# ARTIFICIAL IDIOCY

## How Artificial Intelligence Became Digital Witchcraft

Alessandro Parisi

Innovation eXploited

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# Prologue

*"The Truth Will Set You Free"*

# Introduction

Talking about Artificial Intelligence is now fashionable: after all, the innovations that characterize the sector are so rapid and exciting that it is difficult to resist commenting and spreading news regarding the amazing results achieved by research, especially applied research.

However, it is also easy to fall prey to **false suggestions**, often unmotivated or excessively high-sounding, to the point of appearing unlikely and unrealistic: too often the media, but also the “experts” (who on the contrary should show greater critical sense), give in to the temptation of propaganda.

The reasons for the spread of exaggerated announcements regarding the possibilities of Artificial Intelligence in the various sectors of daily life (starting with job prospects) are often attributable to a distorted *business model*, which **aligns the incentives** (also economic and financial) of **software producers** with those of **media**: both in fact have to gain from the hype that characterizes not only Artificial Intelligence, but technological innovation in general.

Therefore, it is not at all rare nowadays to come across high-sounding proclamations announcing the inevitable advent of Artificial Intelligence, ready to supplant the human race in every field, to the point of ousting humans from the residual dominions that are still their own, such as that of creativity and scientific research.

But how much truth could be assigned to such high-sounding proclamations?

In reality not much, but the problem is that it is difficult to disavow the **rhetoric of the techno-chauvinists** with intuitive

and convincing arguments, so thick is the aura of mystery that surrounds these technologies which have now become “esoteric”, to the point that the risk of succumbing to the spell of **“digital witchcraft”** no longer concerns only the common citizen, but also the (alleged) experts in the sector.

# Part 1. The Cultural Ancestry of Digital Witchcraft

# The Rhetoric of the Inevitable

If there is an element that characterizes the narrative of digital innovation, it is the extensive use of rhetorical devices aimed at instilling in the public a sense of **inevitability** of technological progress.

As we will see, this rhetoric serves the economic interests of the companies that provide technological products and services, and aligns with the interests of the *media*, aimed at capturing the attention of users.

But before going deeper into our analysis, it is useful to briefly retrace the historical and cultural process that gave rise to this narrative, which as we will see, finds its unsuspected roots in some **ancient philosophical and religious doctrines**, revived by today's **technocratic ideology**.

The first concept that needs to be introduced is that of **eschatology**, which is the basis of the presumed "inevitability" of technological progress.

## Eschatology and the Ultimate Destiny of Humanity

To understand the reasons behind the rhetoric of the inevitability of technological progress, it is necessary to start from the "end of History", or from the doctrine which traditionally goes by the name of **eschatology**, and which represents the interpretation that every philosophical and religious tradition has intended to give to the destiny of the human race.

The term *eschatology*, as is known, is widespread in theological and philosophical fields, and concerns doctrinal studies aimed at revealing the **ultimate destinies** of Humanity, with the aim of contributing to clarifying the **existential meaning** of man.

It is therefore clear how this type of investigation can have a decisive influence on the choices of **life conduct** of individuals who recognize themselves in a specific eschatological vision of existence.

Although eschatological analyzes are usually attributable to different religious conceptions, they are however also common to philosophical doctrines which claim to be able to identify a **meaning in History** in general.

A typical case are the conceptions of history advanced by nineteenth-century German Idealism, which see in History a dialectical unfolding between antagonistic "forces" (*thesis* and *antithesis*), which find their *synthesis* in the concrete realization of the historical *becoming*.

For such secular eschatological conceptions, historical becoming is **determined**, and as such is destined to be

realized **inevitably** on the basis of the ultimate *"Reason"* that moves such antagonistic forces.

In the case of the Hegelian philosophy of History, Reason is realized through the affirmation of the **Absolute Spirit**; in the case of Marxism (another doctrine of history indebted to the Hegelian conception), the forces of the proletariat will determine the overcoming of capitalism, bringing about the inevitable advent of Developed Socialism.

The common feature that characterizes these conceptions, both religious and "secular", is represented by the **inevitability** of historical development, determined by the inescapable forces that lie behind the "destiny" revealed by the eschatological vision itself.

## Technology as Salvation and Destiny

Positioning itself from the point of view of the “end of times”, eschatology intends to give an answer to the question about the **purpose** and the **end** of human existence.

Being determined by the ultimate expectations regarding destiny and the purposes to which human existence must be inspired, the different eschatological interpretations influence and **condition** in a decisive way the life and **choices** of the individuals who recognize themselves in such interpretations, and who place their aspirations of **“salvation”** and redemption in them.

Consequently, the expectation of an otherworldly life can lead the believer to postpone their ideal aspirations (such as that of justice, etc.) to the **otherworldly dimension**.

On the contrary, a millenarian eschatology like the Marxist one places the salvific dimension within the temporality of the material world, without referring it to an afterlife, and this vision consequently informs the choices and aspirations of those who embrace this doctrine.

In the same way, the eschatological visions that see **technological progress** as their source of inspiration, influence and condition in a decisive way the choices of individuals, on the basis of **expectations** (more or less realistic) and conceptions of the world, as well as of the future, which they help to spread.

Therefore, if we start from the assumption (as technological visionaries do) that **man** is essentially a **“defective”** (*flawed*) being, and as such is in need of being **redeemed and cleansed** from one’s *“natural vices”*, and that **the only**

**salvation** for man is represented by **technology**, it clearly appears that any attempt to counteract (or just slow down) the technological progress is seen as sacrilege and impiety (also condemned to failure, given the inevitability of the reasons that govern the realization of Progress).

One of the main eschatological interpretations based on technological progress is represented by **transhumanism**, whose ancestry lies in the ancient cult of **gnosticism**, as we will see shortly.

In reality, there is absolutely **nothing "inevitable"** in technological progress, but since (as the visionary innovators themselves often like to repeat) the best way to predict the future is to design it, it is evident how the **rhetoric of the inevitable** is functional to justify the adoption of (pre)defined technologies, also favoring their proponents.

If to this we also add an aura of "destinal sacredness", the narrative becomes even more convincing, thus spreading that **"reverential fear"** towards technology, necessary for citizens to prove willing to accept (for not to say passively suffer) the choices desired by the technocrats, casting in a bad light those who dare to criticize and oppose them, qualifying them as "retrograde" and "irrational", precisely by virtue of the alleged inevitability of the "magnificent and progressive" destinies that the future will reserve us...

## The Cult of Inevitability as a Legitimation of Technocracy

In reality, the alleged “inevitability” of technological progress also serves another preeminent purpose: to attribute to the technocrats the **legitimacy** that they lack, in order to be able to impose on the people the choices deemed most appropriate for their future.

Unlike democratically elected representatives, technocrats find their legitimacy directly in their *expertise*: if the future is governed by the **inevitability** of technological progress, **only experts** are by definition considered fit to interpret the evolution of the inevitable future that awaits us, and consequently the are the only ones in the position to make the appropriate **decisions** to organically support progress realization.

As we will see, the technocrats pursue the ancient aim of replacing the elective representatives of the people with **experts** in the field, on the ground that experts are deemed more adequate to take decisions about the future, compared to the political ruling class, which on the contrary are considered “incompetent” from the technical point of view, and as such unsuitable for managing technological evolution.

That of **technocracy** is therefore nothing other than the modern re-edition of the Platonic aspiration (delivered by the Greek philosopher to posterity in the famous book the “Republic”) of installing **philosopher Kings** in power, by virtue of “true” knowledge, the exclusive prerogative of such enlightened scholars, as opposed to the “opinion” which instead characterizes the common people.

In the same way, the revival of this Platonic suggestion is nothing other than the attempt to undermine democratic institutions, with the aim of handing over the power to decide the future of citizens into the hands of “experts”.

# The Exponential Myth

To support the rhetoric of the inevitability of technological progress, there is another founding myth: that of exponential growth associated with continuous improvements in technology.

In this sense, the so-called “Moore’s law” (which is anything but a law, neither in the sense that physics would give it, nor in the legal sense of the term) is often indicated as “evidence” in support of the this myth.

Moore’s law arises from the empirical observation relating to the **growth in complexity** of microprocessors (measured by the number of transistors inside the chips), which **doubles every 18 months**, and consequently quadruples every three years .

In light of this empirical observation, Gordon Moore, then head of Research and Development at Fairchild Semiconductor, hypothesized in 1965 that the number of transistors in microprocessors would double approximately every 12 months.

Moore’s prediction proved to be empirically correct, and in the years to come it maintained its substantial observational validity, thus helping to corroborate the aspirations of the inevitability of technological progress.

From a formal point of view, “Moore’s law” represents a statistical **extrapolation**, which from the analysis of *known* historical data, extrapolates a “regularity” which is assumed to also be valid for *unknown* future data.

Extrapolation is a mathematical-statistical process similar to that of interpolation, with the difference that while in the case of interpolation one attempts to identify a trend within a set of *known* data, in the case of extrapolation one tries to extend this trend also to future data, which are by definition *unknown*.

Consequently, forecasts based on the extrapolation process retain a **high degree of uncertainty** (as such incompatible with the formal concept of rigorous "law"), regardless of the number of future confirmations that such forecasts may receive (as investors in stock markets should know well, for whom it is always worth the warning that past earnings do not constitute a guarantee of future ones...)

But beyond the formal correctness of the so-called "Moore's law" and the relative reliability of its future predictions, what most denotes the *"magical"* character compared to the alleged inevitability of technological progress is the **logical leap** performed by technocrats in justifying this inevitability.

Let's try to clarify the terms of the question better.

## When Quantity translates into Quality, the Course of the Future is Marked

> "A Change in Quantity entails a Change in Quality"
> K. Marx, *"Das Capital"*

Implicit in the observation of the **exponential growth** of the **complexity** of microprocessors, there is the assumption that the computational capacity that derives from this growth can determine the emergence of **"singular" phenomena** ( such as for example the emergence of the *mind* and *consciousness*) upon exceeding an unspecified *critical threshold*.

Without anticipating what we will say later regarding the **Singularity** expected by the visionaries at Kurzweil, what we would like to underline here is how these concepts are nothing more than the revised and corrected version of past ideas.

Specifically, we intend to refer to the Hegelian theory of dialectical historicism, and Marx's historical materialism that derives from it, which represent central concepts in determining the evolution of History and Society according to these conceptions.

Marx makes his own the "discovery" originally made by Hegel, who in the "Logic" had argued that *"purely **quantitative** changes can result at a certain point in **qualitative** distinctions"*.

This discovery can be defined as the **"law of the qualitative leap"**.

In reality, despite the apparent cryptic nature, the concept underlying this statement is intuitive and is easily verifiable even in everyday experience: just think, for example, of how a few drops of water can be easily collected in an ordinary glass, while billions of drops transform into a cloudburst, thus giving rise to a **qualitative** distinction induced by a purely **quantitative** change.

It is always the same "substance" (*water*) that is in action: but the **different quantities** involved determine the transition (*qualitative leap*) from the drops collected in a glass, to those of the storm...

The novelty that characterizes the dialectical conception is the **metaphysical interpretation** that is given to it (first by Hegel and then by Marx) in determining the course of History and Society.

Along the same lines as dialectical historicism and historical materialism, the **Technological Singularity** is "destined" to occur following the **qualitative leap** made by computational complexity, upon exceeding the necessary "critical threshold".

Likewise, phenomena considered "emergent" (such as mind and consciousness) will manifest themselves *spontaneously*, when the technological Singularity occurs.

But before the "emergent" phenomena of mind and consciousness can manifest, we must free ourselves from the obsolete burden of the biological body.

# Exit This Body: The Material Body as a Cage of the Spirit

Among the cultural ancestries that inspire today's "salvific" vision of technology, the ancient doctrine of **Gnosticism** occupies a prominent place.

The term gnosticism derives from the Greek word gnósis, which can be translated as "knowledge", also understood in the sense of "enlightenment".

Gnosticism represented a philosophical, religious and esoteric movement, already known in the Hellenistic Greek-Roman world, which reached its maximum diffusion between the 2nd and 4th centuries AD.

The ascetic ideal of Gnosticism preached the abandonment of the material world, seen as the "cage" of the spirit.

The material world in fact represents a level of **"lower" reality** from which one must free oneself, adopting life practices which, depending on the cults, involve personal poverty, sexual abstinence, etc.

Only in this way can the **Spirit** free itself from the material element (represented *primarily* by the body and flesh) that cages it, and **prevents it from uniting** with the only **true Reality**, that of the Divinity.

The world of Divinity is outside of space and time, and as such **is not corruptible**, nor is it subject to the limits of the existential dimension.

The type of **knowledge** that Gnosticism intended to achieve was of an **esoteric and initiatory** nature, aimed at escaping

from the material world, considered “inferior” and impure, to embrace the spiritual world and reunite with divinity, represented in an impalpable and immaterial form, and as such not subject to material space-time limits.

As a consequence of this approach, the **biological body** itself is considered as a **cage** that traps the superior spiritual element, forcing it to remain confined in the “inferior” earthly reality.

The echo of this **devaluation of the material body** can also be found in Christian doctrine, where the apostle Paul himself in the Letter to the Romans maintains that *“You are not under the dominion of the flesh, but of the Spirit, given that the Spirit of God lives in you”* (Romans 8,9).

The *“flesh”* therefore represents the **principle of sin** that operates in men, a sin that can only be overcome by welcoming divine Grace, through Faith, which leads man back to salvific communion with God.

## The Technological Spirit versus the Biological Cage

The echo of the Gnostic doctrines appears evident in most of the **“salvific” technologies** and the related prophetic narratives that accompany them, starting from the movement of **transhumanism**, up to the uploading of the mind into the cloud, passing through the “Singularity” which according to its supporters (Ray Kurzweil first and foremost) will give rise to the advent of Intelligent Machines.

We will have the opportunity to address the characteristics of these “narratives” in due course; here we would like to underline how ancient esoteric conceptions such as the Gnostic ones are instrumentally resurrected to affirm the claimed *“superiority”* of technology compared to biological nature, considered as a corruptible element, from which it is necessary to free ourselves.

At the same time, the conception of the **computational mind** takes on a central role, taking the place traditionally reserved in Gnostic doctrines for the **“immaterial” Spirit**.

As a consequence, the conception that supports *“mind-body” dualism* is reiterated and strengthened, despite superficial statements to the contrary, which usually characterize technological narratives, inspired by the *reductionism* prevailing in the scientific world.

# The Computational Conception of the Mind

The pervasive diffusion of computers and the success achieved in the use of increased computational capabilities in many sectors of daily life, including scientific research, has strongly relaunched the suggestion that the inner mechanisms (still largely unknown) at the basis of the *mind* and *consciousness*, may finally be revealed by machines.

The same distinction between **“hardware”** and **“software”** has suggested to many the possibility of extending the distinction in analogue form to the “human machine”.

Thus the *body* is called to play the role of hardware, while the *mind* and consciousness are nothing more than the **“software”** that runs inside the brain.

Then borrowing the already introduced concepts of **“increasing complexity”** of microprocessors and the implied **qualitative leap** that such complexity entails, the analogy between the complexity of the *neural structure* of the brain and today’s **artificial neural networks** appears immediate.

If all this is true, then it will be *only a matter of time* (for some that time has already arrived) that machines will not only be able to think and be self-aware like humans, but that their intelligence will surpass the human one, giving rise to the **“Superintelligence”** theorized by N. Bostrom, which seems to be nothing other than Kurzweil’s Singularity at work.

Supporting this suggestion is the **“functional” conception of the mind**, which as we will see shortly, is nothing other than the modern legacy of the ancient Gnostic doctrines, and at the

same time the reaffirmation of *Cartesian dualism* “by other means”.

## If it looks like a feline, meows and purrs, then it's... a Cheshire Cat!

The *functional* (or *behavioural*) conception is a form of **reductionism** aimed at tracing the essence of an entity to its behavior or ability to perform certain functions.

In this way, not only is the aforementioned Cheshire Cat represented by its external manifestations, but the mind itself is reduced to its cognitive abilities, which are believed to be replicable even by software agents.

In essence, the process of *abstraction* from specific *material characteristics*, considered merely *accidental* and not essential for the purposes of functional capabilities, leads to considering these capabilities as **autonomous and independent**, to the point of attributing to them a their specific **"identity"** (in philosophical language this process is commonly indicated with the term *hypostatization*).

This abstraction process is also typical of mathematical reasoning: the power of numbers consists in the abstract ability to perform calculations and operations (such as sum, product, etc.) regardless of the concrete nature of the objects to which they apply.

According to the Platonic conception of mathematics (still in vogue among mathematicians today), numbers would have their own independent **"reality"** (along the lines of the perfect ideas existing in the Platonic hyperuranium); similarly, the *mind* is considered to have its own independent reality, which can be traced back to the abstract functions it is capable of manifesting.

The Gnostic influence in this process of abstraction appears evident, with the *mind* playing the role of the **disembodied Spirit**.

That same disembodied Spirit that will take the form of Descartes' *"res cogitans"*, as opposed to the *"res extensa"* (the materiality of the body), in which the individuality of thought is certified by the well-known *"Cogito, ergo sum"* ("I think therefore I am").

Despite the *reductionist* approach commonly accepted in the scientific field, the *functionalist conception* underlying the **"computational mind"** is a reaffirmation of *mind-body dualism*, rather than its dissolution.

In this sense, the asserted **independence** of the mind **from the material substrate** also plays a key role, which if carried to the extreme requires considering the material substrate absolutely secondary and **non-essential**.

## The Independence from the Material Substrate of the Computational Mind

Many of the science fiction suggestions put forward by technocrats are affected by this claimed independence of the mind from the material substratum.

Since the body does not represent a necessary element for the realization of the mind, it not only could be possible to *simulate* it within a computer with adequate processing capacity (there is much fantasizing about the amazing capabilities of the upcoming *quantum* computers), but it is even considered possible to "save" your mind by **uploading** it to the cloud!

In this way, one of man's oldest aspirations is realized, together with *ubiquity* and *eternal youth*: that of **defeating death**, separating consciousness (considered as a "computational" soul) from the cage of the biological body (as such "perishable" and corruptible), to replace it with any alternative material "support", manly represented by the fungible hardware of the silicon machine.

Indeed, according to Ray Kurzweil (among the enthusiastic supporters of the possibility of actually uploading the mind), the *emulation* of the human brain inside a **computer** would be much **more performing** compared to the *"biological computer"*, i.e. the brain!

In this way, the Gnostic heresy definitively takes on the form of today's digital *witchcraft*...

# From the Computational Mind to Artificial Intelligence

If the mind itself is nothing more than a computational process that can be simulated within an electronic computer, why not consider the possibility to **computationally recreate** the cognitive abilities characteristic of the mind, starting with intelligence?

This is the logical next step that makes its appearance after having reduced the mind to a simple computational process.

In fact, attempts to simulate human intelligence in artificial form can be traced back to the dawn of computing.

The very definition of *"Artificial Intelligence"* is due to J. McCarthy, who coined the term on the occasion of the conference organized in Dartmouth in 1956, which marks the birth of the research sector as we know it today.

The research program intended in a first phase to solve well-defined logic problems, and subsequently aimed to emulate human behavior in the solution of general problems, giving rise to the research line known as *"Artificial General Intelligence"* (AGI).

The implementation of these research projects has continued up to the present day, and is currently inspired by the emulation of what is believed to be the functioning of the human brain, artificially replicating its neural structure, giving rise to the current *"Artificial Neural Networks"* (ANN).

This approach is supported by the success that artificial neural networks have recently achieved, particularly in automated learning achieved in the form of **Deep Learning**, which is

considered by many to be the most promising approach towards the concrete achievement of AGI.

The progress achieved by artificial neural networks is indisputable, also thanks to the current availability of the necessary *calculation architectures*, which have allowed the implementation of algorithms that were already developed in theoretical form in past decades.

The problematic points that give rise to *"Artificial Idiocy"* are the exaggerated narrative that of such progress is made, going to the extreme of considering *Artificial General Intelligence* as already acquired (which is far from being true), on the basis of simple *faith* in the **inevitable progress** of technology, along with assigning to such progress a *"salvific"* role in solving all the problems and failures of the world.

Such "failures" are by definition attributed to the defects of human beings, due to their alleged "limited" intelligence (as if Artificial Intelligence were not itself a product of human creative activity...)

In this sense, *tech-chauvinists* intend to acknowledge to Artificial Intelligence the **regulatory role** of saving the human species itself.

In so doing, they identify in the algorithms the presence of the *"Nous"* which in ancient times was considered a typical connotation of the Divinity...

## Artificial Intelligence as today's Divine "Nous".

The Greek term *νοῦς* (*Nous*) dates back to the times of Homer, and represents that peculiar *faculty* of the intellect, understood as the ability to **understand events** or the intentions of rational agents.

In Homer the term is used to indicate the place of the representation of "clear ideas", and represents the ability of the intellect to understand the "true" **hidden intentions**, despite the "appearances" of external behaviors.

In this sense, it is introduced the classical philosophical theme which concerns the ability of the intellect to identify the *"hidden"* reality (to which the character of **"truth"** is attributed) behind the sensible appearance (treated as unreliable, on the contrary).

Greek philosophers also knew the term from different perspectives.

In Anaxagoras the term *Nous* takes on its most proper and complete metaphysical value, being conceived as **"Divine Intelligence"** that *organizes* the world.

This "divine intelligence" is considered as **ordering power**, which gives rise to the world from the primordial *chaos*.

Plato will associate this ordering intelligence with the providential activity of the Demiurge, who intervenes as a **"rational" cause** to shape corruptible matter in the image of eternal and incorruptible *ideas*, thus giving rise to the *Cosmos*.

In the intentions of today's technocrats, the ordering function which by virtue of its "rationality" creates order in the chaos of human affairs is to be attributed to Artificial Intelligence, which

thus takes the place of the Platonic Demiurge and the “divine” Intelligence of Anaxagoras .

In other words, **Artificial Intelligence** as today’s *“Nous”*, takes on the role of **ordering criterion** characterized by those same ideal prerogatives of rationality, once associated with divine entities, today replaced by the non less *“sacred” algorithm*...

# The Magical Thinking at the basis of Digital Witchcraft

From what we have said so far, it is clear that the narrative that characterizes digital technology is inspired by ideas that are anything but original, which also leverage ancestral beliefs, which have always accompanied the path of human existence.

Among these beliefs, **“magical thinking”** plays a central role.

Let’s see what the characteristics of this primitive form of thought are, and how they are re-proposed in the *technological* field, to create a more convincing narrative by leveraging ancestral arguments.

## Thinking by Associations

In fact, it should be noted that human forms of reasoning can take on different typologies: alongside *logical-deductive* reasoning, we have *inductive* and *abductive* reasoning.

Aside these types of reasoning, based on the different modalities that the *causal relations* involved can take on, we have forms of reasoning that completely go beyond these causal relationships, and are instead based on **analogical** procedures.

In other words, the relationships established by these "analogical" arguments are based on characteristics such as **similarity**, i.e. the "sympathy" that binds elements together, or the *contiguity* that characterizes these elements, considered as part of a whole.

This form of reasoning is not only typical of primitive man, but is also the basis of *magical thinking*.

Frazer himself, in his famous study "The Golden Bough", already underlined how magical thinking is characterized by an *erroneous identification* of **causes**, identifying the significant relationships between objects and events on the basis of **associations** that are the exclusively fruit of the human mind.

Such forms of associations would be established:

- by **similarity**, according to the principle by which "the similar acts on the similar" (the same principle which is also the basis of *homeopathy*);
- by **contiguity**, on the basis of the principle according to which if two elements have remained in contact with each other for a long time, their interaction is maintained even at a distance of time and place.

In more recent times, Freud himself compared the magical thinking of primitive man to that of the child, thus underlining another typical characteristic of magical thinking, already identified by Frazer, which takes the form of the asserted **omnipotence of thought**, according to which reality can be influenced by human desires and thoughts.

Freud also extended this characteristic to adults suffering from **neurosis**, who would be inclined to give relevance only to thoughts that imply intense emotion, regardless of their objective reality.