

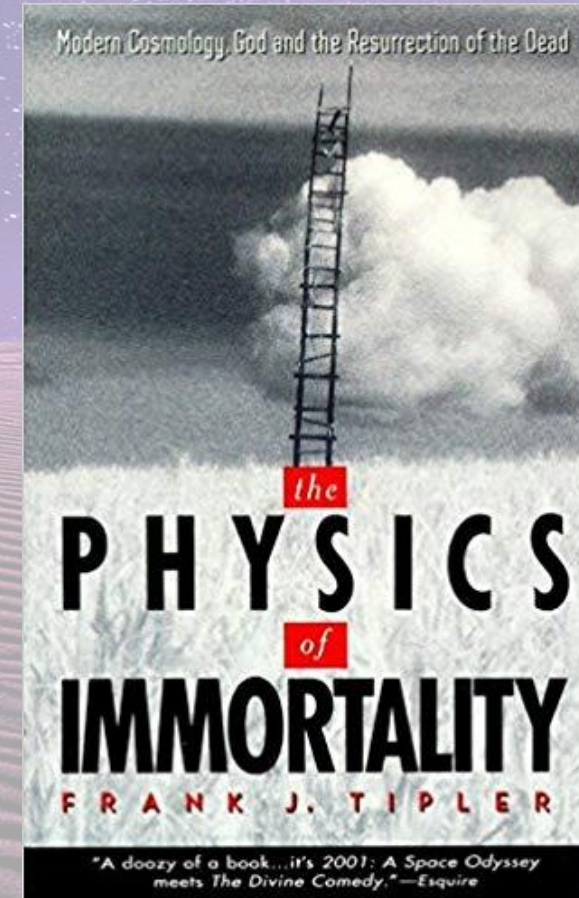
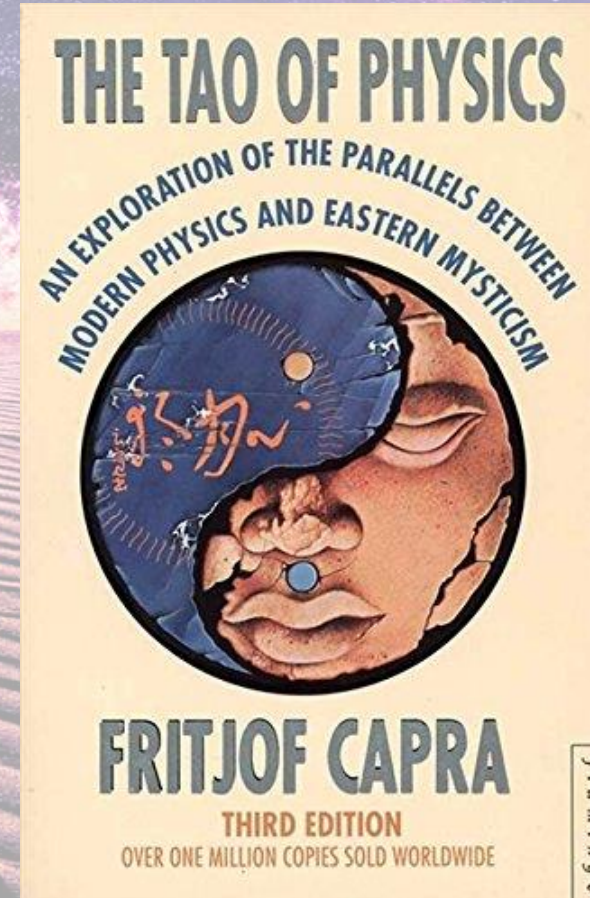
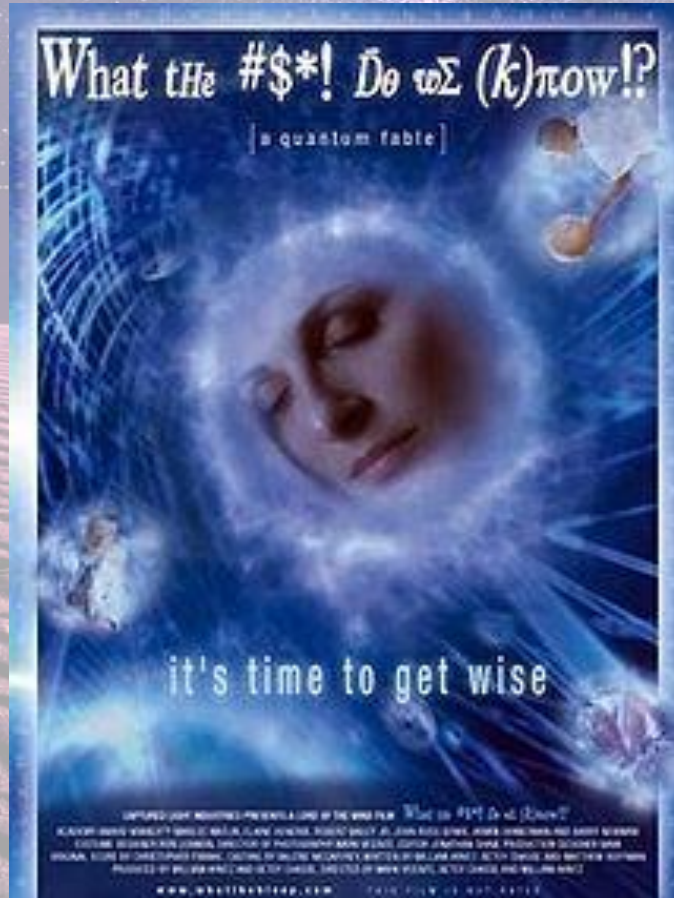
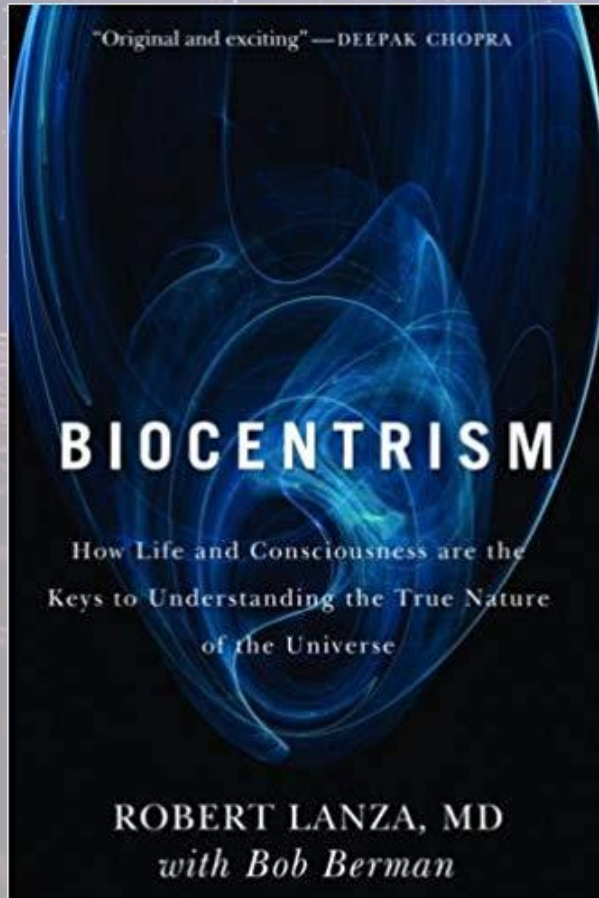
A person stands on a vast, rippled sand dune under a night sky with the Milky Way galaxy visible. The person is a small silhouette in the distance, looking up at the galaxy. The sand dunes are in the foreground, with ripples in the sand. The sky is dark with many stars and the bright band of the Milky Way. The overall scene is surreal and evocative.

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FROM HYPER-REAL RELIGIONS TO HYPER-REAL SCIENCE

**2019 CESNUR CONFERENCE
RE-ENCHANTING THE WORLD: SPIRITUALITIES AND RELIGIONS OF THE THIRD MILLENNIUM**

WHAT THE #\$*! IS GOING ON?



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UNDERSTANDING RE-ENCHANTED SCIENCE

- Robert Lanza's Biocentrism: *What we perceive as reality is a process that involves our consciousness* (Lanza, 2009).
- Frank Tipler's Omega Point Theory: *A testable physical theory for an omnipresent, omniscient, omnipotent God who will one day in the far future resurrect every single one of us to live forever in abode which is in all essentials the Judeo-Christian Heaven* (Tipler, 1994).
- Fritjof Capra's Tao of Physics: *Quantum theory has abolished the notion of fundamentally separated objects, has introduced the concept of the participator to replace that of the observer, and may even find it necessary to include the human consciousness in its description of the world* (Capra, 1975).
- John Hagelin's Unified Field of Consciousness: *There is a unified ground state of consciousness in which the observer, the process of observation, and the observed are unified in a structure of "pure, self-interacting" consciousness* (Hagelin, 1986).

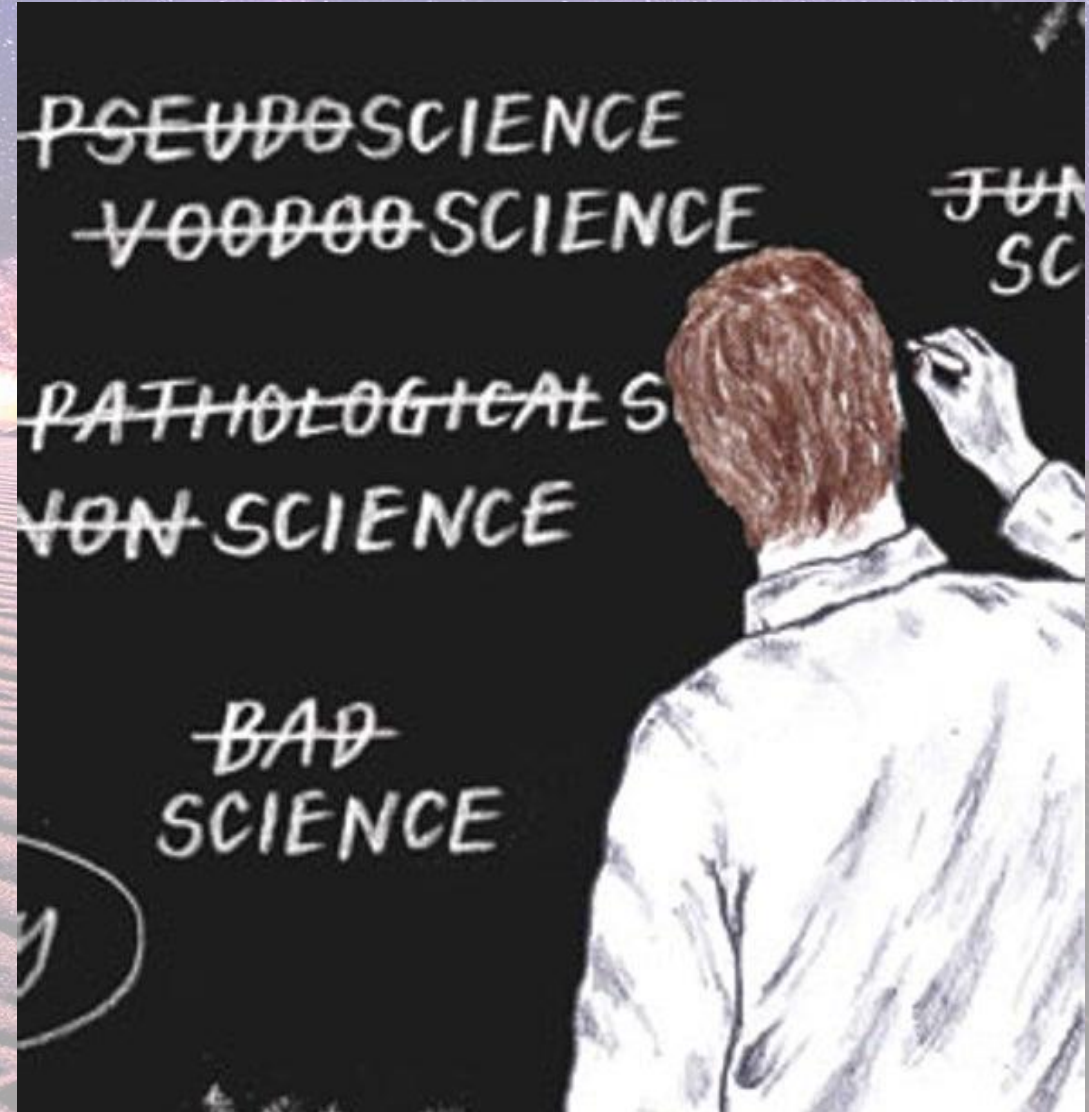
UNDERSTANDING RE-ENCHANTED SCIENCE

Scientific & cultural background

- Strong and Final Anthropic Principle: *Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out* (Barrow & Tipler, 1986).
- First debates among the founding fathers of quantum physics about the role of consciousness in the physical reality (Marin, 2009).
- Von Neumann-Wigner interpretation of quantum mechanics.
- John Wheeler's proposal of a "participatory universe" (Wheeler, 1974).
- Orch-OR model proposed by Roger Penrose and Stuart Hameroff (1996).
- Pierre Teilhard de Chardin's proposals of noosfera and Omega Point.
- Non-dualistic vision of reality supported by the New Age.
- Human soul as energy: conservation law requires that energy should never be destroyed, only transformed, so the soul/consciousness is subjected to a similar transformation after the body's death.

IS IT PSEUDOSCIENCE?

- The trouble with the demarcation problem in the age of post-empirical science (e.g. Frank Tipler's testable predications vs. lack of falsifiable predication in some mainstream theories of contemporary theoretical physics).
- Distinguishing between pseudoscience made by cranks and «fringe science» pursued by real scientists.
- Other proposals: alterscience (Moatti, 2013), minor science (Wolf-Meyer & Cochran, 2015), borderland science (Shermer, 2013), groovy science (Kaiser & McCray, 2016).
- «Instead of astrophysics, engineering or molecular biology, youthful members of the counterculture (...) were more likely to embrace astrology, Eastern religions, and chemically enhanced spirituality» (Kaiser & McCray, 2016).

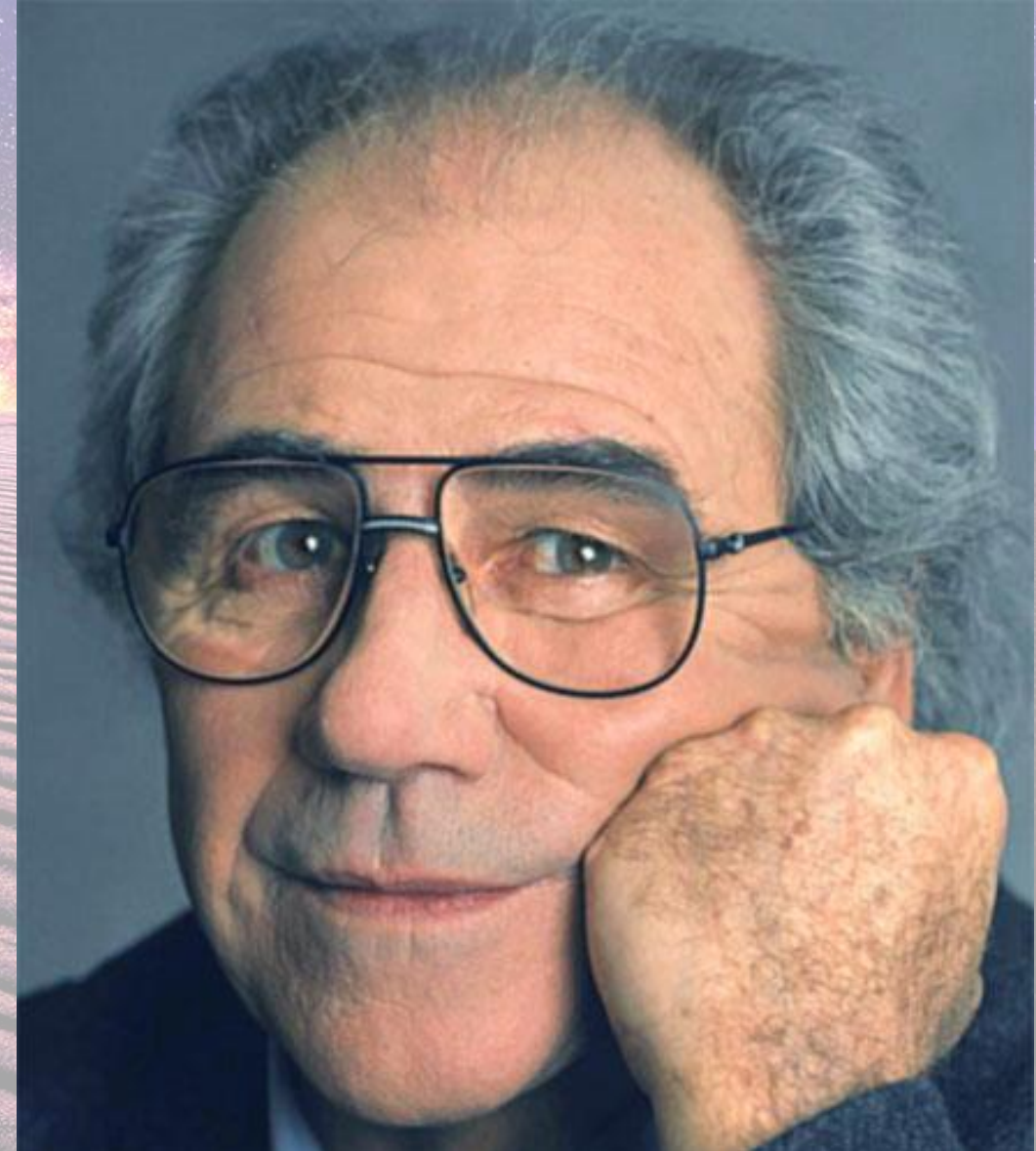


BAUDRILLARD'S HYPER-REALITY

Jean Baudrillard's notion of hyper-reality (1981) poses the problem of the dominant role of narratives and representations in postmodern society (anticipating the current issue of post-truth). Simulacra (representations) take the place of reality, replace it, become hyper-reality.

Five stages of representations:

1. It is the reflection of a profound reality (e.g., a metaphor).
2. It masks and denatures a profound reality (e.g., a misconception).
3. It masks the absence of a profound reality (e.g., the mimicry of scientific jargon in pseudoscience).
4. It has no relation to any reality whatsoever (e.g., a fiction).
5. It is its own pure simulacrum.



FROM HYPER-REAL RELIGIONS...

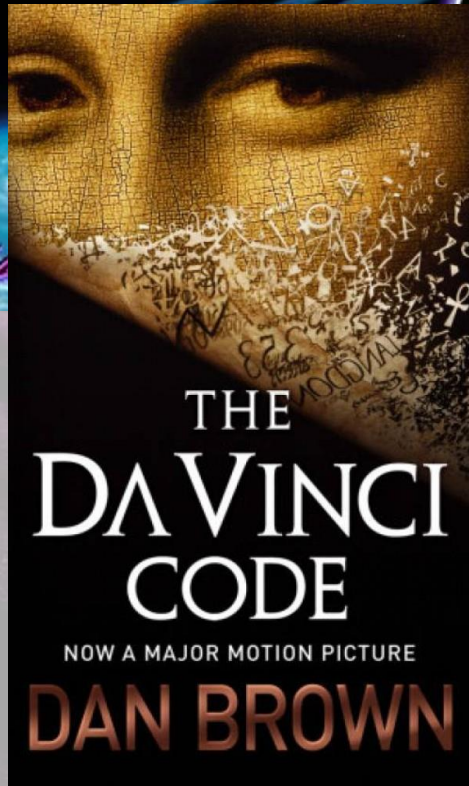


«Hyper-real religion refers to a simulacrum of a religion, created out of, or in symbiosis with, popular culture, which provides inspiration for believers/consumers»
(Adam Possamai, 2013)

FROM HYPER-REAL RELIGIONS...

- Some individuals actively consume popular culture to create new types of spiritualities, e.g. Jediism and Matrixism, or to enrich existing spiritualities (e.g. neo-paganism) .
- Micheal Barkun's concept of *fact/fiction reversal*: «Conspiracy literature is replete with instances in which manifestly fictional procedures, such as films and novels, are asserted to be accurate, factual representations of reality».
- They are not just «invented religions» or «fictional religions». E.g. Wrestling is a simulation of boxing with its own rules created for entertainment purposes, but consireded by its followers in some way «real». Hyper-reality happens when the simulacrum of reality succeeds over reality itself.
- «We could say that hyper-real religions consumers are worshipping a model of religion instead of the original because no one can identify what is true religion anymore. This confusion is caused by the failure of representation systems due to the development of integral reality» (Geoffroy, 2013).

FROM HYPER-REAL RELIGIONS...



keys to Heaven
they were in



... TO HYPER-REAL SCIENCE

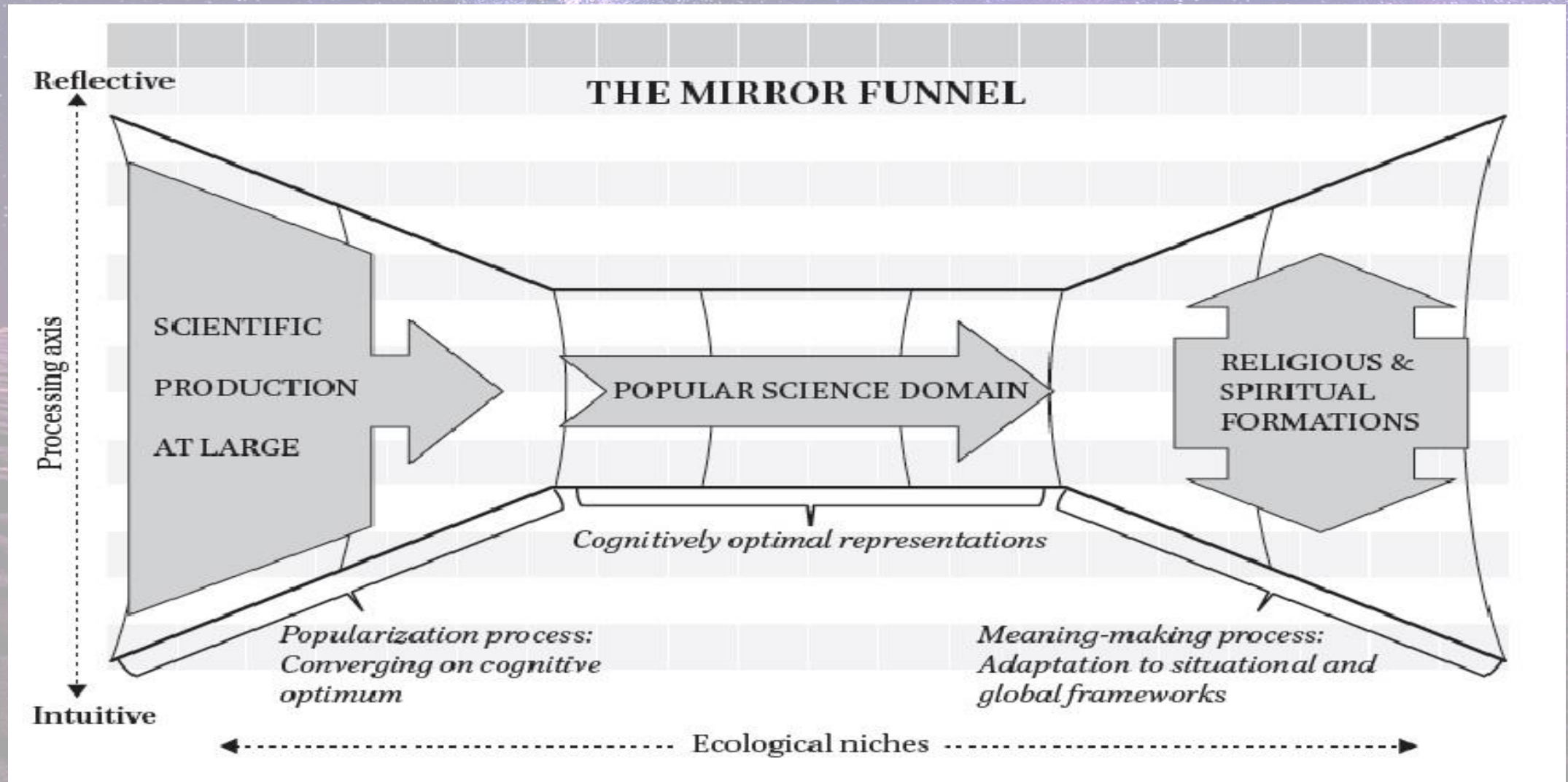
«Pseudoscientific myths are science-fiction-type stories that reduce people's skepticism and their resistance to explain primal experiences in essentially occult terms» (Hexham & Poewe, 1997)

«It is essentially to examine the rich boundary zones in which science itself acquires religious and prophetic overtones: within the area of scientific production itself, and also in contexts formed by the media, artistic production and entertainment» (Machado, 2013)

«In the popularisation of science, scientists often use partial representations of the universe to forge cosmic connections between the human and the universal order. This enables both a discourse of instrumentalised disenchantment, the traditional view of rationalism, and a discourse of enchantment, the injection of cosmological meaning into science via charisma» (Locke, 2011)

«If scientists can set themselves up as the high priests of a new metaphysics, and continue to preach their gospel unchallenged through popular books and television, then the credibility of all scientists start inexorably to be eroded» (Baggott, 2014)

... TO HYPER-REAL SCIENCE



The *mirror funnel* model proposed by Asprem (2016).

... TO HYPER-REAL SCIENCE

Analogies between Baudrillard's five stages and Egil Asprem's stages in the epidemiology of science-based representations (Asprem, 2016).

1. Formation of hard-to-process, reflective scientific content (science-internal articulation).
2. Minimal counterintuitiveness (MCI) concept formation in constitutive forum (science-internal communication).
3. Theoretical disembedding of MCI-concepts in contingent forum (science-external communication).
4. Dissemination of MCI-concept (communication in popular culture, social media, private networks).
5. Casual re-embedding of MCI-concept in situational meaning-making (e.g., in the "cultic milieu").
6. Theoretical re-embedding of MCI-concept in global meaning-making (e.g. New Age science literature, natural theology).

Hyper-real science emerges at the 5-6 stages.

... TO HYPER-REAL SCIENCE

Baudrillard's stage	The Omega Point Theory and Biocentrism
It is the reflection of a profound reality	Popular science books, or articles from popular science magazines, popularize ideas such as anthropic principle, Von Neumann-Wigner interpretation of quantum mechanics, Penrose and Hameroff's Orch-OR model.
It masks and denatures a profound reality	Religious concordism tries to propose a vision of the anthropic principle in line with the idea of a God who creates the universe; Fritjof Capra's <i>The Tao of Physics</i> uses the paradoxical aspects of quantum mechanics to suggest a correlation with Eastern mysticism.
It masks the absence of a profound reality	The theory of Intelligent Design hides behind a patina of scientific jargon the revival of creationism; <i>What the Bleep Do We Know?!</i> starts from the problems of interpreting quantum mechanics to suggest concepts typical of quantum mysticism, artfully misrepresenting the ideas expressed by several of the scientists interviewed.
It has no relation to any reality whatsoever	Maharishi University theories such as the Unified Field of Consciousness and transcendental meditation, the vision of Ramtha's School of Enlightenment, Rhonda Byrne's <i>The Secret</i> .
It is its own pure simulacrum	Frank Tipler's Omega Point Theory and Robert Lanza's Biocentrism are simulacra capable of generating a hyper-real version of science, which replaces the original one.

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... TO HYPER-REAL SCIENCE

Hyper-real science refers to a simulacrum of science, created out of, or in symbiosis with, popular culture, which generates interest and attraction to the general public by pushing laymen and scientists to study and develop it as a real branch of science.

- It is a type of science in progress (i.e. does not constitute a sedimented scientific knowledge of the same type as that taught in textbooks)
- It is a type of science based on attractive concepts, able to generate wonder and passion in the general public, generally for its ability to answer fundamental questions or to trespass in areas where the metaphysical, ethical or philosophical aspect is strong.
- It is a type of science that dominates the field of popular science, on which most popular science books, articles in science magazines and television documentaries on science are based on.
- It is a type of science that influences fiction and is in turn influenced by fiction, generating the popular scientific imaginary.
- It is a type of science developed by professional scientists, although often in fringe areas. When it is developed by amateur scientists, it becomes pseudoscience.

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