

3. The Empress

Is she a **lab technician exploring the secrets of CRISPR-Cas 9 genome editing** with her test tubes, pipettes and petri dishes or a **high priestess of Monsanto** guarding the **monopoly over the future of all plants and life?**

- Microbiome
- Genetic engineering
- GMOs
- Genetic Patents
- Biodiversity
- Scientists & lab technicians

2. The High Priestess (Popess)

Does the **mother of all protocols and networks** only connect (**IoTs**) devices or she transforms our bodies, clothes and the whole nature into sources of data and electric signals with **wearables and EEG monitors?**

- Future internet
- Wearable technologies
- Tissue engineering & cloning
- Bacterial materials
- Food safety & security
- Consumer organizations & patient groups

1. The Magician

Is he a **maker** who can **3D print** anything and bring innovation to unexpected places, a **tinkerer** playfully misappropriating and repurposing hardware, or an **entrepreneur with a new vaporware?**

Is he an **evangelist of open source culture** changing how businesses and governments operate or a **black hat hacker-provocateur?** Does his illegal **FPV antenna with VR goggles** help him see the world from a bird's-eye view or taste the power of racing drones and showing off new gadgets?

- IoTs (Internet of Things)
- Additive manufacturing
- Digital fabrication
- New conductive materials
- (Un)employment
- Hackers & makers

6. The Lovers

Will **drones** become our **future cupids** bringing unexpected loves, events, presents and disasters or they are becoming our **prison guards in the panopticon?** Is our **love for every new gadget** stronger than our search for intimacy with fellow humans? Will the **choice between human and robot lovers** become an everyday dilemma?

- Drones
- Social Media
- Personalized medicine
- Estrogen & BPA pollution
- LGBT issues
- Youth people & youth culture

5. The Pope (Hierophant)

Is he a priest of **all trade marks, patents and copyright laws** forcing innovation to obey the corporate oligarchy or a benevolent patron of disruptive technologies, such as the first synthetic organism, **Mycoplasma laboratorium?** Do laws and regulations that he represents **hinder innovation or stimulate it** while insisting on **anticipatory governance**, which protects the interests of present and future humans and institutions?

- Laws & regulations
- Synthetic biology
- DNA synthesis
- Bioterrorism
- Religions & cults
- Regulators & Government agencies

4. The Emperor

Is he a king ruling **all communication infrastructure** and holding firmly in his hands all cell towers and satellites or a **Quantified Self tracking geek** expecting **everything to develop according to the Moore's law?**

- Activity monitors
- Biobanking
- Governance of minerals
- GDP & economic indicators
- NSF & grants
- Protectionism & Nationalism
- Corporations

9. The Hermit

Should technology **assist us in aging and dying and bring immortality?** When to choose **exoskeletons, prostheses, implants, robots and SENS** (Strategies for Engineered Negligible Senescence) techniques of rejuvenation and when to give up and choose painless **euthanasia?** Should we trust our light of reason or "LEDs" designed and patented by various stakeholders in such matters?

- Assistive technology
- Telomeres
- Neurodegenerative diseases
- Life expectancy
- Senior citizens

8. Justice

Will justice become **blinded by powerful new algorithms and AIs** with their **recognition grids** scanning all face and constantly collecting data about everything? Will the open data and open gov systems support or erode our trust in public institutions? Will our new weapons, such as **ultrasonic cannons**, bring peace or new forms of violence and terror?

- Big data
- Open data
- Biometrics
- Human rights & future of justice
- Future weapons
- Judges & lawyers

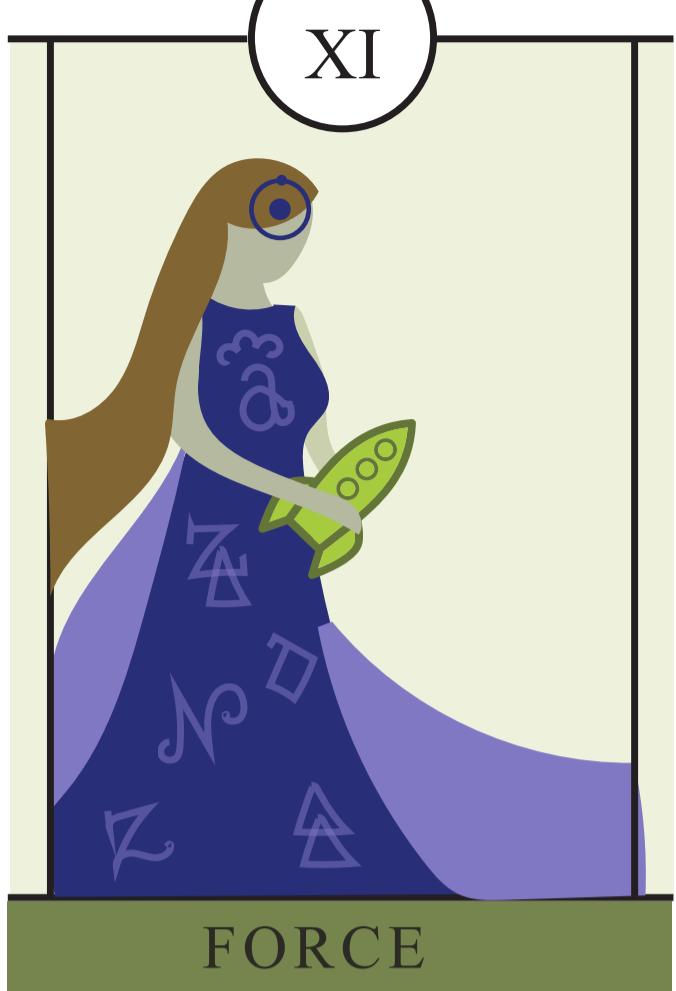
7. The Chariot

Who are the **future chariots?** Hipsters on the **hoverboards?** Autopilots in the **Tesla cars, Amazon flex drivers and similar slaves transformed into autonomous vehicles?** Astronauts on a **mission to Mars** searching for the old **Mars rover?** Asteroids miners remembering the success of the **Rosetta probe?** Will the **zero human intervention world** full of artificial moral agents become truly autonomous and optimized or completely unmanned, making humans redundant?

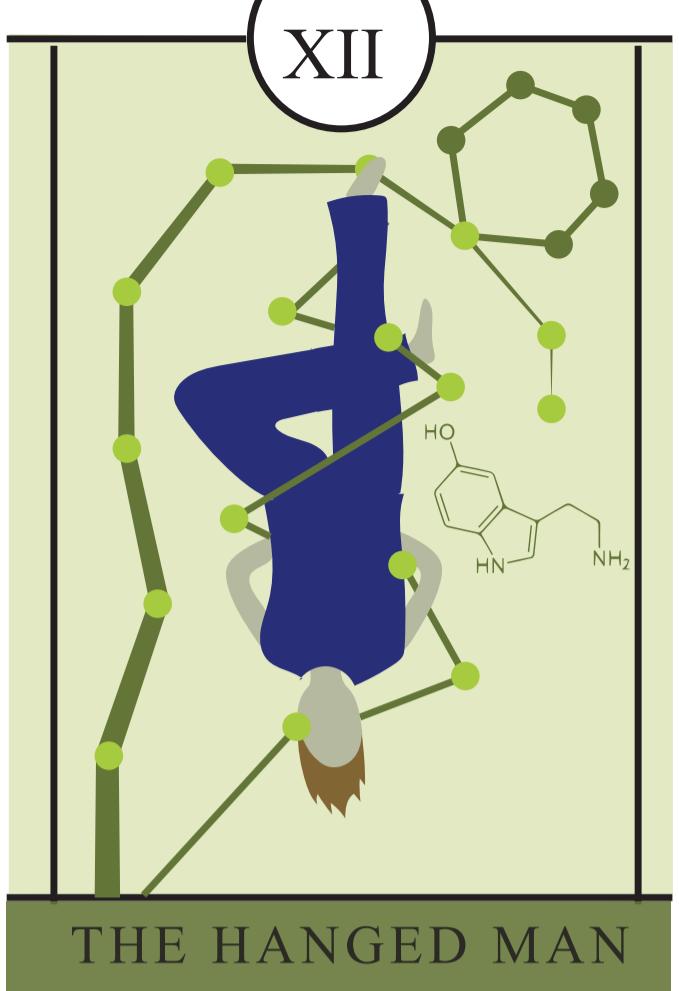
- Future of Transportation
- Autonomous Vehicles
- AI and neural networks
- Volunteerism & NGOs
- Entrepreneurs



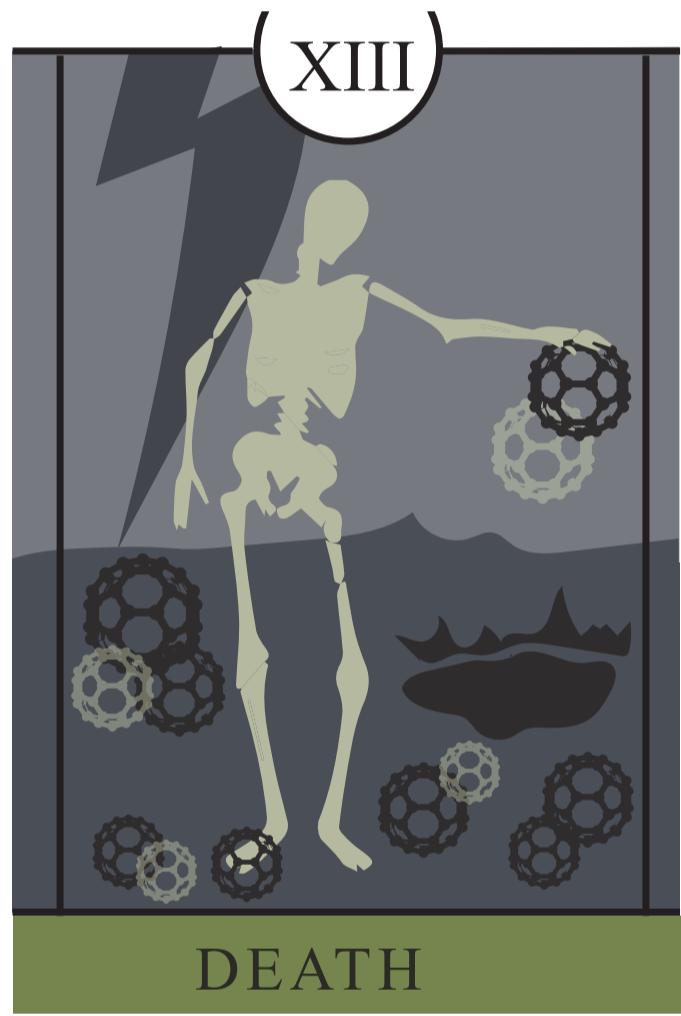
WHEEL OF FORTUNE



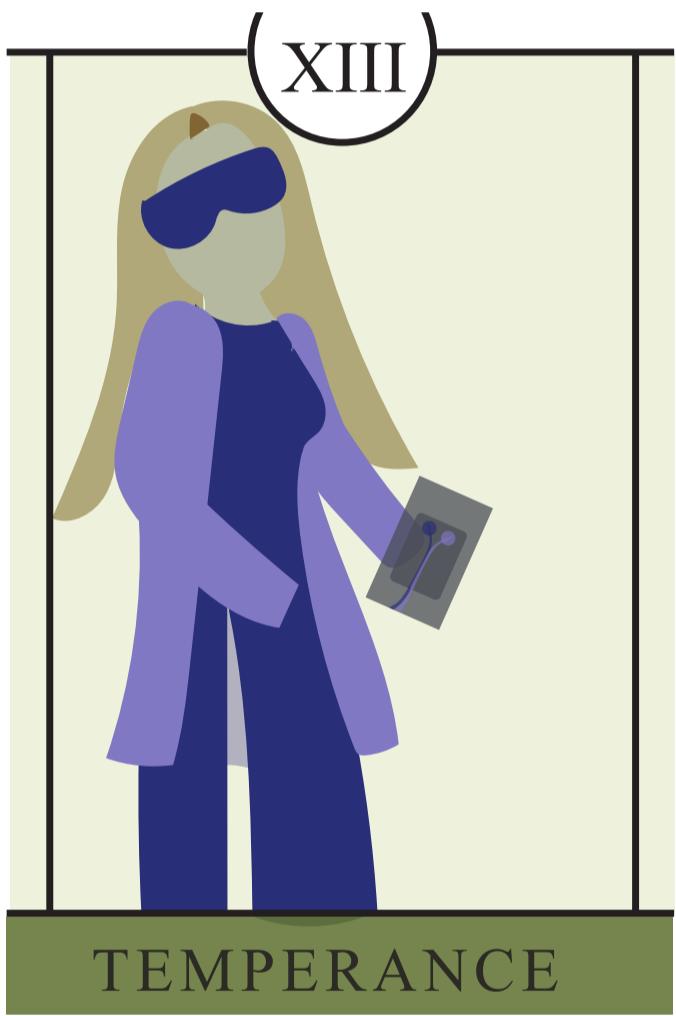
FORCE



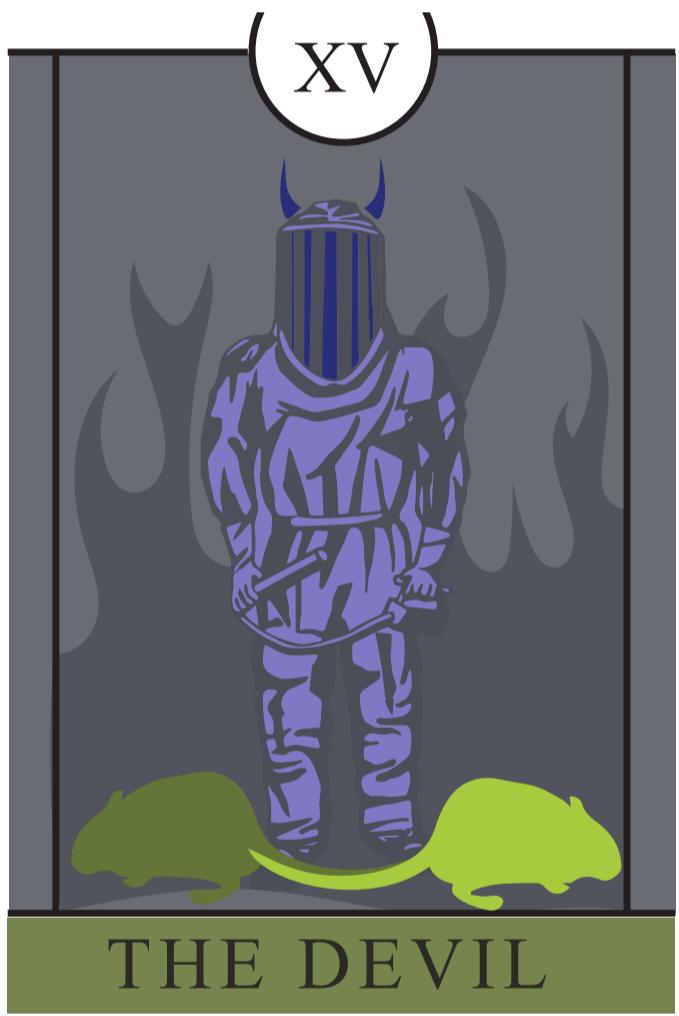
THE HANGED MAN



DEATH



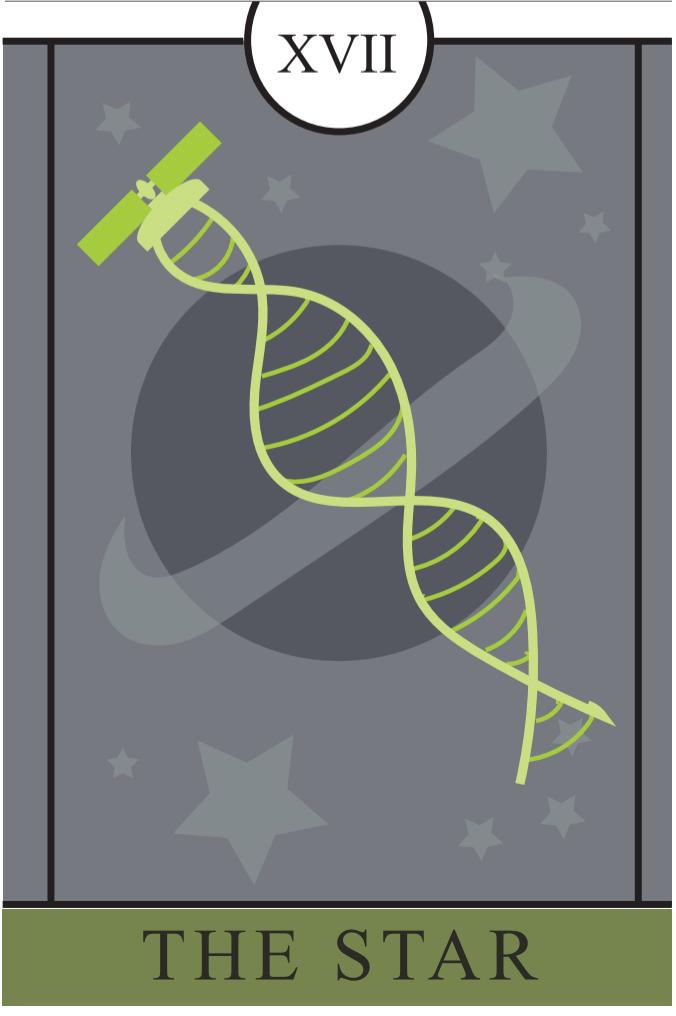
TEMPERANCE



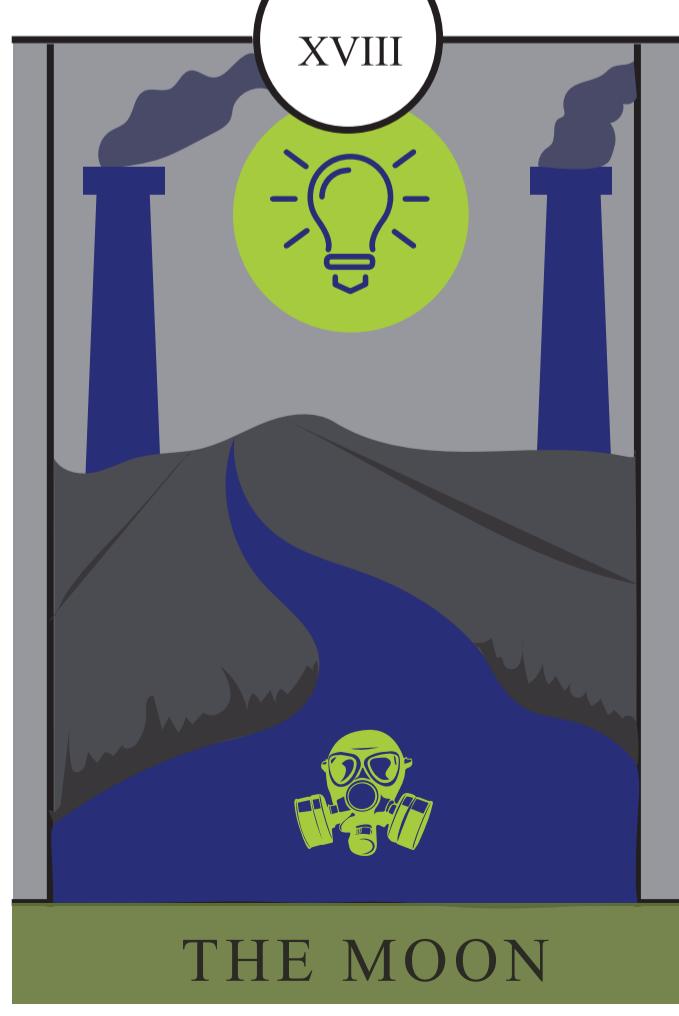
THE DEVIL



THE TOWER



THE STAR



THE MOON

12. The Hanged Man

Will **neurotechnology** and various **brain implants and brain-computer interfaces** bring enlightenment and understanding of our human condition on the level of **neurotransmitters** and amino-acids? Are we transforming the human mind into a free biopsychiatry market and letting various **nootropics** define the future **bio-neuro-politics**? Is the hanged man experiencing the freedom of **Zero gravity** or a passive **addiction and a puppet-like dependance**?

Transcranial direct current stimulation
(tDCS)

Transcranial magnetic stimulation (TMS)
Psychometric
Psychopharmaka
Disabilities
Addictions

15. The Devil

The devil is in the details of industry-produced and designed molecules, which promise paradise, but bring **pollution and biohazard**, or in the small prints of the **environmental regulations and laws**, which create loopholes? Do the **optogenetically enhanced mouse** with a photon manipulated brain or the Vacanti mouse growing a human ear show a future, in which our **bodies become farms** and all **genes are patented**? How to present the advances of science and technology without downplaying the power and money interests behind all research?

Designer & synthetic drugs
Surveillance technologies
Manipulations & hoaxes
Tradecraft & spying
Addictions
Lobbyist

18. Moon

Does **Virtual and Augmented Reality** with its 3D movies, games, head mounted displays and simulators make everyone blind to the environmental and social conditions or it alters our senses and understanding of xyz? Does it sedate us and push us into a world of fantasy or enables us to see and hear beyond the common spectrum? Does **enhancing the human perception** also **enhance human empathy**?

Google Cardboard
Samsung gear VR & Oculus
Telepresence
Military technology
State-corporate crime
War crimes
Criminals

11. Strength

Does the **lightest and most common element in the universe** hold the key to a sustainable future or deadliest weapon in the universe? Will we tame the **power of hydrogen** to start our interstellar adventures to TRAPPIST-1 worlds or we are opening a path to new catastrophes? Does the **metal hydrogen** and similar materials for superconductors and quantum phenomena dissolve the differences between energy and matter? Do they help us to build bridges between various states of matter and communities or new walls?

New sources of energy
Energy solutions & crises
Terrorism & Hate crimes
R&D offices

10. The Wheel of Fortune

Is the **blockchain technology** the new wheel of fortune creating opportunities, but also new disparities in the world? Does it amplify the economic crises or it offers an alternative, such as a distributed and decentralized cryptocurrencies? Will **smart contracts** between people and things become **pacts with the devil** or they amplify democratic decision making?

Bitcoin & Ethereum
Smart contracts
Cybersecurity
Algorithmic trading
Stock exchange
Global recession
Bankers, speculators & traders

14. Temperance

Will we carry our **organs on a chip** like little homunculi to test medication and environmental conditions or these **lab on a chip technologies** are voodoo dolls making all threats more personal and personalized? Are **microfluidics** and **nanopore-based sensors**, which miniaturize all laboratory equipment, balancing the divides in access to science? Will we reach an equilibrium between our bodies and the world through monitoring and sharing data in real time? Does this support **science that is open and reproducible, citizen friendly** and transparent, or it creates conditions for future data wars and surveillance?

Low power electronics
Sensor networks
Energy harvesting techniques & ambient energy
Science wars & Retractions
Democratization & Public participation in science

Recycling & conservation
Science publishers

13. Death

Do **carbon nanotechnologies** remind us that all life is just **chains of carbon atoms**, which level everything after death to connect us with the "nonliving" matter? Do these **future carbon fibers, nanotubes and graphene** reduce all life to a mere geometry of atomic forces or they hold the promises of **human extension, immortality and mind uploading** with the next generation biosensors and implants?

Nanotechnologies
Biosensors
Vantablack & blacker than black
Cryogenics
Weapons of mass destruction

17. Stars

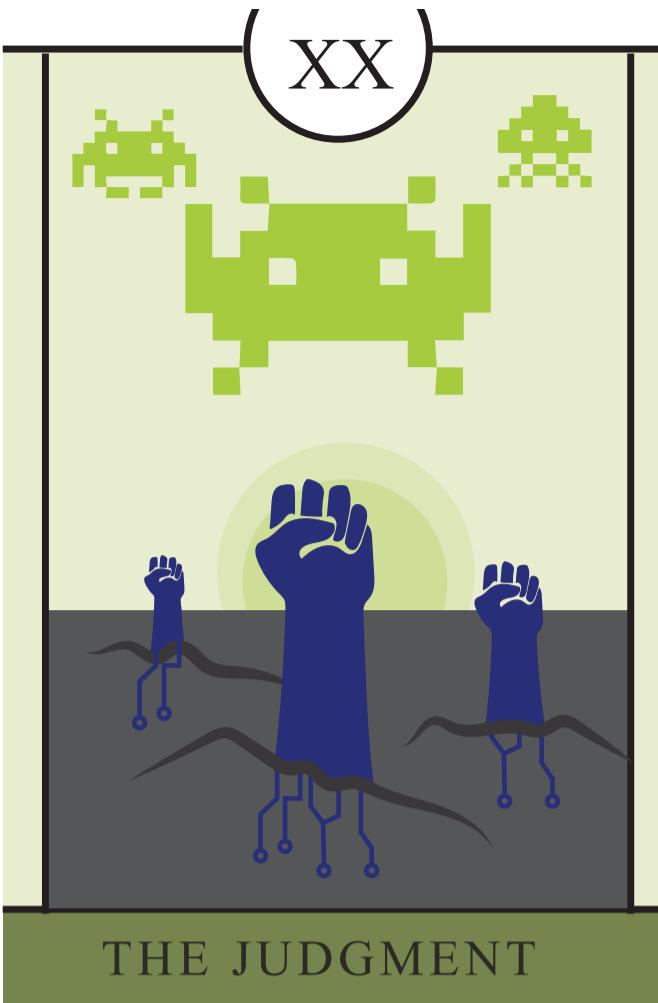
Do **stargazing and space science** lead to humility and poetic admiration of the vast universe or to a **space colonization** and attempts to **terraform planets**? Will **satellites and space stations** bring transcendence to our life on earth or amplify our fears and anxiety about the future of our planet, **global warming and climate change**?

Space exploration
Exoplanets
Rockets
NASA
Astronauts & visionaries

16. The Tower

Is **geoengineering** our present attempt for a Babylon tower? Do large scale industrial solutions lead to hybris, toxic pollution and collapse of civilizations or they create conditions for global xyz governance?

Gaia hypothesis
Climate change & global warming
Technological determinism
Nuclear energy & waste
Herbicides & pesticides
World Bank
Urbanization & Slums



21. World

Does the **Large Hadron collider** and the promises of **quantum physics and computing** lead to a new perspective on our place in the universe or they bring further fragmentation? Can the **Higgs boson** define a new unity and complexity of all life and matter or it problematizes all meaning? Does it support the work of the global and transnational organizations discussing issues of **global warming and sustainability**? Does it lead to politics, which is probabilistic and full of paradoxes, non-events, alt-truths and entangled in hidden variables?

World Wide Web
Clouds & data centres
Quantum bits (Quibits)
Globalization
CERN
UNESCO. UN

20. Last judgement

What are the present **fantasies, conspiracies and cults** embracing the apocalypse and the last judgement? Should we expect invasions by **swarms of robots, self-replicating machines or smart dust as described by SF literature**? Are we waiting for **singularity**, a point of no return transcending all human history, when all technologies and life converge to reveal a simulation on a super-computer? Do these Transhumanist raptures for geeks reveal how science creates new religions and ideas about a paradise and hell or we are witnessing a return of the repressed anxieties and hopes?

Machine learning
Cellular automata
Artificial life
Nanorobots & assemblers

19. Sun

Will the **biological, technical and legal generosity of stem cells, open source software, hardware and creative commons** create a **post-scarcity future** or they lead to **gated communities** for the privileged, guarding their technical and scientific advances behind walls?

Pluripotent stem cells
Solar cells & photovoltaic material
Linux & open source
Free Media & Censorship
Humanitarian crises
Congressional hearings
Moratoria & embargoes
Universities & academics
Philanthropists

0. The Fool

Behind the **Anonymous mask is a fool, a joker or a troll**? Is someone diving into the deep wisdom outside of technology or someone drowning into the **deep web**? Is he a **neo-luddite, a cyber-criminal or a hacktivist**? Someone who brings unexpected **insights** or reposts **alt-truths** and turns everything into **internet memes** and **LOLs**? Is he embracing an open future and promises of a **radical utopia (Pirate Party)** or trying to escape the **robotic dog of automation (Aibo)** without any goals?

Games
Deep web
Crowdsourcing
Anonymous & Hacktivists
Pandemics
Refugees
General Public