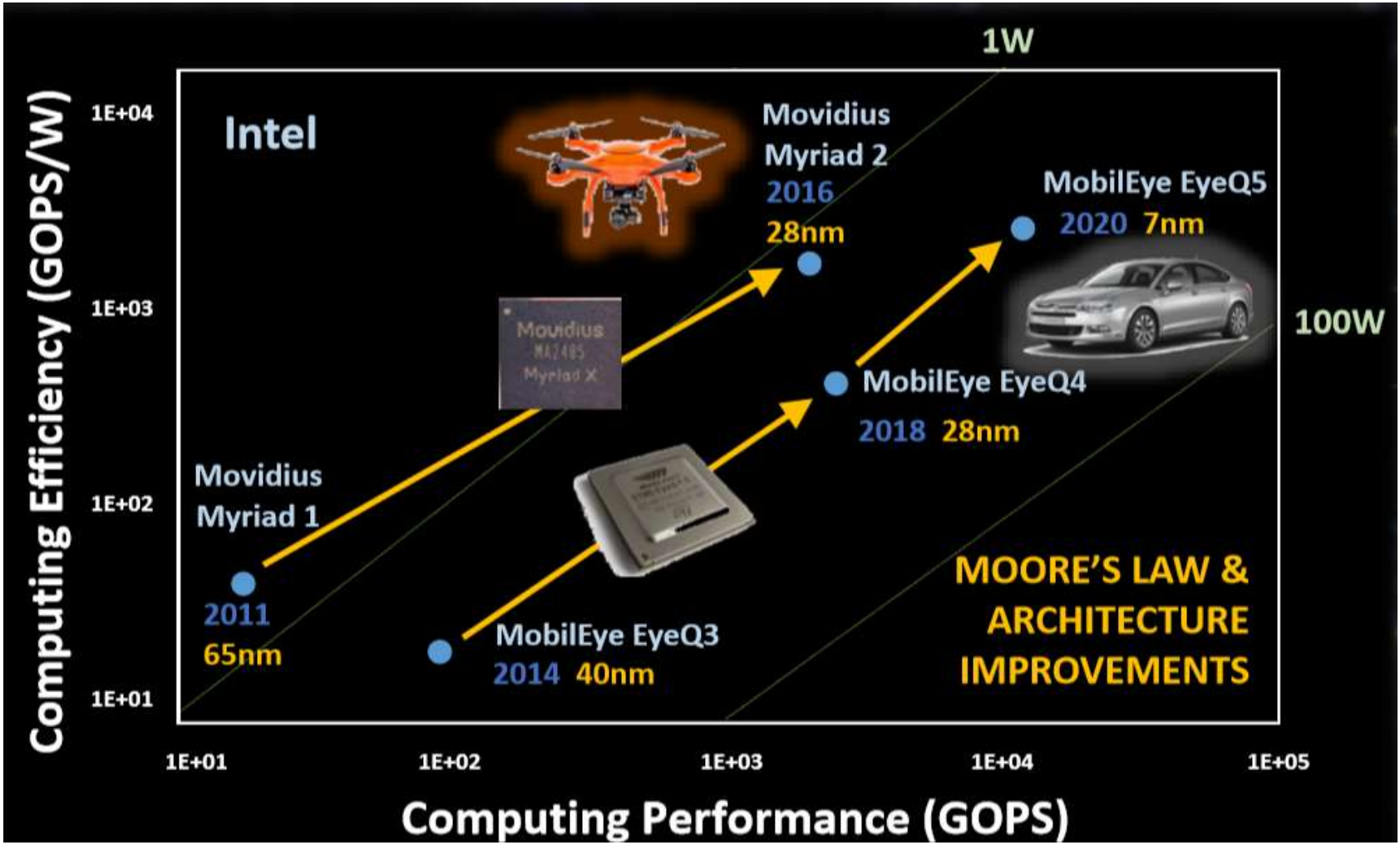
- Renaissance 2.0
- Tomorrow …

Moral Education for AI Developers

- A computer is without the concepts of good or evil that exist in people's hearts
- "We need to ensure AI's designers, including software engineers and algorithmic scientists, master the right tools, and have the right awareness to develop an AI system"

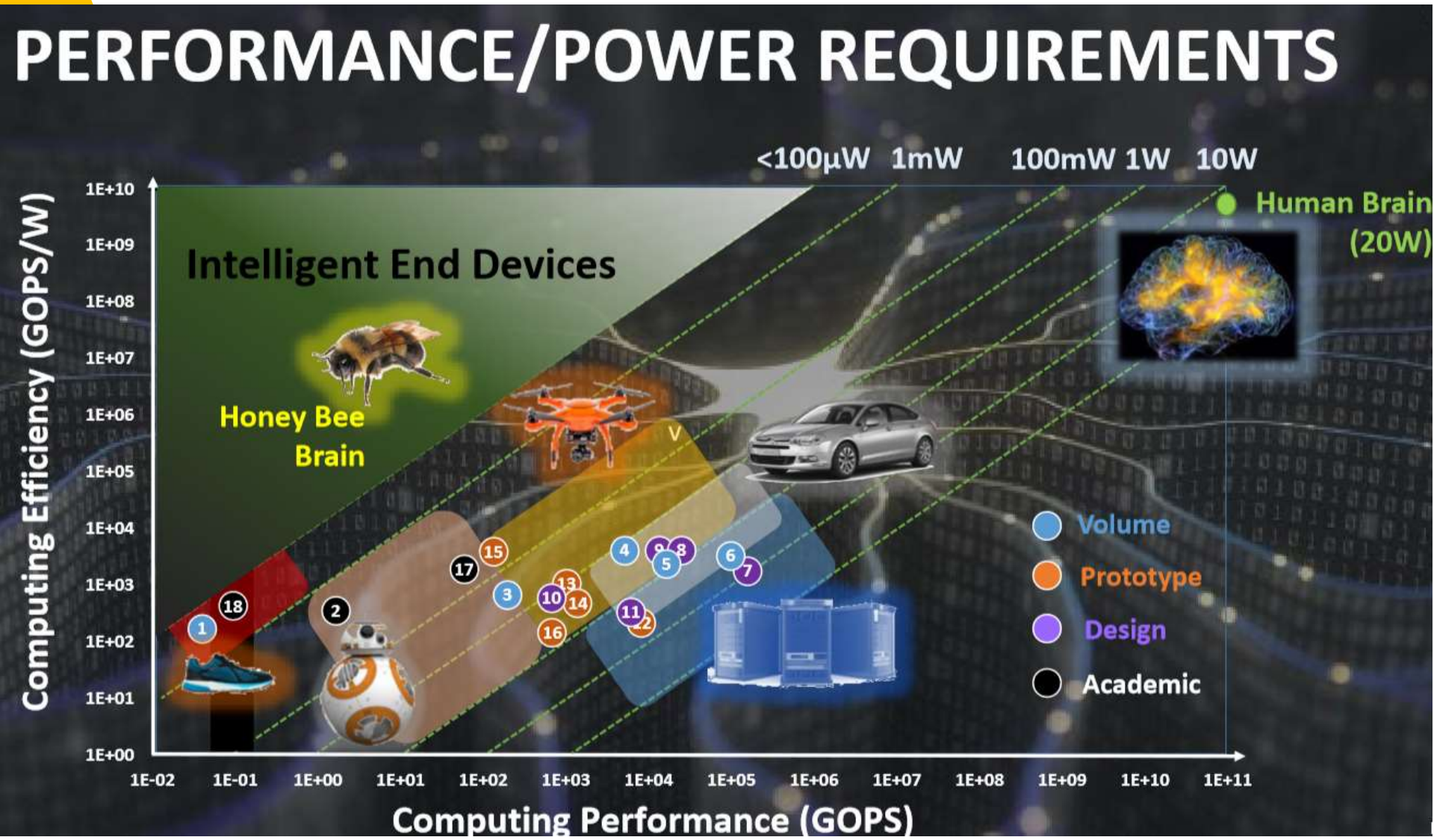


Trend for Embedded AI Platforms



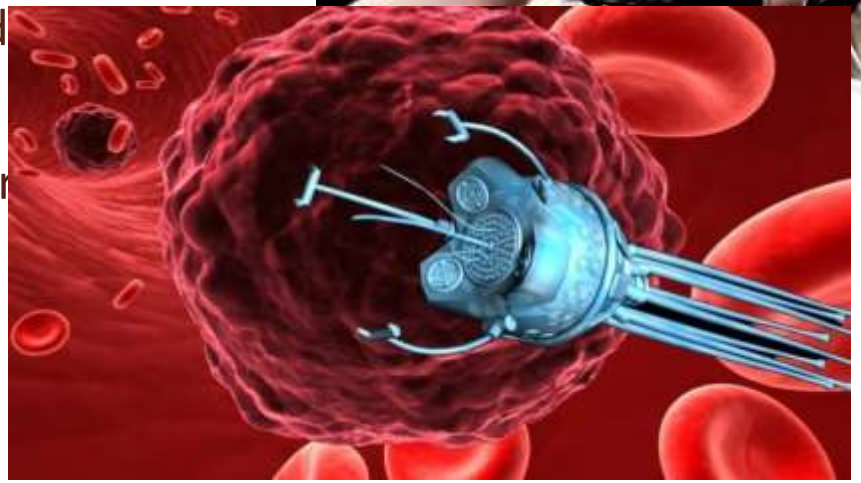
Singularity: when AI surpasses HI

Compare to the Human Brain



Machine as an Extension of the Body

- Becoming comfortable operating an automobile
- Becoming comfortable operating an auto-humanoid
  - From within, not like the movie Avatar
- **Emancipation**
  - Physical labor
  - Mental labor



Attachment of a Second Being

"During the **course of the Fifth PACA**, so many problems have lost all inner, vital warmth. The countless questions which confront us when we study Spiritual Science with any depth, simply do not exist for the modern man with his materialistic outlook.

"A different form of experience will come to the man of modern times. In his own opinion he knows ever so well; he observes the material world, **uses his *intellect* to establish the interconnections between its phenomena** and believes that all its riddles are solved in this way, never realizing that he is simply groping in a phantasmagoria**.**

"But this way of working coarsens and dries up his ether-body, with the ultimate result that the [Ahrimanic] powers, ***like a second nature, will attach themselves to him***.

The Balance in the World and Man, Lucifer and Ahriman, Rudolf Steiner

Building Anthroposophy Upon Science

- “What was quite impossible in earlier times — to find any reality in the external world — is now a possibility through the very circumstance of our having become **inwardly hollow**. And this possibility **will increase**. …
- Ancient times reached **knowledge of the world through knowledge of man**. Speaking theoretically, we might say that what man went through as a **life-process** was, when completed, knowledge of the world; and with knowledge of the world in his consciousness, he could work back to man.
- If today you pass through **forms, life, and consciousness** of this world, what you really reach in this way is **knowledge of Man**. Everything else in the knowledge of nature vanishes, and Man becomes comprehensible. In the same way, from having gained knowledge of the world, Man becomes comprehensible as a three-membered being — nerve-sense being, rhythmic being, and metabolic being. From Man we can then pass again to knowledge of the world.” -- *How Can Humanity Find the Christ Again*? Lecture 4

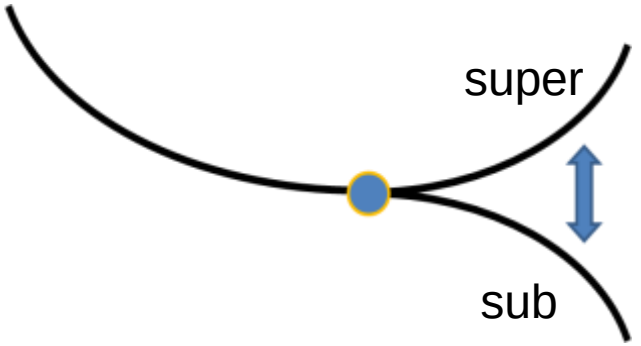
Reality in the Consciousness Soul Age

- "In our time, if a man really strives to **reach life through forms**, he must be able to say to himself: Even if I hold concepts ever so beautiful from this or that traditional religious confession, they may be quite fine, but I still do **not attain reality** by means of them unless I can also set the **opposite concept** before me.
- The reality, our true being, only shines into us and what we bear within us is merely the reflection." – *lecture 5*
- **Spirits of Form**, were active; they revealed themselves to each supersensible consciousness. Now, it is the **Spirits of Personality** who work in Imagination of those who **go to meet them** (except in pathological cases).

From Natural to Spiritual Science

- “This present-day development demands of us that we strip away all that is out of date in current science, and really find our way into **new thought-forms**, so that in them we may reach not antiquated visions, but **imaginations built up with all our will**, which we may then offer to the objective process of the spiritual world and receive back **verified**.
- When one attains a consciousness that is outside the body and outside the course of life, that is really in the spiritual world, then **will and conceptions flow together** again into one reality.
- Man **must** for once **dive down into this purely material life**, so that, **independent of it**, he may **gain the spiritual**.”

Higher Stages of Spiritual Development



- The **Fifth Stage**, The **Mystical *Death***
  - The whole world appears as if covered with a veil. Everything around has lost its old value. While a person feels himself thus lost in darkness, suddenly the veil is rent and he begins to see the ultimate spiritual and original aim. He gazes into a quite new, world.
  - At the same time he learns to recognize what lies at the bottom of the human soul. He becomes **a second person** by the side of him-self and looks down on his lower self, which is separated from him.
  - **His body is the mother** that he sees standing below him and the transformed lower self is the disciple who bears witness that Christ lives. The higher self says to the lower self, "Behold thy mother!"
- The **Sixth Stage**, The **Burial *And Resurrection***
  - Everything pertaining to this planet becomes the body of the Christian mystic. He is one with the whole life of the earth.

The Gospel of St. John, 26Feb1906, Berlin, GA 94

See also *Occult Science and Occult Development,* 1May1913, London, GA 152

Spirits of Birth and Death

- Now being freed up; entering industry and commerce
  - At the boundary between spiritual world and physical world
- Wherever electricity is used, there is demon magic. **Demon magic signifies progress** – we should not oppose progress
  - *Karma of Vocation*, lecture 9, GA 172
- In the fifth post-Atlantean cultural age **illusion**, Maya itself, **will be seized** upon by **Evil**. It will all be **permeated by cleverness**, intelligence [AI]
  - ***Leonardo da Vinci**, His Spiritual and Intellectual Greatness At the Turning Point of the New Age,* Rudolf Steiner, Berlin, February 13, 1913, GA 62

Spirits of Birth and Death

- The human being can only come to spiritual freedom by growing strong against the resistance provided by evil.
  - We must **not regard Evil** from the outset as one would, who in the fullness of **his egoism** merely wanted to get away, to **flee from it**
  - Learn to know them and what lives and moves in the very depths of things
  - We cannot do so but we must penetrate it with consciousness; we must learn to know it — really learn to know it [evil]
- All progress takes this course: wherever what has been created falls into ruin, we know that out of that ruin new life will always blossom
  - ***Leonardo da Vinci**, His Spiritual and Intellectual Greatness At the Turning Point of the New Age,* Rudolf Steiner, Berlin, February 13, 1913, GA 62

Mythology

- Preparer for our times
  - Withdrawal of the moon
  - Asexual to sexual
  - Cain and Abel, separate streams
  - Prometheus and Hephaestus

Aphrodite and Hephaestus

- *"Where is beauty, where is art, where is love? If they cannot find their way back to the center in a manner that is fitting for our future then I don't think there is any hope for technology. The wisdom of the gods is that they put beauty, art and love together with technology. They did not put Aphrodite with Mars, with whom she has flings once in a while. They did not put her with one of the other beautiful gods. They placed her with us who are lame, who are of this earth, and yet on whom so much depends.*
- *"If we can find our way to that place of the heart, not just body and mind but heart, then it is my conviction that from out of the cosmos into which all the inner dimensions of our world disappeared, there will return wisdom, the wisdom which is joined to the heart, not as cold knowledge, not as fruit of the tree of knowledge, but as the fruit of the heart. This heavenly wisdom has been known throughout all times as Isis Sophia who will once again join hands with human beings in order to create a fertile future. A **marriage of love with technology** can produce the offspring for which we all long: an art of living as **free moral beings** in **both** the human and the nonhuman world. This is synonymous with right livelihood."*

  – *Quote by Arthur Zajonc, from "Buddhist Technology: Bringing a New Consciousness to Our Technological Future"; The Journal for Anthroposophy No. 68 Spring 1999*

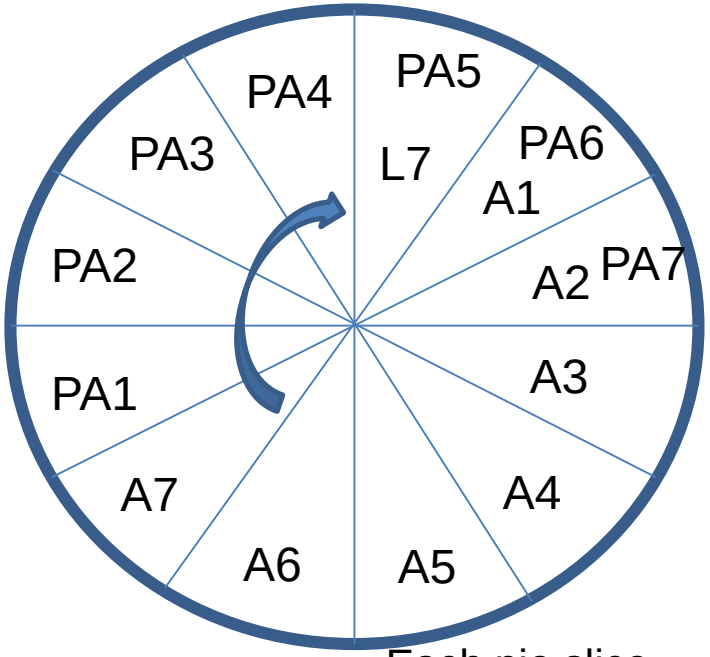
Before Incarnation can End …

- Achieve full control of astral body
  - Convert it to Manas
- How?
  - Recognize we are Prometheus
    - Chained to the Mineral Kingdom
  - Freedom – become angel-like
    - Via the labors of Heracles
  - Sacrifice our inner centaur
- Oh well, lots of time, right?
  - How many incarnations?
  - 4000 yrs left → about 5 or 6 more incarnations
  - Then a 2160 year period of non-natural body life on earth
    - Helping others with their karma

Body-Soul Development by era

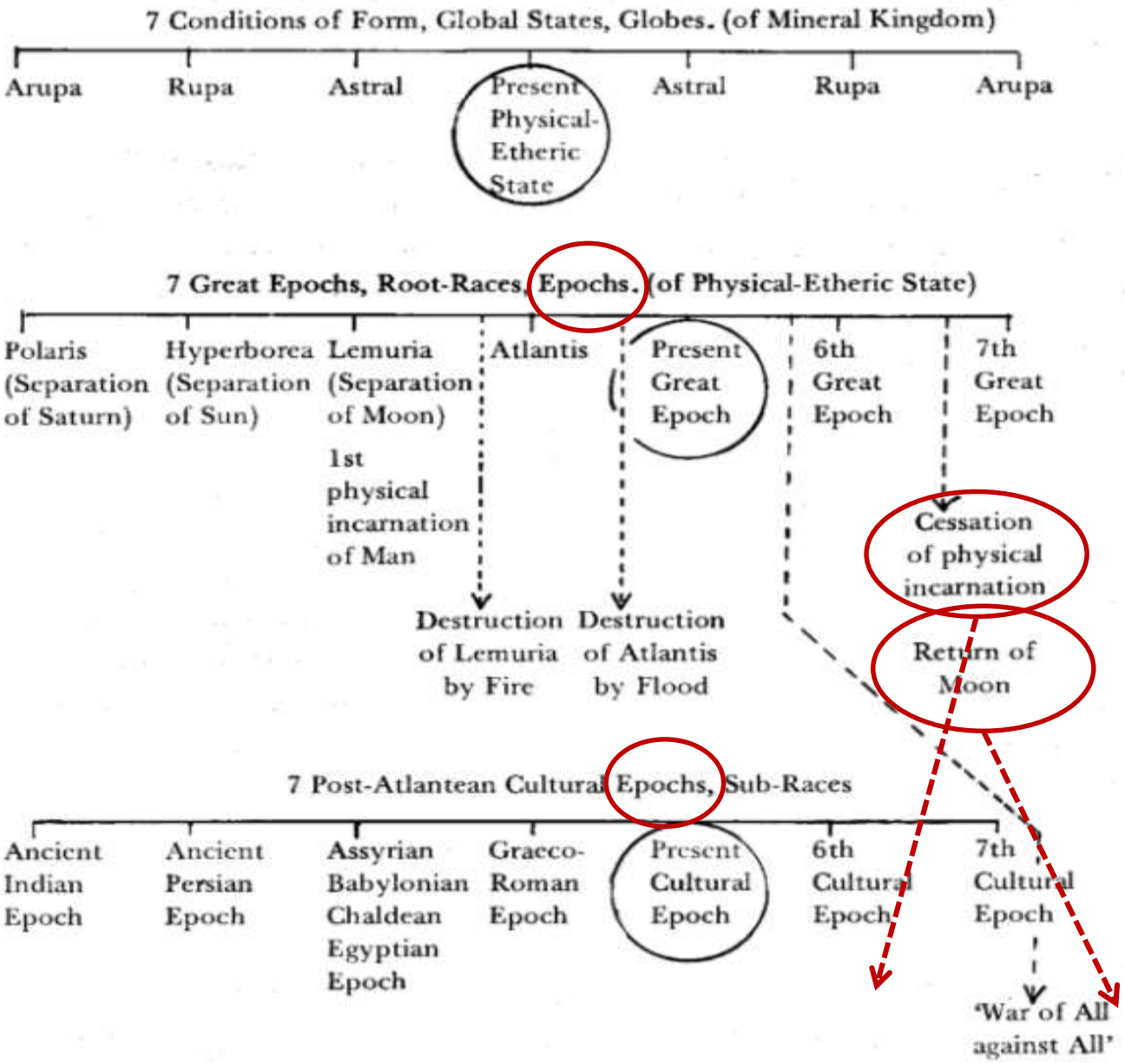
- Lemuria (moon separated)
- Atlantis (phys incarnation)
- Post-Atlantean

•		I.	56 49	earth
•		II.	48 42	speech
•		III.	41 35	stars
•		IV.	34 28	33 – Christ
•	1879	V.	27 21	Today 27 (Michael's era)
•		VI.	20 14	Year 4,000
•		**VII.**	**13 7**	Year 6,000 – women are infertile
				Year 8,000 – moon returns



Each pie slice represents ~2160 today-years

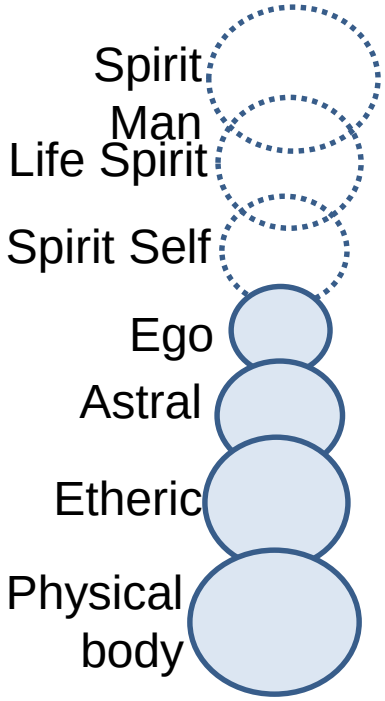
Source: *Evolution of Human Freedom and Personal Consciousness*, 19Jan1905, Dusseldorf


7 Conditions of Form, Global States, Globes. (of Mineral Kingdom)
Arupa
Rupa
Astral
Present Physical-Etheric State
Astral
Rupa
Arupa
7 Great Epochs, Root-Races, Epochs. (of Physical-Etheric State)
Polaris (Separation of Saturn)
Hyperborea (Separation of Sun)
Lemuria (Separation of Moon)
1st physical incarnation of Man
Atlantis
Present Great Epoch
6th Great Epoch
7th Great Epoch
Cessation of physical incarnation
Return of Moon
Destruction of Lemuria by Fire
Destruction of Atlantis by Flood
7 Post-Atlantean Cultural Epochs, Sub-Races
Ancient Indian Epoch
Ancient Persian Epoch
Assyrian Babylonian Chaldean Egyptian Epoch
Graeco-Roman Epoch
Present Cultural Epoch
6th Cultural Epoch
7th Cultural Epoch
'War of All against All'

Transition Time

How do we get from

Here to HERE?



What happens to the Temple?

Housing for The Three

n't this an angel?

Rudolf Steiner References

More Rudolf Steiner material can be found online at www.rsarchive.org

1. The Temple Legend
2. Three Streams in the Evolution of Mankind
3. Anthroposophical Leading Thoughts
4. The Influences of Lucifer and Ahriman
5. The Karma of Vocation
6. The Karma of Materialism
7. The Karma of Untruthfulness
8. Materialism and the Task of Anthroposophy
9. Colour
10. Boundaries of Natural Science
11. Secret Brotherhoods
12. The Fall of the Spirits of Darkness
13. The Work of the Angels in Man's Astral Body
14. The Apocalypse of St. John
15. The Evolution of Consciousness
16. A Picture of Earth-Evolution in the Future
17. The Wrong and Right Use of Esoteric Knowledge
18. Geographic Medicine
19. Man as Symphony of the Creative Word

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1. Greyson, Bruce, *The Handbook of Near-Death Experiences*: Praeger Publishers, 2009
2. Jaynes, Julian, *The Origin of Consciousness in the Breakdown of the Bicameral Mind*: Houghton Mifflin, 1976
3. Lanza, Robert, *Biocentrism: How Life and Consciousness are the Keys*: BenBella Books, 2010
4. Laszlo, Ervin, *The Immortal Mind: Science and the Continuity of Consciousness beyond the Brain*: Inner Traditions, 2014
5. Lockley, Martin, *How Humanity Came Into Being, The Evolution of Consciousness*, Floris Books, 2010
6. Rosenblum, Bruce, *Quantum Enigma: Physics Encounters Consciousness*: Oxford University Press, 2011
7. Francis, Keith, *Rudolf Steiner and the Atom*, Adonis Press
8. Shelley, Mary, *Frankenstein, or the Modern Prometheus*, 1818
9. Welburn, Andrew, *The Mysteries*, Floris Books, 1997
10. http://www.theoi.com/Ther/Automotones.html for information about the automatons of Hephaestus

Conversation

The Stars once spoke to Man.
It is World-destiny
That they are silent now.
To be aware of the silence
Can become pain for earthly Man.

But in the deepening silence
There grows and ripens
What Man speaks to the Stars.
To be aware of the speaking
Can become strength for Spirit-Man.

Rudolf Steiner

MysTech: Mysteries of Technology

- Sponsored by The Center of Anthroposophical Endeavors (CFAE) of Seattle, WA.
  - Non-profit, started in 1982 as Friends of Anthroposophy
  - Founded other Anthroposophical organizations
  - Hosted hundreds of lectures, workshops, and performances
- MysTech Membership to support R&D
  - Journal, website, classes – outreach, building awareness
  - Inner development – inreach, becoming builders
  - Moral interface to machines – cultivate
- MysTech.co: devoted to cultivating moral technologies
  - Founding meeting June 12, 2017, 10 founding members
  - Exploring waves, resonance, harmonics, boundaries, more

More info at: http://rudolfsteinerbookstore.com/product/mystech-membership/

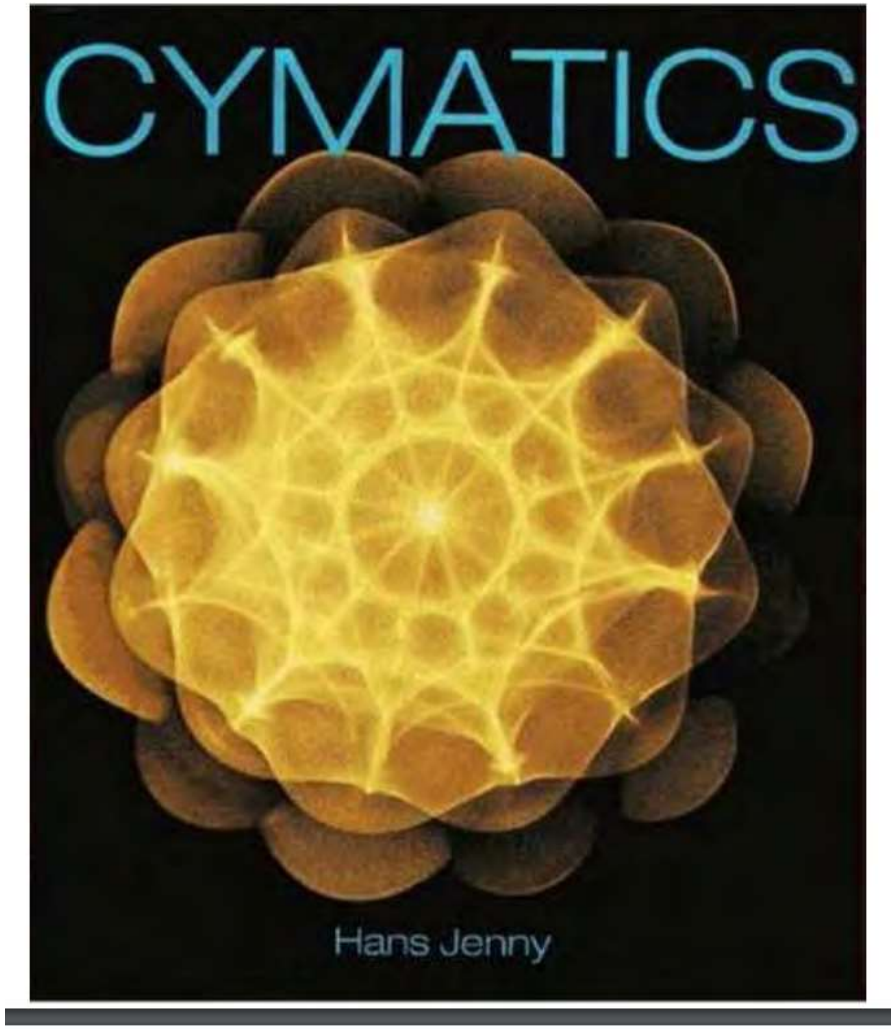
spirit

soul

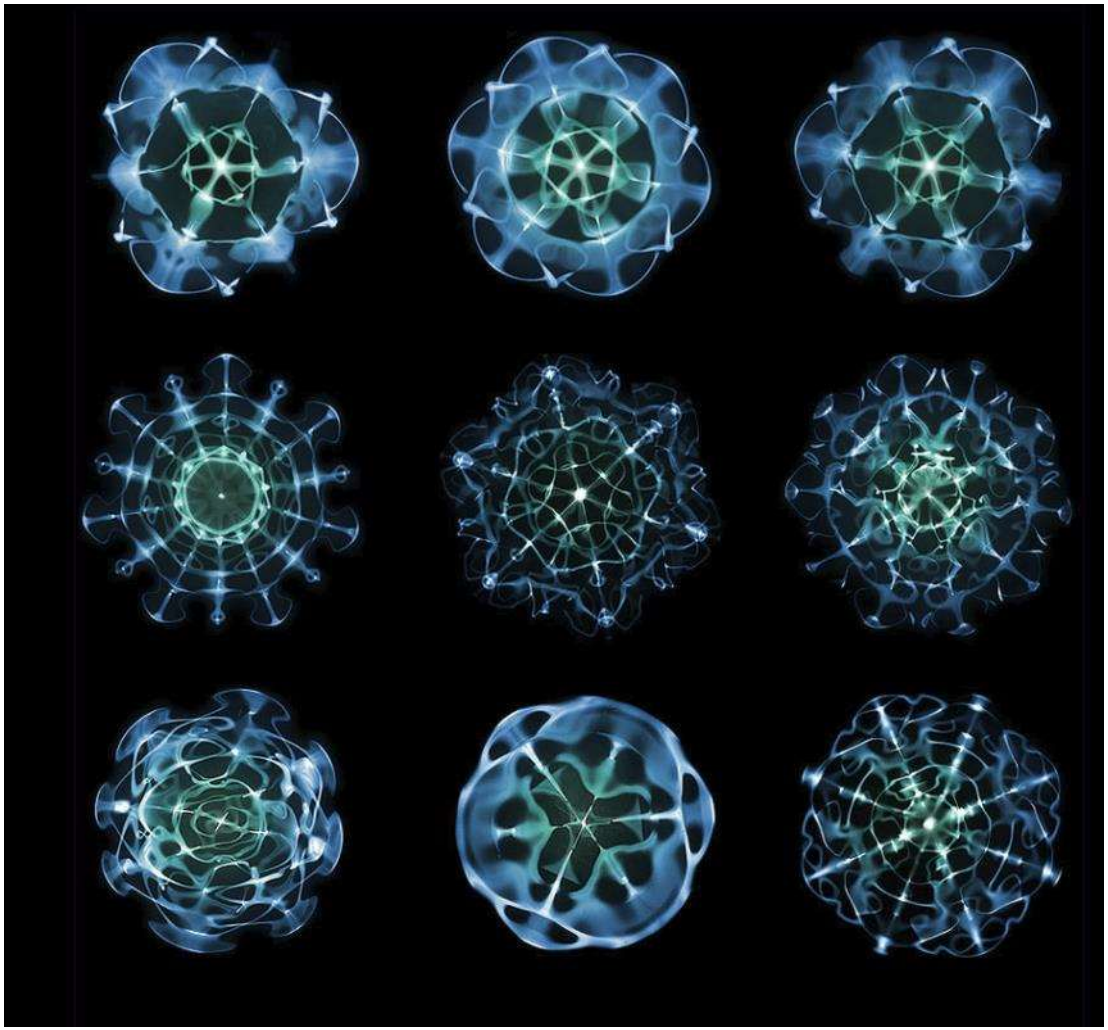
life

RESEARCH AVENUES

MysTech Pioneer: Hans Jenny

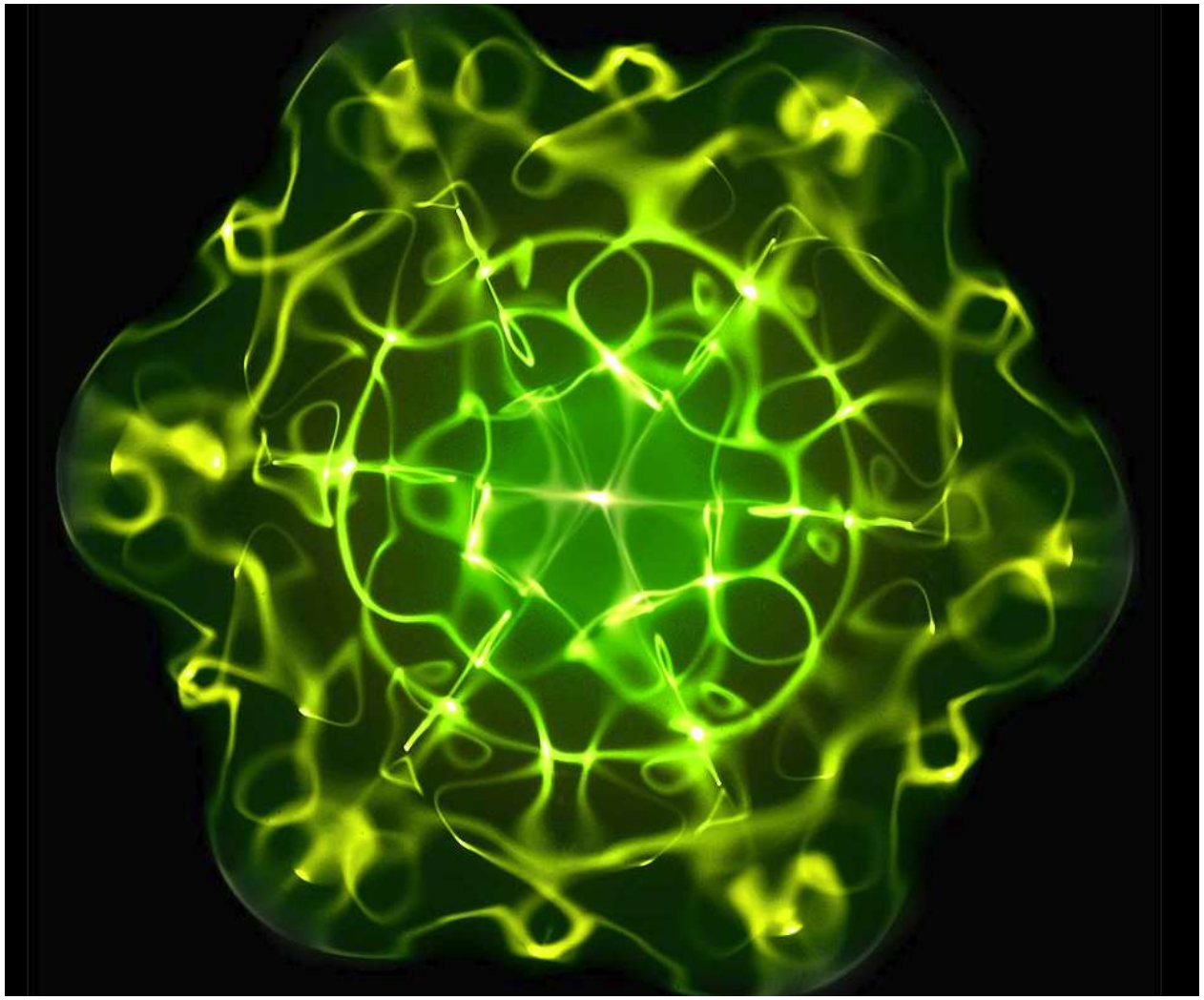


Cymatics.org



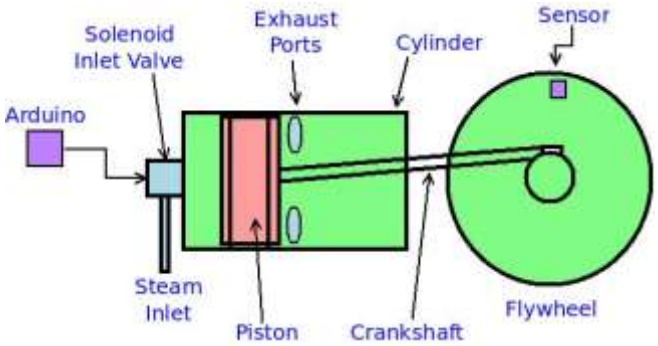
14hz to 30hz sweep. Square wave

Cymatics.org



Sine wave & alcohol

What is Technology?
Overcoming Our Fears



- Offers emancipation from labor (and from Nature)
  - Allows mankind to rise above ("to conquer") Nature
  - Mankind becomes aware of its separateness (freedom)
- Who gave technology to humanity?
  - Hephaestus/Vulcan (God sourced)
  - Cain and Tubal Cain (Masonic tradition)
- "Tools" based on the **lifeless** of the human body
  1. Augment limbs (tools)
  2. Augment rhythmic (steam engine, piston)
  3. Augment nerve/sense (telescope, microscope, camera)
  4. Augment thinking (computers, AI) – *is it still just a tool?*
     - By taking on our dead thinking, are we freed for living thinking?
     - What will we do with our "free time"?

When is Modern Technology OK to Use?

- Transition Era: are children differently ‘equipped’?
- Let the foundations be constructed first
  - From where does a baby come?
- When the human “motor system” is ready (after)
  - Age 0: physical body born. Age 7: etheric body. 14: astral body
  - Importance of Play, Imitation of the Human
    - Lead by example like a god
- When what is built from above is ready for Earthly life
  - Puberty
- Importance of Movement
  - Postural alignment. Eurythmy. Rhythms. Harmonic oscillations.

Known but unspoken tech problems

Source: HuffingtonPost

1. Rapid brain growth continues until age 21
   - Delayed development results from insufficient movement
   - Epidemic obesity correlates with video game use
2. Sleep deprivation
   - 60% of parents do not supervise their child's technology usage, and 75% of children are allowed technology in their bedrooms
3. Mental illness
   - Technology overuse as a causal factor in rising rates of child depression, anxiety, attachment disorder, attention deficit, autism, bipolar disorder, psychosis
4. Aggression from violent media content
   - Poor manners, irreverent
5. Digital dementia: decreased concentration ability
6. Addiction
7. EMR emissions (cordless phone, WiFi router)

Children and Technology

Source: HuffingtonPost

Developmental Age	How Much?	Non-violent TV	Handheld devices	Non-violent video games	Violent video games	Online violent video games and or pornography
0-2 years	none	never	never	never	never	never
3-5 years	1 hour/day	✓	never	never	never	never
6-12 years	2 hours/day	✓	never	never	never	never
13-18 years	2 hours/day	✓	✓	limit to 30 minutes/day		never

Children and Technology

- **Screen (blue light) time**
  - Disrupts sleep, desynchs circadian rhythm
  - Desensitized the brain's reward system
  - Light-at-night linked to depression
  - Stress reactions, hormonal, irritability, addiction
  - Overloads sensory system, fractures attention, depletes mental reserves
  - Limits movement, physical activity, and "green time"
- "Screentime is Making Kids Moody, Crazy, and Lazy"
  - Psychology Today, Victoria Dunckley, M.D.
  - ***"Wired and tired"***
  - Chronic high arousal levels impact memory and relations
- Digital Heroin, Glow Kids
- Let them **recapitulate** human history
  - Up to grade 8

Passive VS Active Screentime

- http://education.penelopetrunk.com/2013/04/11/kids-who-play-video-games-do-better-as-adults/
- Video games are mentally active
- Research showing:
  - Gamers are better at jobs that are intellectual
  - Gamers do better in jobs that are active
  - Gamers are happier over the long run
- TV is a bigger culprit (of passive, captured mind)

Cell Phone Safety

- No Children Allowed: Cocaine for Kids
  - https://www.facebook.com/HealthForAllKids/videos/301316260295203/
- Keep your phone distant, especially from organs
  - Use the speaker phone
  - Send text messages
  - Use a headset
  - Do not sleep with your cell phone near you

Intensity ~ 1/distance^2

- Limit your cell phone use
  - Especially when reception is weak, e.g. only one or two bars
  - Keep cell phone calls short
- Wireless and wired headsets emit EMFs even when you are not using your phone

EMR Sources

- Wireless (Wi-Fi) networks
- Cell Phones
- Bluetooth devices
- Power lines
- Computers and printers
- Smart meters
- Microwave ovens
- MRIs

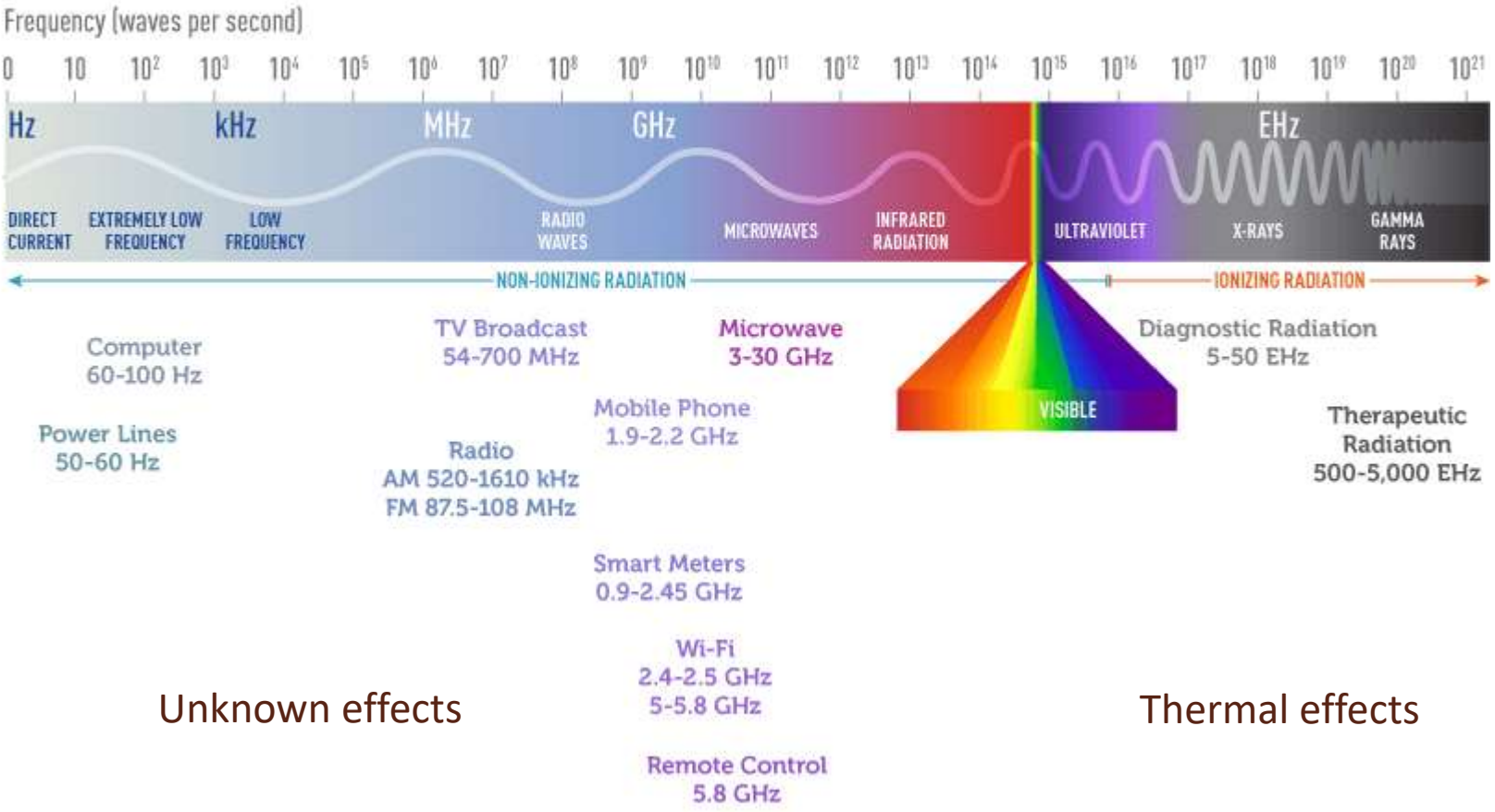
Protections

- Time of exposure
- Distance from source
- Shielding

Types

- **ELF: Extremely low frequencies**
  - Time-varying electromagnetic fields e.g. produced by electrical appliances
  - Frequencies up to 300 Hz
  - Electricity power supply (60 or 50 Hz)
- **IF: Intermediate Frequencies**
  - 300 Hz to 10 MHz
  - Computer screens, anti-theft devices and security systems
- **RF: Radio frequencies**
  - 10 MHz to 300 GHz
  - Radio, television, radar, cell & cordless phones, microwaves

Electromagnetic Spectrum



Unknown effects

Thermal effects

Steiner indicated that this EMR linear spectrum is invalid.

Electromagnetic Hypersensitivity

Study describes a science-based protocol for evaluating patients for electromagnetic hypersensitivity (EHS)

- **EHS** has been *mischaracterized as a psychological issue*, resulting in profound suffering and violations of basic human rights
- "These different tests can be performed under less polluted, environmentally controlled conditions to diagnose chemical and electrical sensitivity precisely"
- Takes the guess work out of the diagnosis
  - Performed in 30,000 patients seen at the EHC-D in the last 35 years
- "The pitfalls of ignoring the principles and facts developed,...can lead to errors in diagnosis and treatment"

Source: Dr. William Rea of the American Academy of Environmental Medicine article: *History of Chemical Sensitivity and Diagnosis*

- http://www.degruyter.com/ downloadpdf/j/reveh.ahead-of- print/reveh-2015-0021/reveh- 2015-0021.xml

Possible Issues

- Rarely immediate health issue (other than headache)
  - 2016: Risk of Glioma (tumor in “gluey” tissue of the brain)
- Neurological (NDD) – contributor to dementia
  - Dr. Nora D. Volkow, National Institute on Drug Abuse: “changes in brain glucose metabolism after cell phone use”
- Cancer (especially breast)
  - 2011: WHO listed cell phone radiation as a 2B carcinogen
- Immune system & blood-filters (toxins pass through ‘holes’)
- References
  - https://draxe.com/electromagnetic-radiation/
  - http://www.trueactivist.com/10-ways-to-protect-against-emf-emissions/
  - https://www.globalhealingcenter.com/natural-health/protect-your-house-emf-pollution/
  - http://articles.mercola.com/sites/articles/archive/2009/08/25/simple-inexpensive-solution-to-radically-lower-emf-exposure.aspx

Remedies

- Generational differences
- EMR-“free” zones in your home
  - Children’s bedroom (no wireless monitors)
  - Ethernet cables or turn off Wi-Fi at night
- Where you carry it (mobile phone)
  - High EMR while talking – use speakerphone
  - Don’t sleep with your phone or carry close to body
- Movement (vs longing for comfort)
  - Mind/Soul – passive vs active
  - Body and posture – wholeness in movement, standing desks
  - Senses – move your focus, variation (temperature, distance, …)
  - Etheric exercises
- Lifestyle (longing to be entertained vs to do)
  - Fasting, friends, food, nature, …
  - Diet: High Oxygen Radical Absorbance Capacity (ORAC) foods

Recommendations

1. Measure your home's EMR
   - Android app (Kirlian Photography)
   - iPhone app (Fallen Angel Creations)
2. Place screen near window – look outside often
   - 20-20-20 rule: Every 20 minutes, look at something at least 20 feet away for 20 seconds
   - Go everyday, same time, for an hour walk
3. Get up once per hour, 10K steps per day
   - Move, get tea
   - Barefoot on the earth
4. Shut down at night
   - And at dinner, make it engaging
5. Annual blood tests

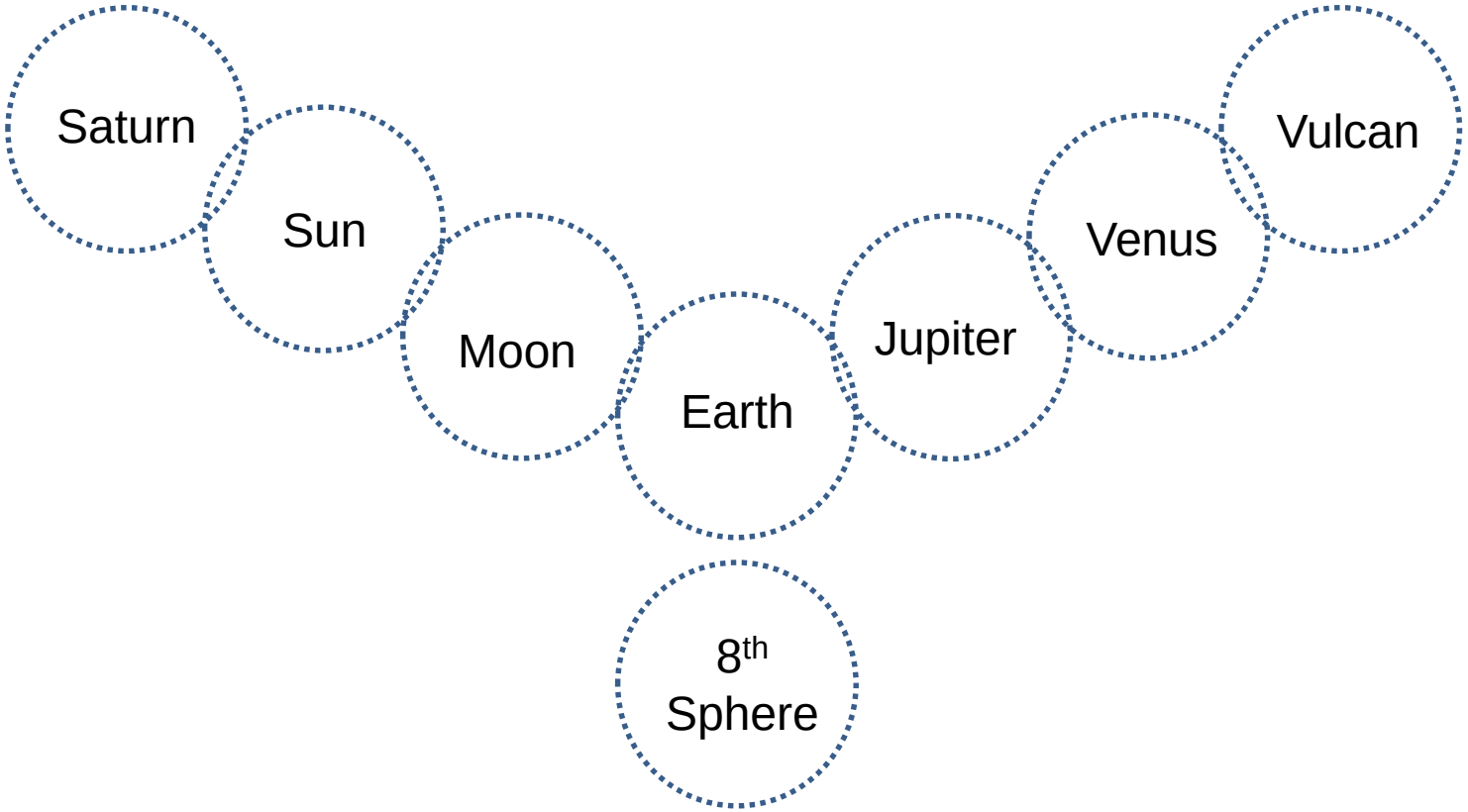
Jennifer Gidley

- Australian psychologist and educator
- University of Technology, Sydney
  - Institute of Sustainable Futures
- President of the *World Futures Studies Federation*
- On Australian **Steiner** National Curriculum Project team
- "We are at a critical point today in research into human futures. **Two divergent streams** show up in the human futures conversations. Which direction we choose will also decide the fate of earth futures in the sense of **Earth's dual role as home for humans, and habitat for life**. …

1. **Scientistic:** dehumanising, and atomistic, based on a mechanistic, behaviourist **model of the human being**, with a thin cybernetic view of intelligence.
   - The **transhumanist** ambition to create future techno-humans is anti-human and anti-evolutionary. It involves technological, biological, and genetic enhancement of humans.
2. **Humanitarian**, philosophical, and ecological, based on a view of humans as kind, fair, consciously evolving, peaceful agents of change with a responsibility to maintain the ecological balance between humans, Earth, and cosmos" -- *Contrasting Futures for Humanity: Technotopian or Human-Centred?* Paradigm Explorer, Sept. 2017

Other Work and Groups

- Advocates for Safe Technology
- **Women's Initiative to Reduce Electro-Smog**
- Dr Mary Redmayne


Saturn
Sun
Moon
Earth
Jupiter
Venus
Vulcan
8th
Sphere

TECH AND EDUCATION

Eliant Position Paper on Digital Media and Childhood

What Constitutes Good Education?

- Draws out from within
- Many Studies, e.g. John Hattie (2008, 2011)
- The teacher's inner being, character, love, wisdom
- Learning without a teacher – ineffective
  - App on screen as teacher – very ineffective
  - Robot as teacher – ?
- Teacher's role
  - Activator of the inner (soul), respectful & loving
  - Coach, grading & grating

Hand-Eye SensoriMotor Skills

- 2-D surface lacks depth
- Eye movement restricted to the plane
- Sensory wholeness not active, not practiced
  - 12 Senses work together
  - What is absorbed through the senses?
  - Experience of wind, warmth, and light
- Compare:
  - Experience of images while outdoors or in classroom
    - Recess
  - Experience of images while online
    - Computer gaming

Learning thru Bodily Interaction

- Balance while in movement
- Experience of whole body during movement
  - Resistance, support, surface, texture, viscosity, moisture
  - Separateness (ego), agency, ability to alter, change environment
- Experiences before their abstraction
- Affect on cognitive and social learning
  - Impairments (Leonard 2016)
- ADHD training ground
  - Computer gaming: very rapid mental reaction
  - No past or future, total absorption in the game
  - Addiction, dopamine stimulation

Effects of Digital Exposure

- Diminished eye contact, social interaction, interaffectivity
- Undeveloped social skills: collaboration, group-work
  - Ekeocha & Brennan (2008): individual memory of an event was significantly worse after watching a movie on computer screen alone than at a theatre with 2 or more others (thought to be due to group discussion afterward)
- Fear of social exclusion

Extensive Digital Media Use

- Zimmerman (2007): Impairs language acquisition, attention disorders
- Weis & Cerankosky (2010): Impairs reading and writing, behavior at school
- Richards et al. (2010): Impairs empathy
- Sanders et al. (2000) and Lepp et al. (2014): Depression, less satisfaction, impairs school performance
- Zheng et al. (2014): Increases ADD
- Hancox et al. (2004): Increases obesity
- BLIKK (2017, 5500 children): impairs concentration, play ability, language, and increases hyperactivity & obsesity

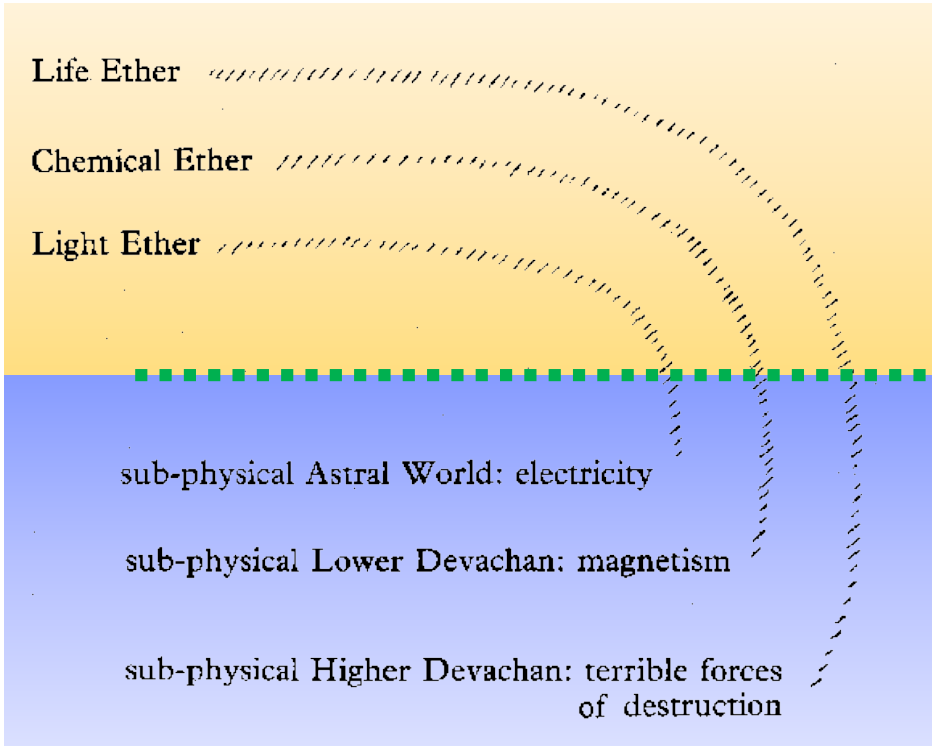
Empathy

Konrath et al. (2011)

- Drew from 72 studies between 1979 and 2009
- Decline of 40% in American college-aged students
- Most of the decline from 2000 to 2009.

Conclusions

- Use of digital media during childhood negatively affects
  - Cognition
  - Emotional skills
  - Social skills
- Well-being with a warm human being as teacher
- Childhood sensory experiences cannot be replaced by computer images – play time
- Education of the child must include teacher and
  - Exploration and acting (imitation)
  - Feeling/emotional coupling (variety)
  - Understanding through the body before using abstractions


Life Ether
Chemical Ether
Light Ether
sub-physical Astral World: electricity
sub-physical Lower Devachan: magnetism
sub-physical Higher Devachan: terrible forces of destruction

The Second Fall

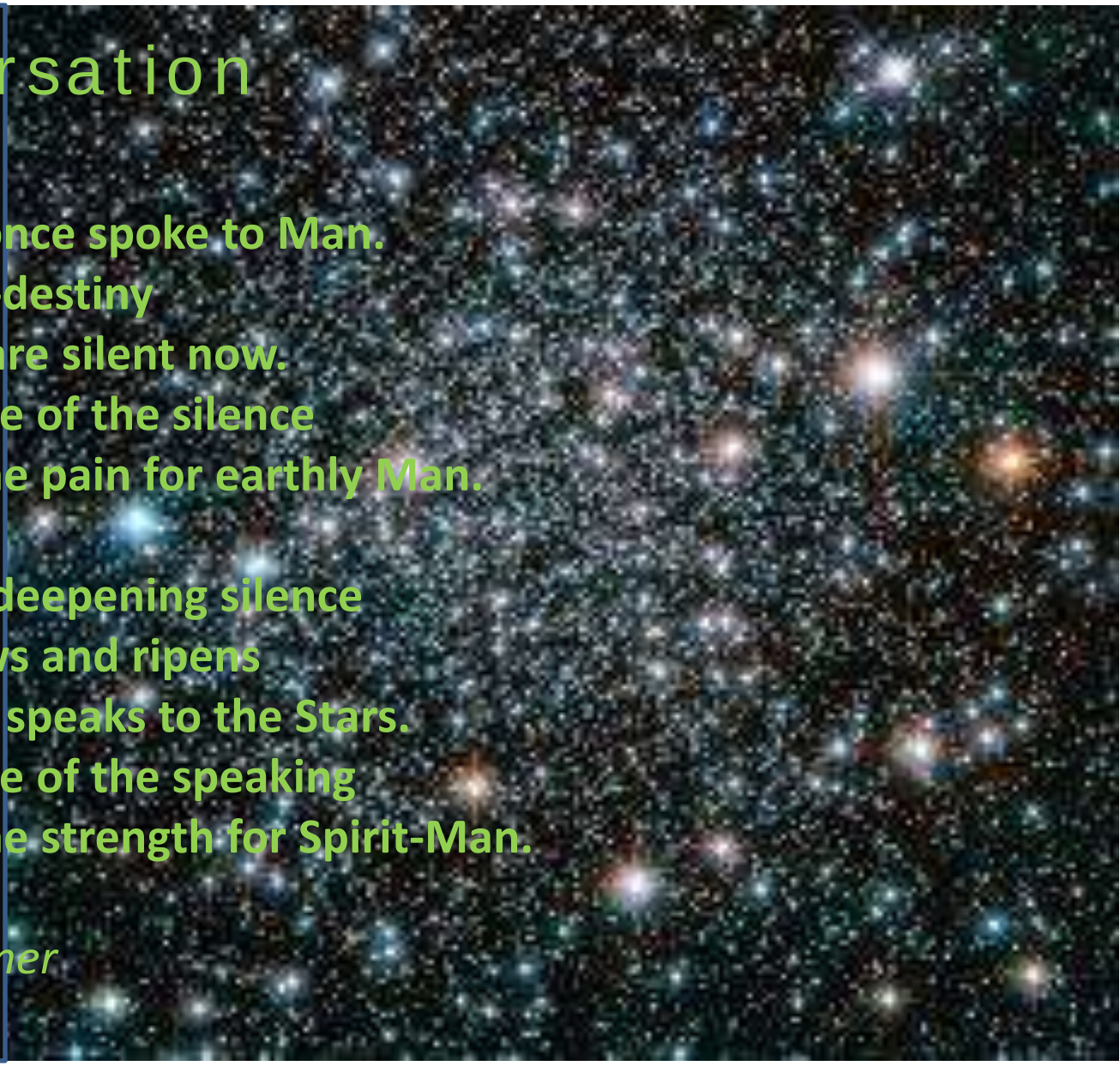
- "Ahrimanic powers will intervene more and more and Ahrimanic spirits will also use human bodies for other things. A time will come when Christians will have to ask themselves seriously when they meet this or that human being: Is that really a human being or is it a very loose mantle for Ahrimanic spirits? In the future one will have to make this distinction in addition to the other ones one has to make today. This will be the second fall, and the beast and his herald will take possession of human bodies. Thereby these demons will have fallen. So first we have the fall of corrupt human beings and then the fall of certain corrupt spirits, who are close to men. These spirits take a tumble in the second fall." – Apocalypse, lecture 11, September 15, 1924, GA 346
https://wn.rsarchive.org/Lectures/GA346/English/UNK1995/19240915v02.html
- One interpretation is that the time is coming when robotics will succeed in creating a machine that looks very much like a human being.

- According to the Environmental Protection Agency (EPA), the average American spends 93% of their life indoors. 87% of that time is spent inside, while the other 6% is spent in automobiles. This means that only 7% of the average American's life is spent outdoors. This is unfortunate considering that spending time outdoors is one of the easiest ways to improve your overall health and wellbeing.

Search, Email, & other Alternatives

- https://www.techspot.com/news/80729-complete-list-alternatives-all-google-products.html

Conversation



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Rudolf Steiner

A Goal of MysTech: Counter-forces

- “Do you imagine, when we imitate it here on a small scale and let it ray out again into the cosmic spaces, that it is of no significance? It is of very great significance for the cosmos.
- Here you can see at once: even the vibrations are given to the demon, whereby he may unfold his activity out into the cosmic spaces.”
- “It is not a question of abolition — not even of hostile criticism — for it goes without saying, these things are justified. Yet, if on the one hand these things must emerge in the progress of mankind, it is indeed a question on the other hand of our creating ***counter-forces*** to bring about the necessary ***balance***.
- Compensating forces must be created, and that can only be when humanity understands once more the principle of Christ and finds the way to Christ.”

- *The Relation of Man to the Hierarchies*, 26Nov1916, Dornach, GA 172

Example Counter-Balance

O Man,

You mould it to your service,

You reveal it according to the value of its substance

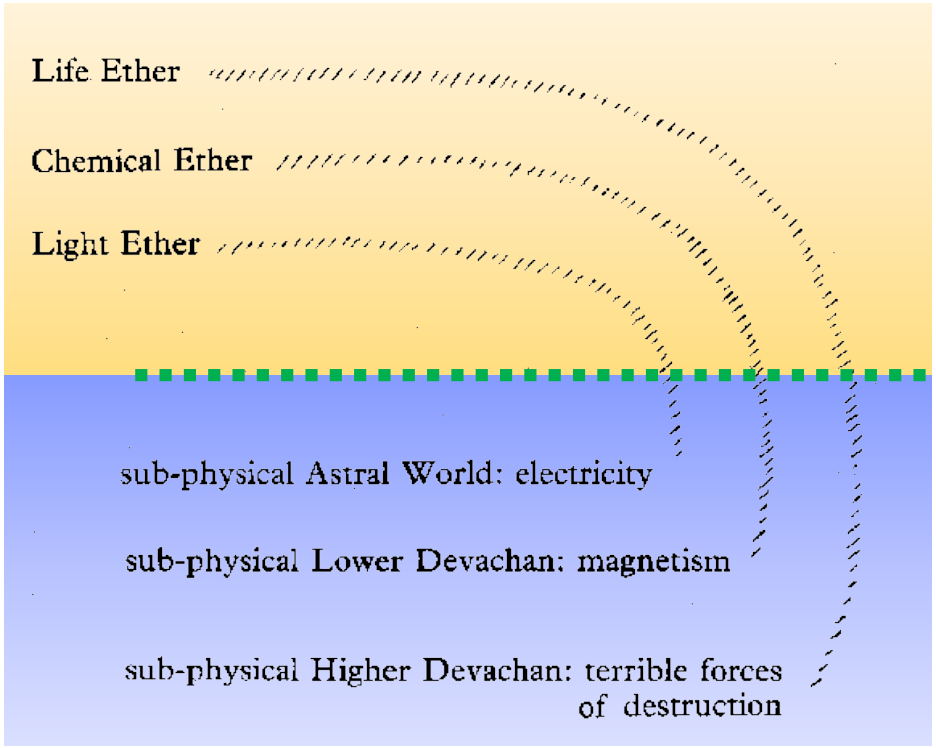
In many of your works.

Yet it will bring you healing

Only when it reveals to you

The lofty power of its spirit.

-- Rudolf Steiner October 5, 1923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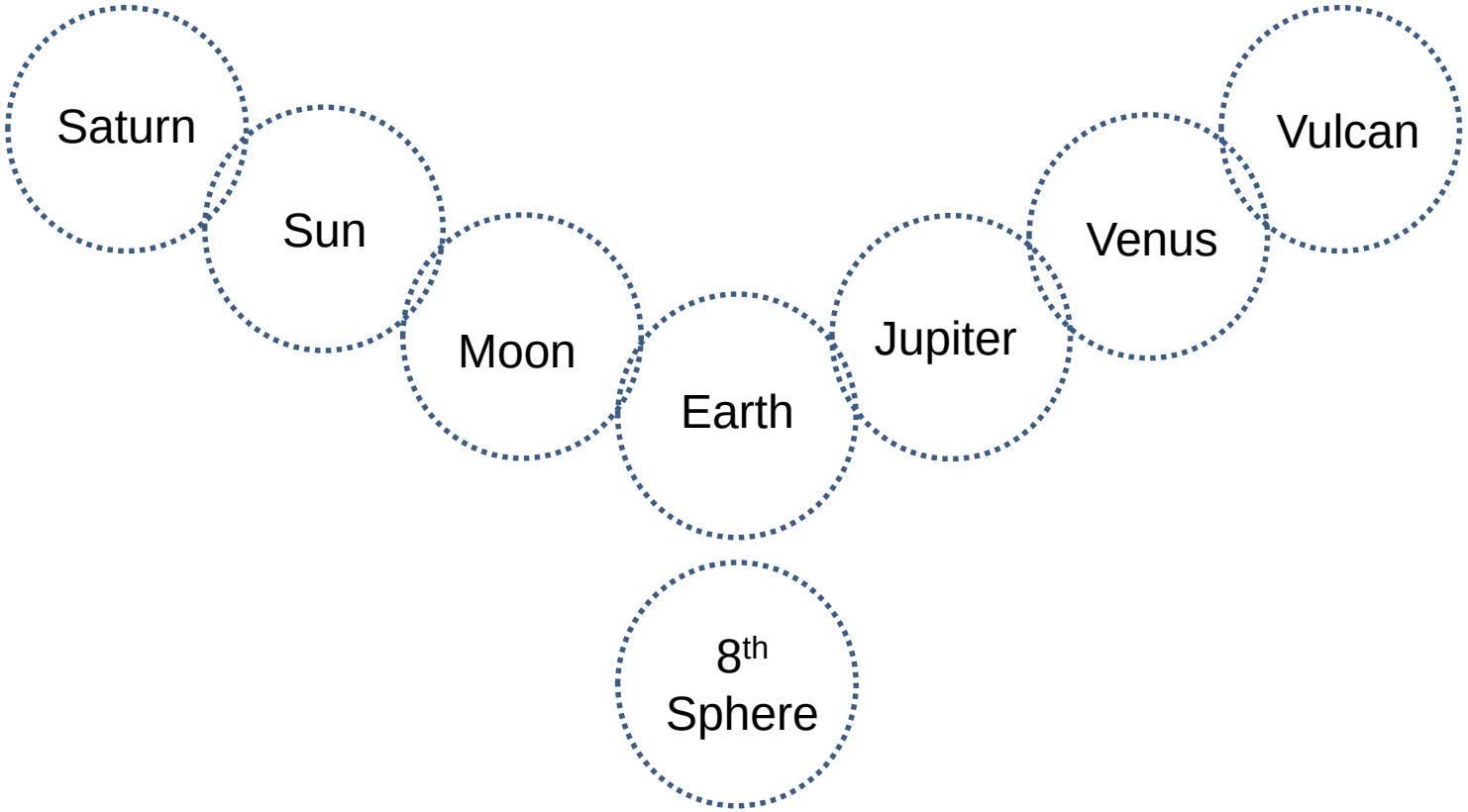
Saturn
Sun
Moon
Earth
Jupiter
Venus
Vulcan
8th
Sphere

- According to the Environmental Protection Agency (EPA), the average American spends 93% of their life indoors. 87% of that time is spent inside, while the other 6% is spent in automobiles. This means that only 7% of the average American's life is spent outdoors. This is unfortunate considering that spending time outdoors is one of the easiest ways to improve your overall health and wellbeing.

Additional Closing Verse

- *In the spirit lay the germ of my body.*
  And the spirit has imprinted in my body
  The eyes of sense,
  That through them I may see
  The lights of bodies.
  And the spirit has imprinted in my body
  Reason and sensation
  And feeling and will,
  That through them I may perceive bodies
  And act upon them.
  In the spirit lay the germ of my body.
- *In my body lies the germ of the spirit.*
  And I will incorporate into my spirit
  The super-sensible eyes
  That through them I may behold the light of spirits.
  And I will imprint in my spirit
  Wisdom and power and love,
  So that through me the spirits may act
  And I become a self-conscious organ
  Of their deeds.
  In my body lies the germ of the spirit.