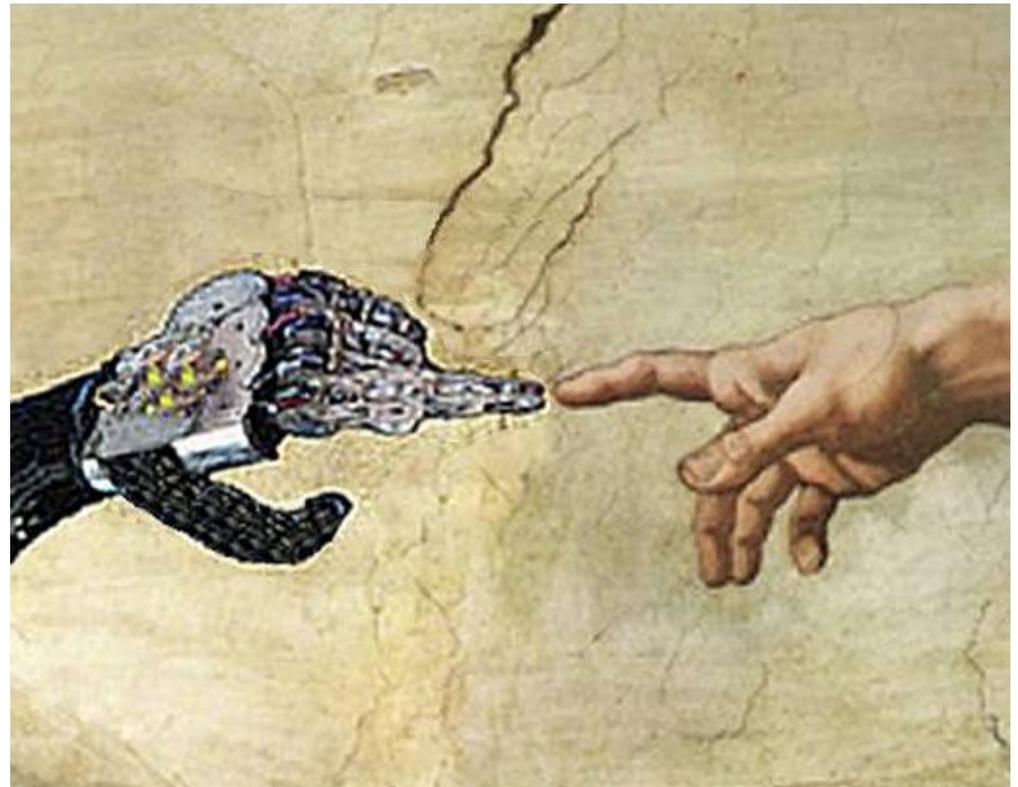


UNDERSTANDING TECHNOLOGY IN RELATION TO THE HUMAN BEING

Exploring The Western Path



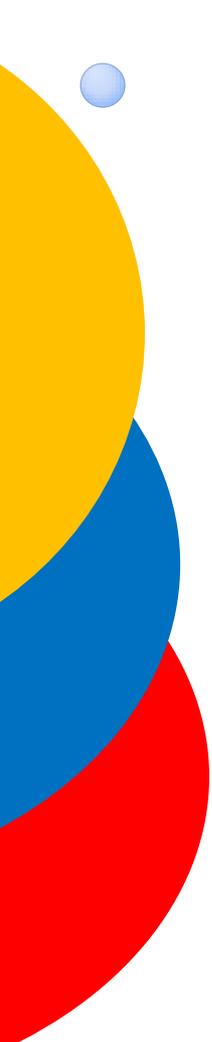
***Tech Retreat
Chestnut Ridge, NY***

Andrew Linnell

[*jandrewlinnell@yahoo.com*](mailto:jandrewlinnell@yahoo.com)

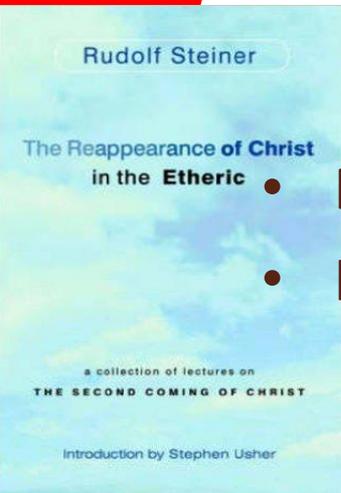
[*www.thechristianmysteries.com*](http://www.thechristianmysteries.com)



- 
- To resolve our past requires knowledge.
To forge our future we need courage.
To experience the present we must develop dedication.
Our thinking needs riddles to wake up.
Our feeling needs pain to mature.
Our willing needs resistance to grow strong.
- Rudolf Steiner

BACKGROUND

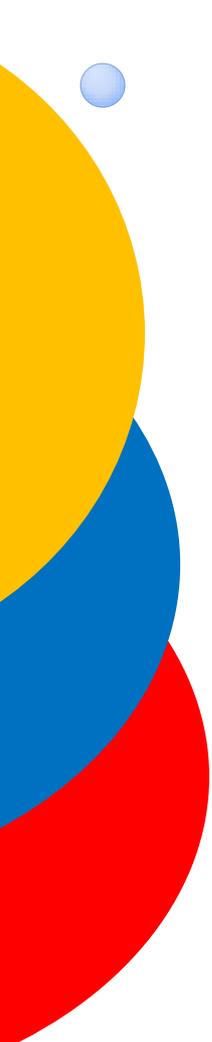
- Rudolf Steiner indicated that three occultisms would be developed:
 1. East: Mysteries of Birth; **Eugenic**
 2. Central: Mysteries of Health and Healing; **Hygienic**
 3. West: Mysteries of the Human-Machine: **Mechanical**
- Mechanical (and Material) Occultism
 - Related to resonances, frequencies between Human & Machine
 - Moral vibrations could be used to start & operate a machine
- Reappearance of Christ in the Etheric
- Hephaestus, Prometheus, and Heracles



HOW EASY IT IS TO FEAR

- The gods hate the engine Ahriman has made on earth
 - With every engine, with every mechanical device we create a starting point for demonical beings
- Electricity has the “peculiar power of leading down *from Nature to Sub Nature*. Only man himself must beware lest he slide downward with it.”
 - Anthroposophical Leading Thoughts, Mar 1925
- Electricity and demon magic
 - “Wherever electricity is used, there is demon magic”
 - Demon magic signifies progress
 - **we should not oppose progress”**
 - R. Steiner, Karma of Vocation, lecture 9, GA 172

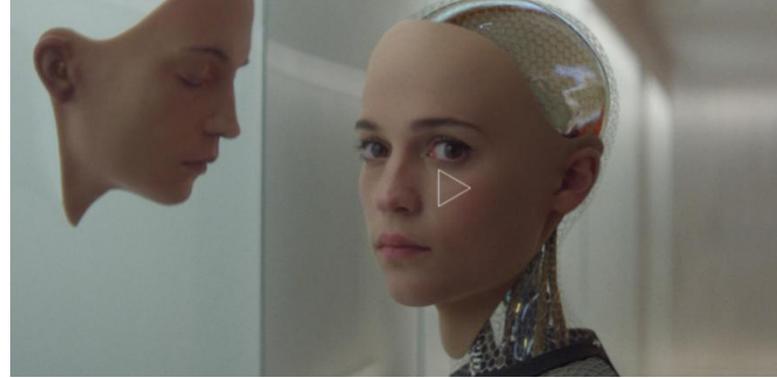




'OBVIOUS' ISSUES AND 'CONCLUSIONS'

- Job loss: 80% of current jobs in 20 years
 - Low cost goods without art, without love
- Education: from AI-supplementation to replacement
- We have become addicted to technology
 - Saps us of our will and natural social development
- EMR: Wi-Fi, smart meters, high-tension wires
 - Keeping cell phone by one's breasts or testicles
 - Impact on brain and other organs – how to measure?
- Anything using electricity is evil
- Technology makes us inhumane
 - Derives from Ahriman
- We need to stop technology ASAP to save our world
 - It's impact on humanity is worse than climate change

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 (most likely)

KNOW THOU THYSELF

- Applies to AI and robotics – what are they NOT?
 - Computers built upon logic; key logic operation is NOT
 - NOR (Not OR) of $x + y = z$
- Not examples:
 - Sacrifice (action only by command)
 - E-motions (artificial soul)
 - Will motivators (will without meaning)

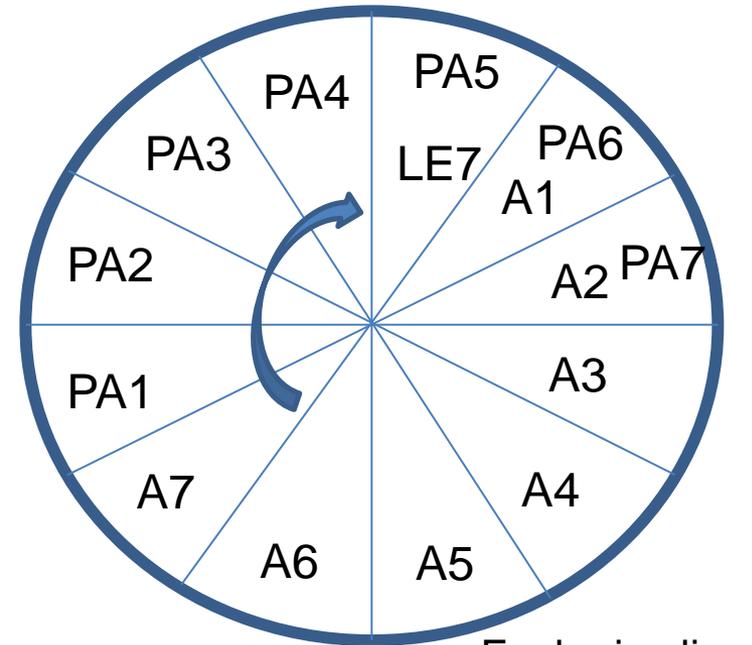
OR	F	T
F	F	T
T	T	T

NOR	F	T
F	T	F
T	F	F



BODY AIDS SOUL DEVELOPMENT BY AGE

- Judgment (my era was superior)
- Lemuria (moon separated)
- Atlantis (phys incarnation)
- Post-Atlantean
- I. 56 49 earth
- II. 49 42 speech
- III. 42 35 stars
- IV. 35 28 33 – Christ
- 1879 V. 28 21 Today 27
- VI. 21 14 Year ~4,000
- VII. **14 7** Year ~6,000 – women are infertile
Year ~8,000 – moon returns

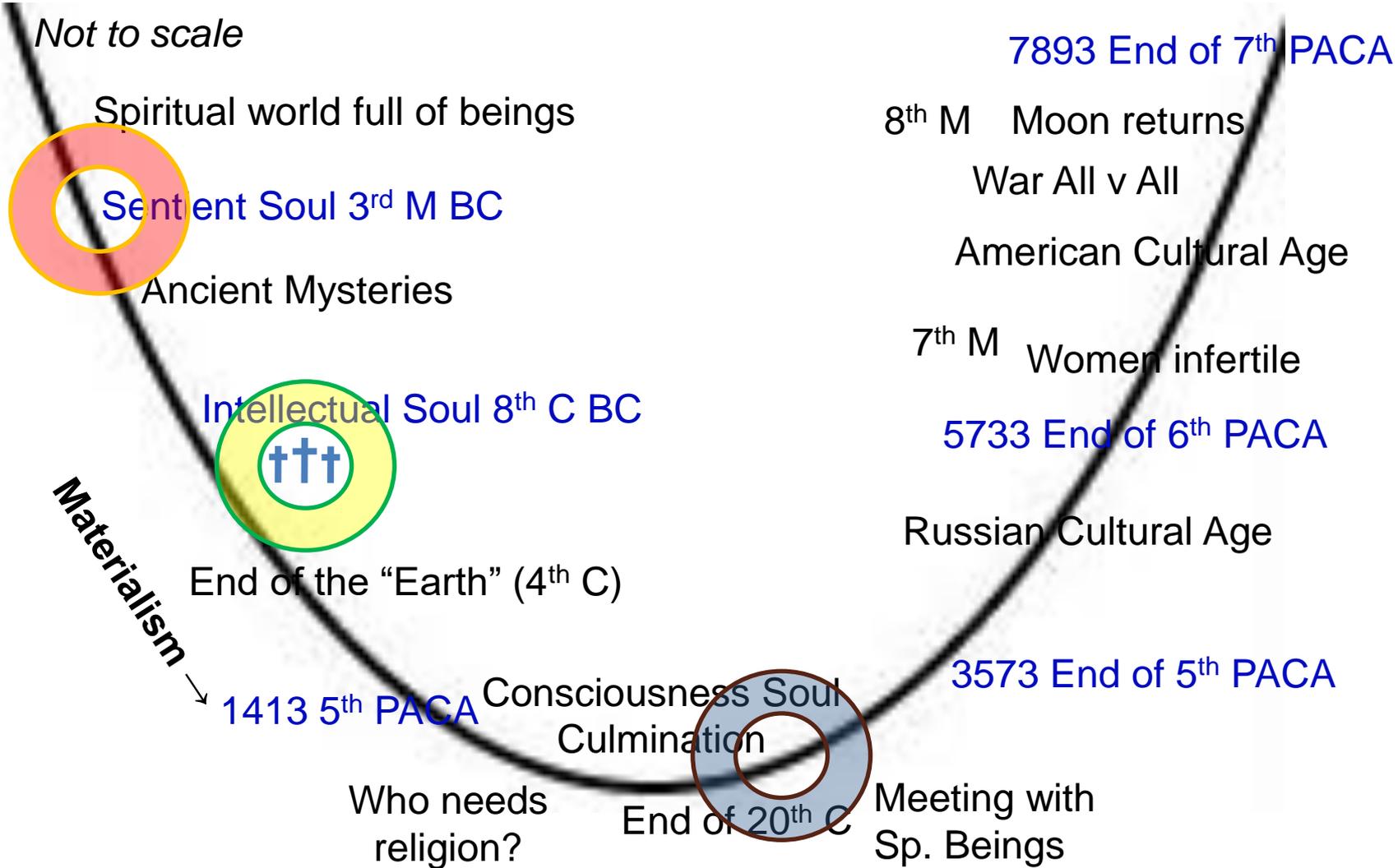


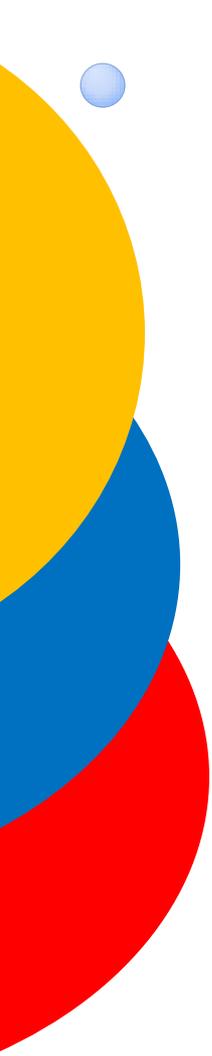
Each pie slice represents ~2160 years

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

EVOLUTION OF CONSCIOUS AWARENESS

Not to scale



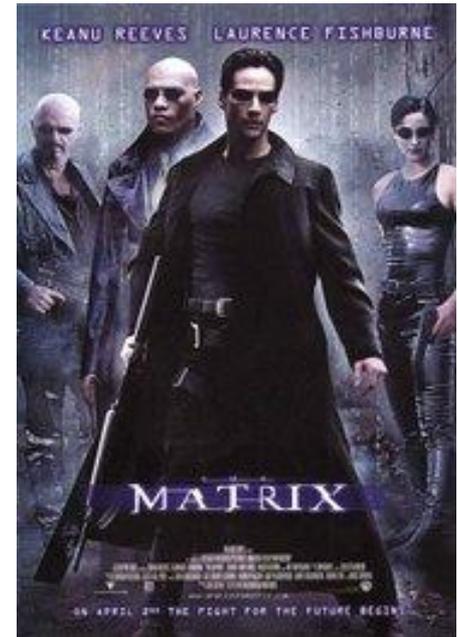


CHANGING THE PHYSICAL BODY

- “Man will bring about the future form of his body
- Inasmuch as the human being becomes softer and softer, inasmuch as **he separates himself from the hard parts, he is approaching his future**
- An age comes when man will **live above his earthly portion** as it were, as in time gone by
- This condition, which is comparable to your present sleep-condition, will then be replaced by another when the human being will be able to **draw his etheric body out of his physical body at will**
- Rudolf Steiner, *Theosophy of the Rosicrucian*, Lecture 13, *The Future of Man*, 5Jun1907, Berlin, GA 99

MYTHS AND LITERATURE

- Mary Shelley: *Frankenstein or the Modern Prometheus*
 - 1818, connected Promethean myth to contemporary science
 - Creation of near-human through electricity
 - Bereft of morals
- Promethean stories/movies
 - Chained to a lesser-reality
 - *The Matrix*
- Hephaestean stories/movies
 - Automatons – not real humans
 - *Ex Machina*, *Nexus*



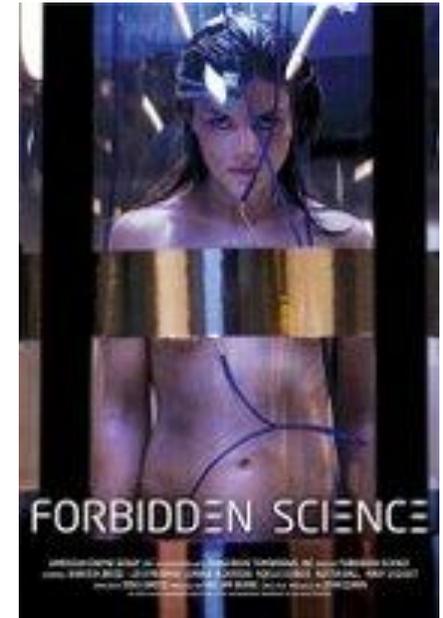
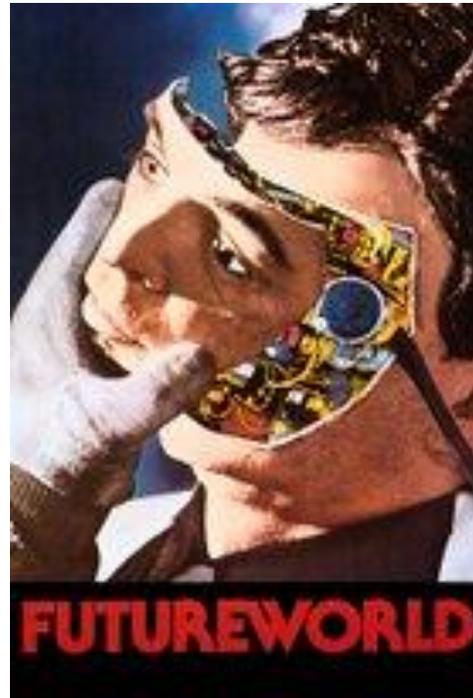
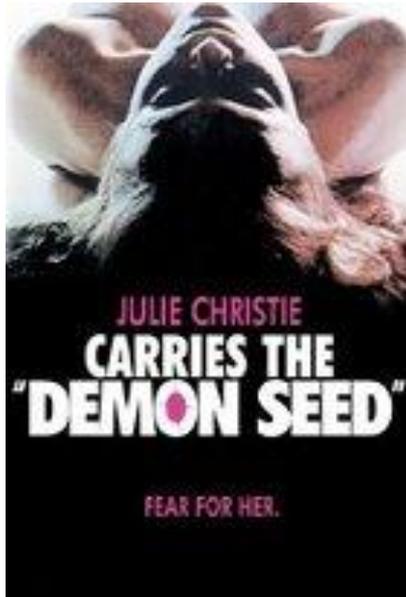
spirit

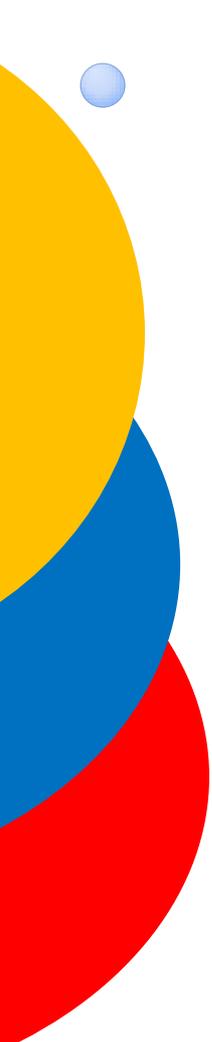
soul

life



FROM WHERE DO THE PICTURES OF THE FUTURE COME TO HUMANS?

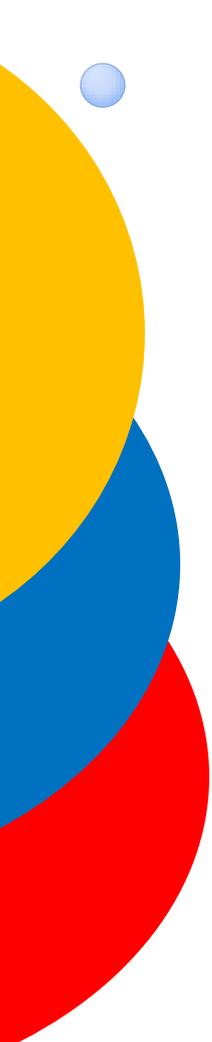




WORK OF ANGELS IN MAN'S ASTRAL BODY

“If men do not allow this to be **achieved in the astral body** while **awake**

- Angels fulfill their aims through sleeping bodies
 - Through the help of the physical and etheric bodies during actual sleep
- seek forces required by means of the etheric and physical bodies
- Here lies the great danger for the age of the Spiritual Soul
 - If, **before beginning the 3rd M**, men were to refuse to turn to the spiritual life
- **Aim of the Angels** in their work would have to be achieved through sleeping bodies
 - Instead of through men wide-awake
- The Angels might still be compelled to withdraw their whole work from the astral body and to submerge it in the etheric body in order to bring it to fulfillment
 - But then, in his real being, man would have no part in it
 - It would have to be performed in the **etheric body** while man himself was not there, just because if he were there in the **waking state**, he would obstruct it”



IMPLANTABLE MICRODEVICES

- Columbia Engineering researchers have invented a technique for manufacturing complex microdevices with three-dimensional, freely moving parts made from biomaterials that can safely be implanted in the body. Potential applications include a drug-delivery system to provide tailored drug doses for precision medicine, catheters, stents, cardiac pacemakers, and soft microbotics.
- The device contains iron nanoparticle–doped components, which respond to external magnetic actuation. Actuation of the device triggers release of payloads from reservoirs.
- <http://engineering.columbia.edu/news/sam-sia-implantable-micrororobots>

BIONIC LIMBS

- Three Austrians have replaced injured hands with bionic ones that they can control using nerves and muscles transplanted into their arms from their legs
- Transplant would have meant taking anti-rejection drugs for the rest of their lives
- His son, then 4, said proudly "my father is a robot"
- 98% of amputees report phantom sensations in their amputated limb - [mirror-touch synesthesia](#)



BIONICS BECOMING AFFORDABLE

- Made with \$2000 3D Printer and inexpensive materials
- More: <https://www.youtube.com/watch?v=A6isKsPWubA>



WEARABLE ROBOTICS

- “I’m getting quite a few questions lately regarding one of my favorite companies, **Ekso Bionics Holdings Inc.**(OTC:EKSO)
- “As you know, the company is tied into one of the most dynamic Total Wealth Trends of all - and potentially the most profitable, too – **Human Augmentation**”
 - www.totalwealthresearch.com
- Superflex: ‘intelligent wearable strength’
 - <https://futurism.com/bionic-humans-this-sleek-power-suit-helps-restore-mobility/>



<http://futurism.com/paralyzed-monkeys-able-to-walk-again-with-brain-implant-human-trials-are-next/>
<http://eksobionics.com/ekso>
<https://www.newscientist.com/article/2112562-first-home-brain-implant-lets-locked-in-woman-communicate/>



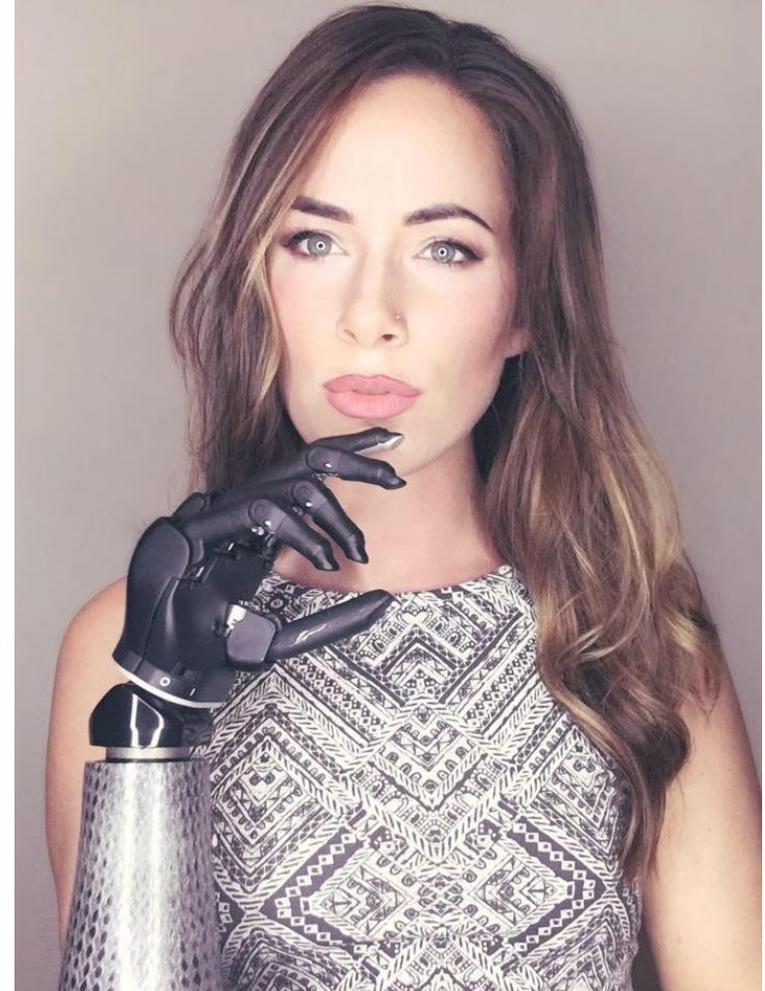
WILL WE LIVE THRU AVATARS?

- “In the *present* evolutionary state the human being is organized in such a way that the ego and astral bodies **must** make use of the physical sense organs in order to become aware of the physical world.”
 - What about the next evolutionary state?
- “The human being has sense organs in the astral body which enable perception in the astral world, but these have normally not been developed” – R. Steiner, *Man & Woman in Light of Spiritual Science*, 18Mar08

WHAT CAN WE FALL IN LOVE WITH?

A person with:

- Bionic finger?
- Bionic arm?
- Bionic arm & a leg?
- Transplanted face ?
- Can we love a person
 - With a pace maker?
 - With bionic eyes?
 - Who we know only through their avatar?



ROBOTS FOR SPACE EXPLORATION

- Lack of gravity dangerous for human travelers
- Too far away for surrogate (remote) manipulation
- Need for autonomy, ‘self’ driven actions, reactions
 - Astrobees: flies around the International Space Station
- Will such robots remain “in space use only”?
 - Autonomous vehicles
 - Humanoids

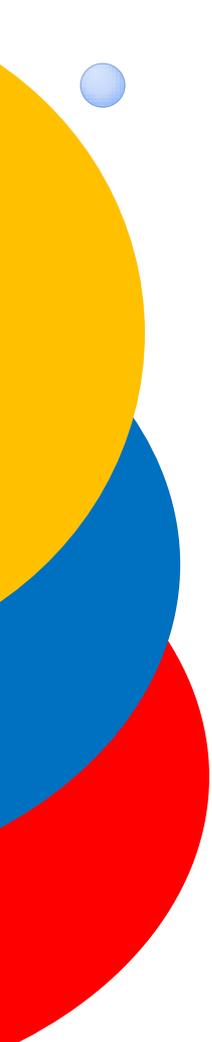


HOW IT BEGINS: GIVING PARAPLEGICS A NORMAL LIFE

- EEG skull cap
- Monitors activity
- Signatures = action
- Slippery slope



Source: <https://futurism.com/experimental-brain-implant-lets-a-paralyzed-woman-communicate/>



STEINER ON FACING HUMAN-MECHANICAL

- Fifth post-Atlantean period will have to solve the problem of how human moods, the **motions of human moods**, allow themselves to be translated into **wave motions on machines**, how **man must be brought into connection with what must become mechanical**
- “The will is there **to harness human energy to mechanical energy**
- **These things should not be treated by fighting against them – that is a completely false view**
- These will not fail to appear; they will come
 - What we are concerned with is whether, in the course of world history, **they are entrusted to people who are familiar in a selfless way with the great aims of earthly evolution and who structure these things for the health of human being** or whether they are enacted by groups of human beings who exploit these things in an egotistical or in a group-egotistical sense
- It is not a question of **what**; the what is sure to come; it is a question of the **how**, how one tackles these situations”
 - Rudolf Steiner, *The Reappearance of Christ in the Etheric*, lecture 12

ATTACHMENT OF A SECOND BEING

“During the course of the Fifth Post-Atlantean epoch, 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.

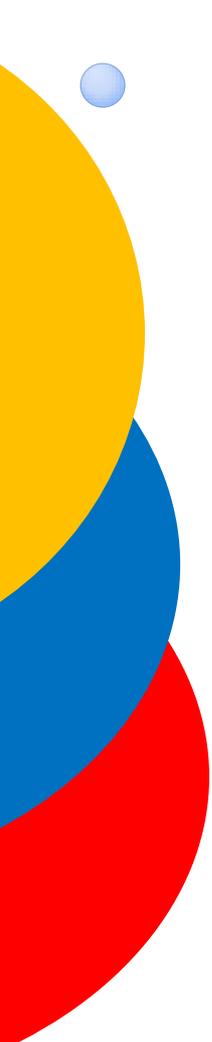
“**A different form of experience will come to the man of modern times.** In his own opinion he knows ever so well; he observes the material world, **uses his intellect to establish the interconnections between its phenomena** and believes that all its riddles are solved in this way, never realizing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

Note similarity to Angel as a second being and to the Double





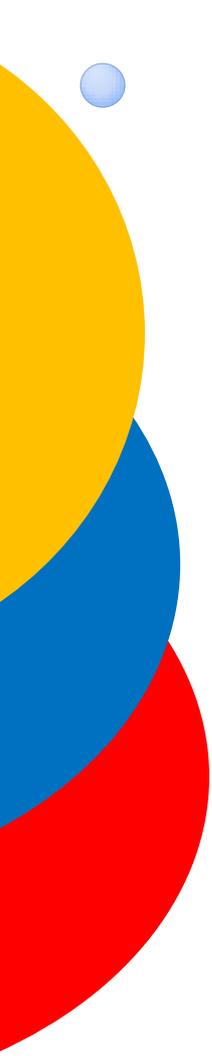
LINKING THE ETHERIC TO THE ROBOTIC

- “Is not Animal Motion perform’d by the Vibrations of this Medium [etheric body], excited in the Brain by the power of the Will...?” – Isaac Newton
- “The spiritual-etheric shall be placed in the service of outer practical life. The emotion in a human mood **will be transmitted in *wave movements* to machines, between the dying forces of the nervous system and the external power of the machine.**” – 13Mar1917, from the *Schiller File* (note: I could not find the lecture for this quote in rsarchive.org)

MERGING MAN AND MACHINE



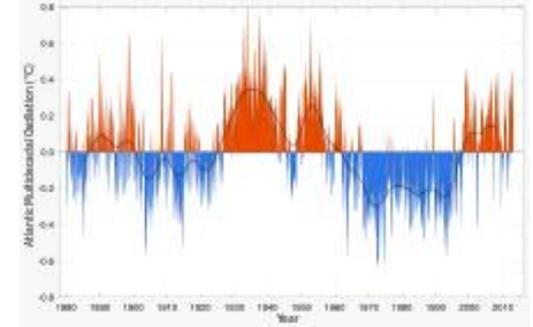
- “The point is **not what** is going to happen, for it certainly will happen, but **how** it happens — how these things are handled.
- **The welding together of human beings with machines will be a great and important problem for the rest of the earth-evolution.**
- I have often pointed out, even in public lectures, that human **consciousness depends on destructive forces**. During public lectures in Basle I twice said that in our **nerve-system we are always in process of dying**. These *forces of death* will become stronger and stronger, and we shall find that they are *related to the forces of electricity and magnetism*, and to those at work in machines.
- **A man will be able in a certain sense to *guide his intentions and his thoughts* into the forces of the machines. Forces in human nature that are still unknown will be discovered — *forces which will act upon external electricity and magnetism*.**
- That is one problem: the bringing together of human beings with machines, and this is something which will **exert ever-increasing influence on the future.**” -- *The Wrong and Right Use of Esoteric Knowledge*, lecture 3, 25Nov1917, Dornach, GA 178



MERGING MAN AND MACHINE

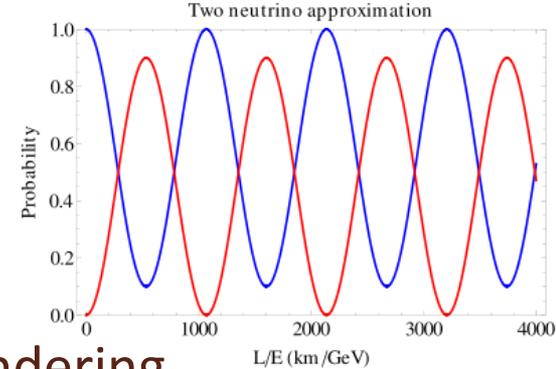
- “Now I will turn again to the fact that in this 5th PACA humanity will have to find ways of **dealing with great life-problems** which in a certain sense were veiled by the wisdom of the past.
- One of these great problems will be concerned with finding out how to **place the spiritual etheric forces at the service of practical life.**
- I have told you that in this epoch we have to solve the problem of how the **radiations from human states of mind are carried over into machines**; of how human beings are to be brought into relation with an **environment which *must become increasingly mechanized.***” – *The Wrong and Right Use of Esoteric Knowledge*, lecture 3, 25Nov1917, Dornach, GA 178

MATERIAL OCCULTISM

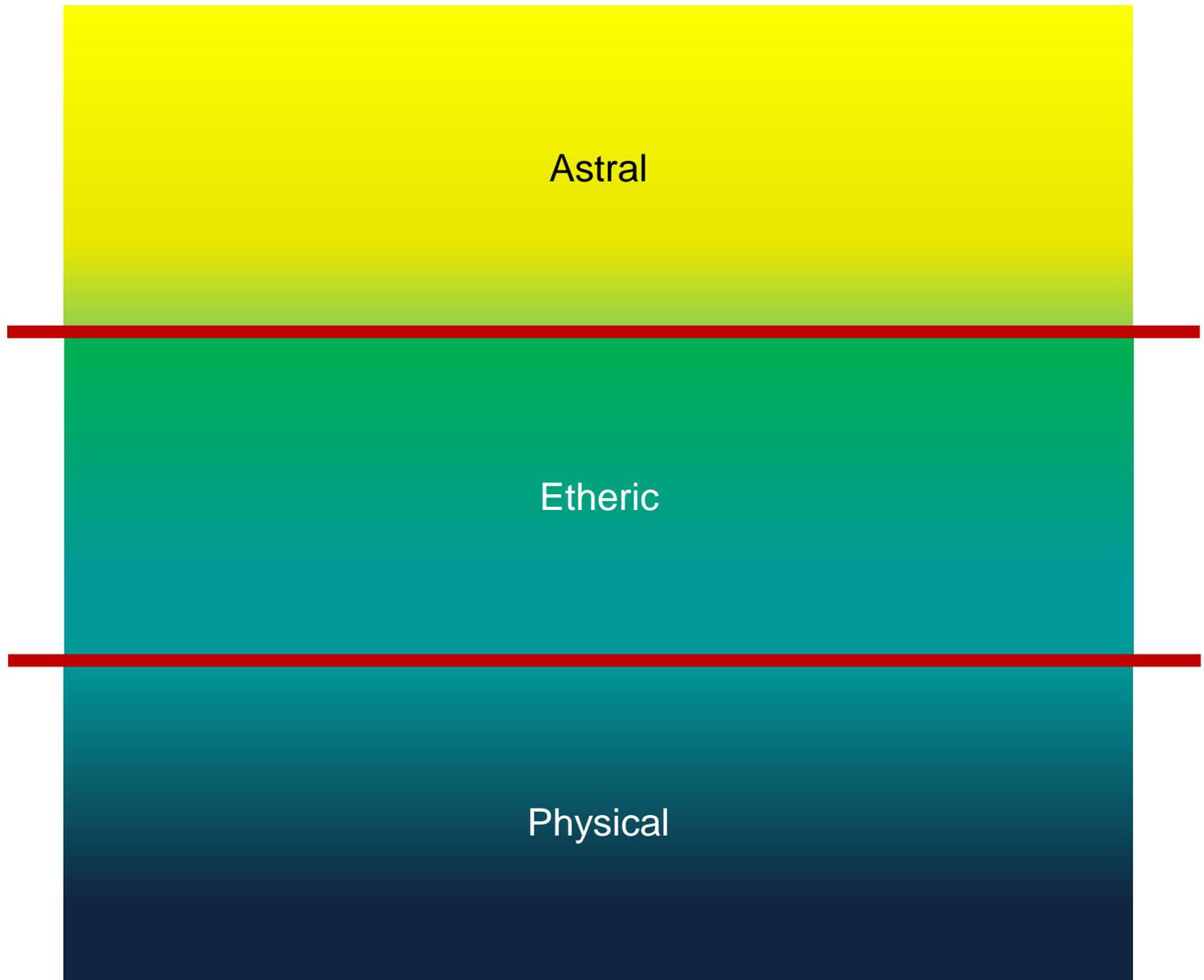
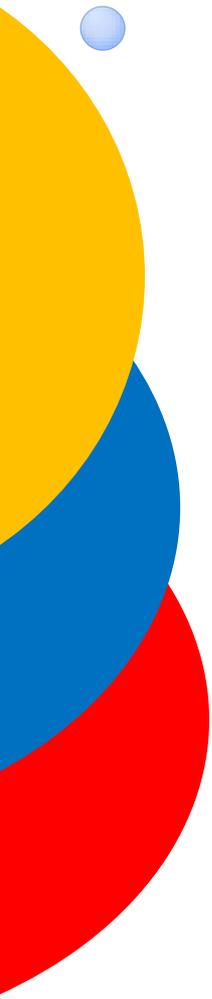


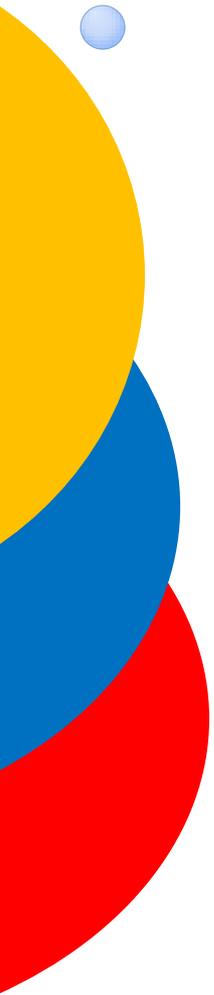
- “First, there are the capacities having to do with so-called **material occultism**. By means of this capacity — and this is precisely the ideal of **British secret societies** — certain **social forms** at present basic within the industrial system shall be set up on an entirely different foundation. Every knowing member of these secret circles is aware that, solely by means of certain capacities that are still latent but evolving in man, and with the help of the **law of harmonious oscillations, machines and mechanical constructions and other things can be set in motion**. A small indication is to be found in what I connected with the person of **Strader** in my Mystery Dramas.
- These things are at present in **process of development**. They are **guarded as secrets** within those secret circles in the field of material occultism.
- **Motors can be set in motion, into activity, by an insignificant human influence through a knowledge of the corresponding curve of oscillation**. By means of this principle it will be possible to substitute merely mechanical forces for human forces **in many things.**”

MECHANICAL OCCULTISM



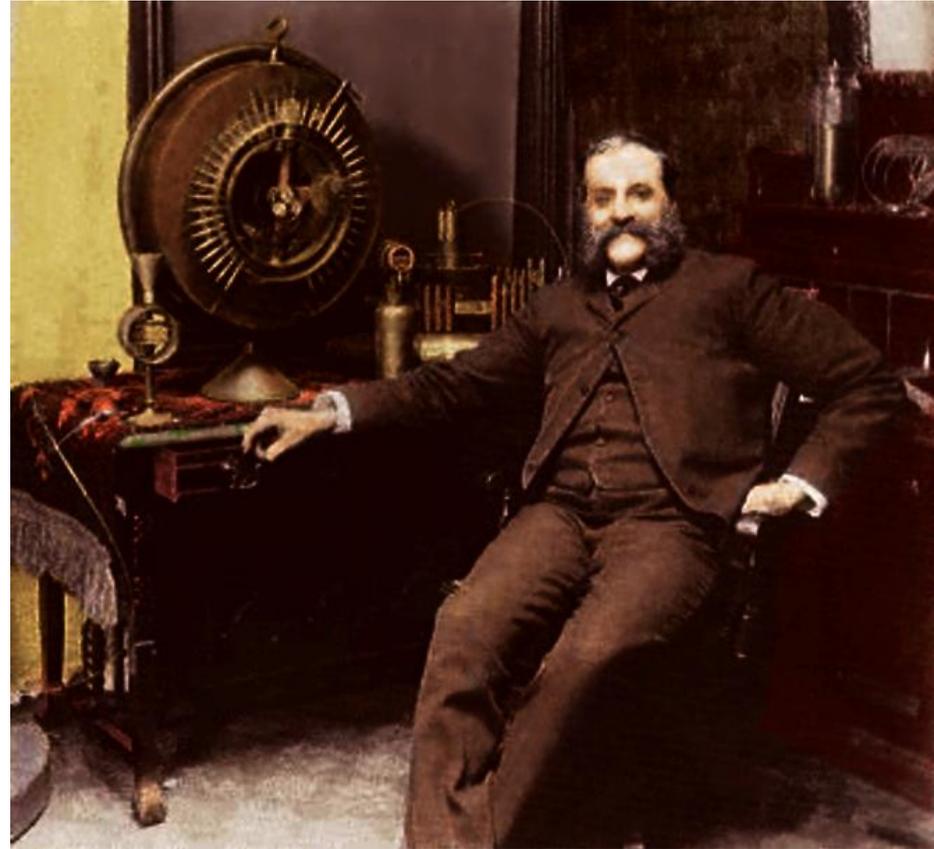
- “The possibility will thus come about of rendering unnecessary nine-tenths of the work of individuals within the regions of the English-speaking peoples. **Mechanistic occultism will not only render it possible to do without nine-tenths of the labor still performed at present by human hands**, but will give the possibility also of paralyzing every uprising attempted by the then dissatisfied masses of humanity.
- **The capacity to set motors in motion according to the laws of reciprocal oscillations will develop on a great scale among the English-speaking peoples.** This is known in their secret circles, and is counted upon as the means whereby the **mastery over the rest of the population of the earth shall be achieved even in the course of the fifth post-Atlantean epoch.**”

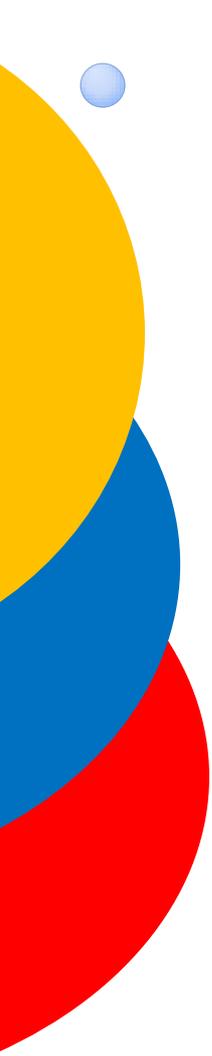




KEELY & RESONANCE

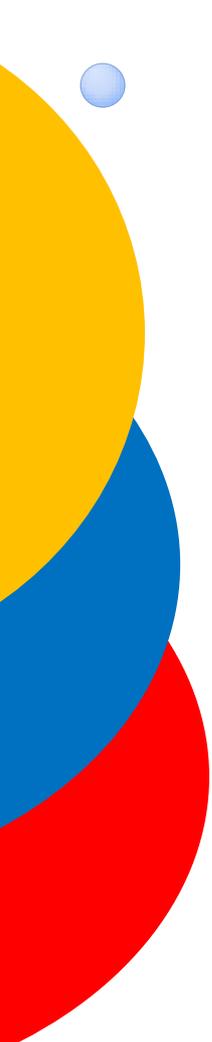
- Mechanical Occultism
 - West
- Frequency & Wavelength
 - As long as we research in mere numbers, we'll not find this resonance
- Keely played music to start his machine





THE MECHANICAL AND THE MORAL

- “The *mechanical and the moral must interpenetrate* each other, because **the mechanical is nothing without the moral**. Today we stand hard on this **frontier**. In the future machines will be driven not only by water and steam, but **by spiritual force, by spiritual morality**.
 - This power is symbolized by the Tau sign and was indeed poetically symbolized by the image of the Holy Grail. **Man is no longer merely dependent on what Nature will freely give him to use; he can shape and transform Nature, he *has* become the master craftsman of the inanimate. In the same way he *will* become the master craftsman of what is living.”**
- The Temple Legend, lecture 20, 2Jan1906, Berlin, GA 93



DRIVING FORCE: MORAL TECHNOLOGY

- “It is perhaps known to you that Keely invented a motor which would only go if he himself were present. He was not deceiving people about this; for **he had in him that driving force originating in the soul, which can set machines in motion.** A driving force which can **only be moral**, that is the **idea of the future**; a most important force, **with which culture must be inoculated**, if it is not to fall back on itself.
- “What is expressed by the **Tau** is a **driving force** which can only be set in motion by the **power of selfless love.** It will be possible to **use this power to drive machines**, which will, however, **cease to function if egoistical people make use of them.**” [*refers to Hiram Abiff, Cain*]

– The Temple Legend, lecture 20, 2Jan1906, Berlin, GA 93

THE POWER OF THE HUMAN SOUL

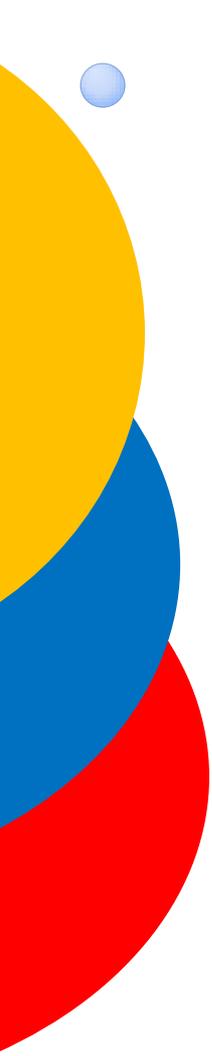
- The telephone and the extension of the soul over space
- The automobile and extension of touch sensation
 - This experience will vanish soon – self driving cars
 - What does it mean when one gets a “feel” for their car?
- Can our soul
- What role do
 - [AI detecting](#)
 - [AI detecting](#)



CHANGING THE PHYSICAL BODY

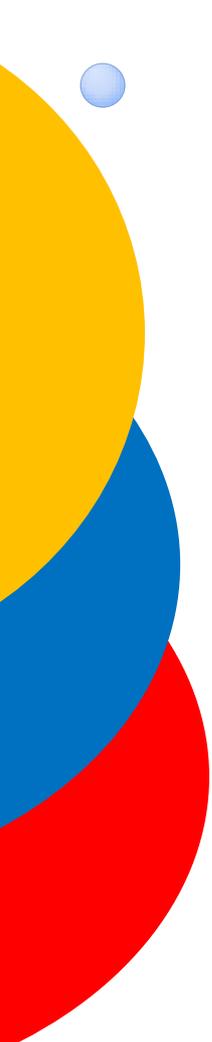
- “It will be as if the **denser part** of man were here **below on earth** and the human being will **make use of it** from outside **like an instrument**
- Man will **no longer bear his body about and live within it**, but will float above it, the body will itself have become rarefied and finer”
- Rudolf Steiner, *Theosophy of the Rosicrucians*, 5Jun1907, Berlin, GA 99
- Avatar time?





WRONG AND RIGHT WAYS

- “But from the other side many endeavors will be made to **introduce the dead** into human existence by **artificial means**. Along the *indirect path through Gemini* the dead will be led into human life, with the result that **human vibrations will pass over into the mechanism of machines and will continue to vibrate there** in a quite definite way. The **cosmos will impart motion to the machines by *the indirect path*** I have indicated.” – *The Wrong and Right Use of Esoteric Knowledge*, lecture 3, 25Nov1917, Dornach, GA 178

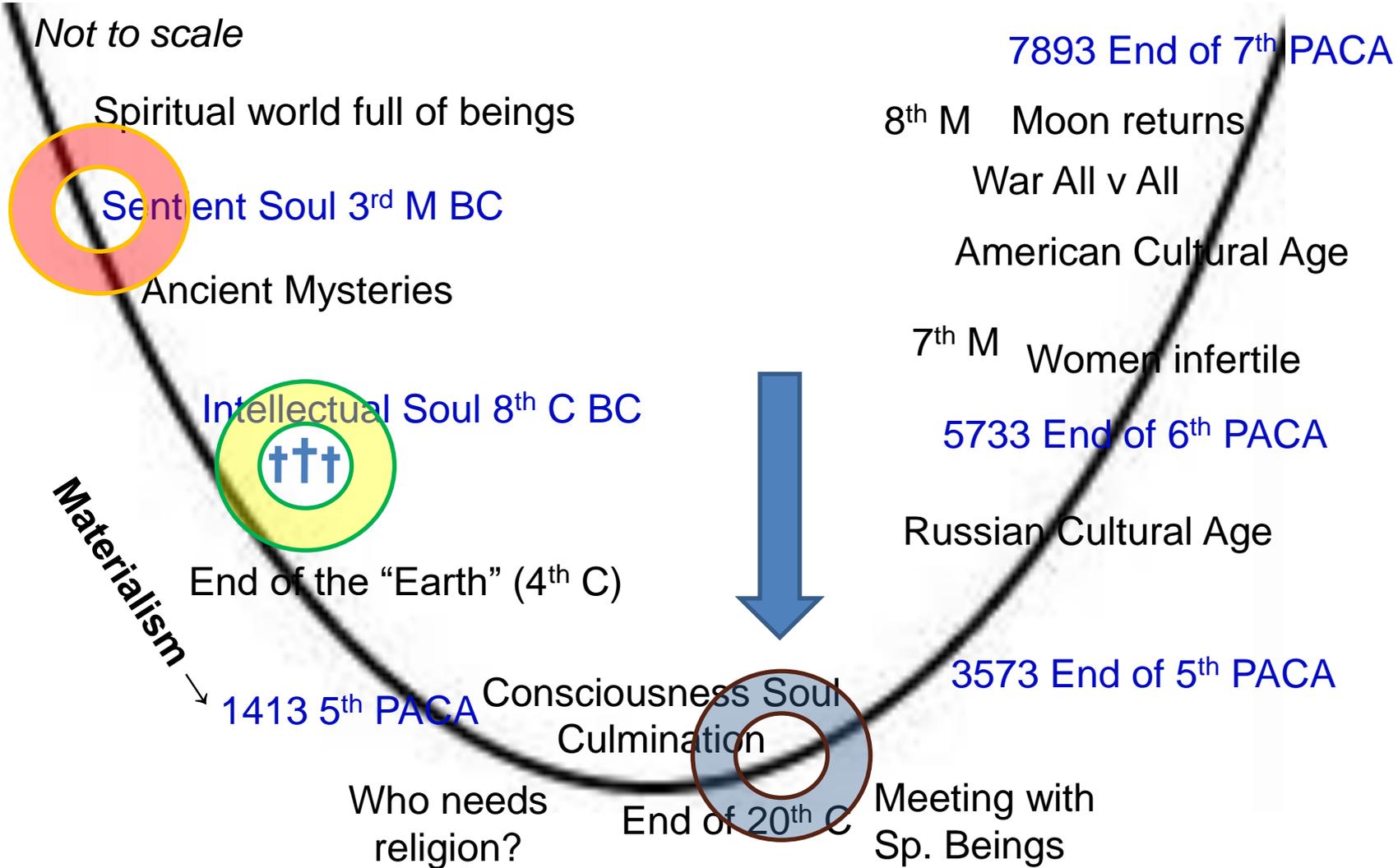


WRONG AND RIGHT WAYS

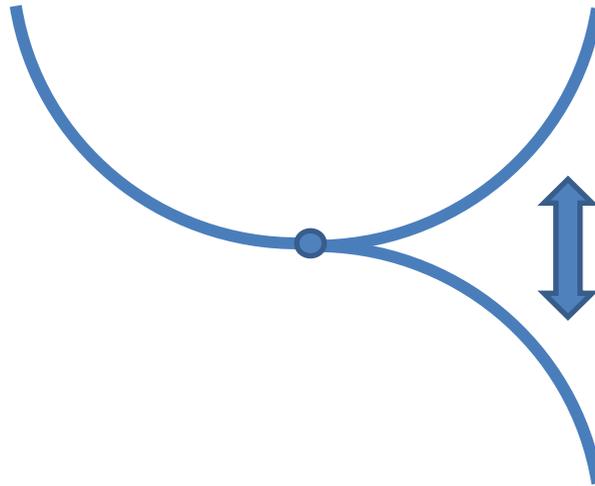
- “It will thus be essential, when these problems emerge, that no improper methods should be applied to them, but **only those elemental forces which belong to nature on their own account**, and great care will have to be taken **not to introduce improper forces** into the realm of machines.” -- *The Wrong and Right Use of Esoteric Knowledge*, lecture 3, 25Nov1917, Dornach, GA 178

EVOLUTION OF CONSCIOUS AWARENESS

Not to scale



WHERE ARE WE HEADED?



- Into sub-nature?
- Into supra-nature?
- Both!
 - Rosicrucian and Christian callings

COMING PREPARED FOR MODERN LIFE



REMEDIES

- Generational differences
- EMR-“free” zones in your home
 - Meter
 - Turn off at night
- Where you carry it (mobile phone)
 - High EMR while talking
 - Don’t sleep with your phone
- 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, ...

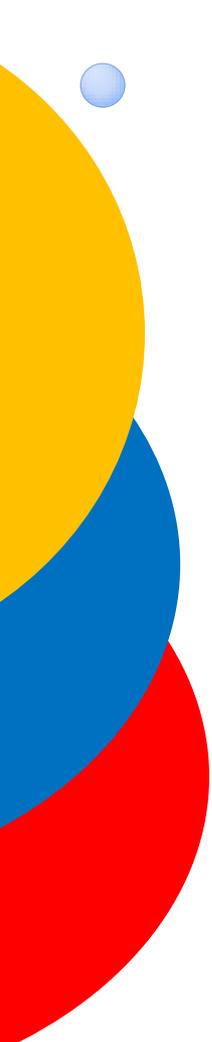


CHILDREN

- Let them recapitulate human history
 - Up to grade 8
- [“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
- Screen 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”

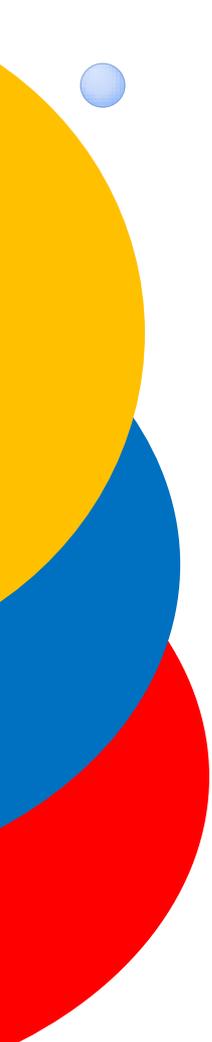


Flickr: futurestreet



EFFECTS OF CINEMA

- They “are external means for turning people into materialists.”
- Films are “weaving materialism into the perceptual habits of those who are watching.”
- “There is no better means of education for materialism than cinema. ... The pictures do not enter into the usual capacity of perceiving, while the person is sitting before the screen, but into a deeper material layer than we have it, otherwise, in our perception. The person becomes ethereally goggle-eyed ... One works there not only on that what the person has in his consciousness, but he undergoes a materializing effect on his deepest sub-consciousness.” – R. Steiner, GA 303, 5Jan1922, answer to question about watching cinema

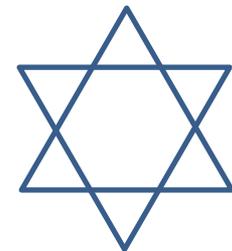
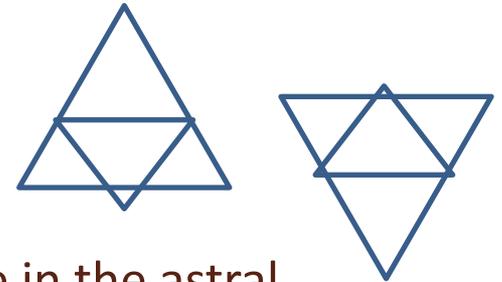


CONCLUSION

- The obstacles in our time become bigger, more capable of presenting an evil path as attractive. One can say "I will not watch a movie or spend time in front of a computer screen because I know it has bad effects on me." This becomes a deep moral dilemma for we should also carry in our hearts the Rosicrucian approach to be there in the world where the world is. If I sink down where the world is (if this is truly the case), will I have the strength afterwards to still rise up? Will I too be lost? Here, I believe, the only answer is Know Thyself. It is in these times that one becomes capable of consciousness expansion. Humanity's natural path is down into sub-nature. It must go there. But we all already have the seeds to develop the capacities to rise equally into super-nature. This balance will keep us healthy and allow us help others.

BATTLE FOR YOUR ETHERIC BODY

- Ahrimanic beings gain a foothold in a parched etheric
 - Attachment of a second being
- Only you can win
 - Must become conscious of our etheric
 - Time, life, movement, vibrations
 - Vibrate with moral impulses that originate in the astral
 - Your victory is for all of humanity and for the cosmos!
- Expanded consciousness: balance sub and supra-Nature
- Reappearance of Whitsun in the Etheric
 - Individual
 - Birth of Christ in the Etheric (~1930s)
 - Slaughter of the Innocents
 - “Out of Egypt”

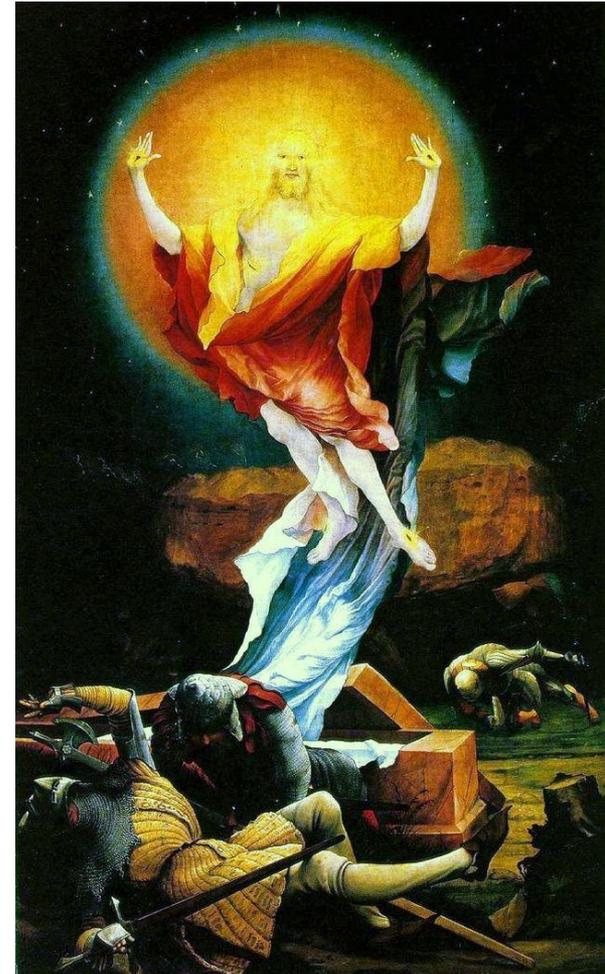


DO I HAVE TO DO THIS? *CAN'T SOMEONE ELSE?* ALIGNING ONE'S WILL

“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*

- “I have come to the frightening conclusion that I am the decisive element. It is my personal approach that creates the climate. It is my daily mood that makes the weather....In all situations, it is my response that decides whether a crisis is escalated or de-escalated, and a person is humanized or is dehumanized” – J. W. von Goethe



RECAP FROM THIS LECTURE

- Fear Not, rather Prepare the Future
 - According to divine will
 - Each cultural age: we were superior
 - 2000 years of avatar life on earth
- Not the What but the How
 - Merging Human and Machine will happen – via slippery slope
 - Who will be doing this? *Become involved.*
 - Now we can grasp: “Upon this rock I build my church”
- Vibrations and Moral Technology – research
 - Interface to electronic machines today





Q&A



Hanson Robotics, 2016