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Why it's so Easy to Hypnotize, and Why Hypnotizability has Persisted to this Day – An Experimental and Anthropological Answer

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INTRODUCTION

Hypnosis remains one of the most fascinating and debated phenomena at the intersection of medicine, psychology, neuroscience, and anthropology. Despite more than two centuries of scientific investigation, fundamental questions concerning its origin, nature, and mechanisms remain only partially resolved. Modern research has identified a variety of neurophysiological correlates associated with hypnotic induction and trance condition, including characteristic patterns of cerebral activation (particularly the *corpus callosum*), measurable changes in autonomic regulation, and significant modifications in perception, cognition, memory, and behavior. These findings have greatly advanced our understanding of what occurs during hypnosis. Nevertheless, they do not fully explain why hypnotic induction can often be achieved with remarkable ease, why susceptibility to hypnosis is so widespread among human beings, or why this capacity has persisted throughout the evolutionary history of our species.

Most contemporary models interpret hypnosis from psychological, cognitive, or neurobiological perspectives. Such approaches have yielded valuable insights and have helped establish hypnosis as a legitimate scientific and clinical phenomenon. Yet a deeper question remains largely unanswered: is hypnotic responsiveness merely a particular psychological characteristic exhibited by some individuals, or does it reflect a more ancient and fundamental property of the human mind itself? Addressing this question requires moving beyond the limits of contemporary experimental psychology and considering the broader evolutionary and anthropological processes that shaped human consciousness.

The present paper explores the hypothesis that *hypnotic induction* may represent the reactivation of cognitive and behavioral mechanisms whose origins precede the emergence of modern egoic consciousness. From this perspective, the extraordinary ease with which hypnosis can be induced is not accidental. Rather, it may derive from psychobiological structures deeply embedded within the human species and inherited from earlier stages of mental evolution. Hypnotizability is therefore interpreted not as an anomalous trait but as the residual expression of adaptive mechanisms that once played a central role in the regulation of thought and action.

Particular attention is devoted today to the evolutionary development of the Ego and to the possibility that hypnotic phenomena reflect the temporary re-emergence of ancestral modes of mental functioning. Anthropological, historical, and neuroscientific considerations have to be integrated with theories concerning bicameral mentality, unconscious symbolic processing, inner speech, and the continuing influence of unconscious structures upon conscious experience.

Within this framework, hypnosis is examined herein not only as a clinical and experimental tool [Casiglia et al., 1991, 2012] but also as a phenomenon of profound anthropological significance [Casiglia, 2020].

The persistence of hypnotizability across millennia of natural selection suggests that it may have conferred adaptive advantages upon the species. Such advantages may include enhanced resistance to pain and fatigue, increased behavioral flexibility, improved social cohesion, facilitation of learning, stimulation of creativity and imagination, and the generation of complex symbolic representations. If this interpretation is correct, hypnosis should not be regarded as an exceptional condition imposed upon an otherwise rational mind, but rather as the controlled activation of capacities that have accompanied *Homo sapiens* throughout its evolutionary journey.

The aim of the present paper is therefore twofold. First, it seeks to explain why hypnotic induction is generally so easy to achieve and why the hypnotic state can be effectively managed by a trained operator. Second, it attempts to clarify why hypnotizability has survived the powerful forces of natural selection and remains a widespread human characteristic. By combining experimental findings with anthropological and evolutionary reasoning, the article proposes an integrated interpretative model intended to stimulate further theoretical reflection and empirical investigation into the origins of hypnosis and the nature of human consciousness itself.

HYPNOTIC INDUCTION

Induction is the first phase of hypnotism. If by induction we mean the set of procedures implemented to achieve the hypnotic condition[1] within a structured setting, then induction is hypnotism itself [Casiglia et al., 2015, 2022a, 2025]. We are thoroughly familiar with induction, having studied it since 1994 and having scientifically described, characterised, classified, and quantified it in a paper published in 2012 [Casiglia et al., 2012].

Induction may be either slow or rapid. At present, we define a *slow induction* as one lasting approximately two minutes and a *rapid induction* as one requiring about twenty seconds[2] [Casiglia, 2025]. There is also an *instantaneous induction*[3], achieved within one to two seconds; however, this approach is of little or no value for either clinical or research purposes.

Rapid and slow induction differ substantially from one another. Rapid induction is characterised by marked hyperactivation of the right cerebral hemisphere, the central cortical regions, and the precuneus relative to baseline conditions, and is accompanied by a transient increase in peripheral

[1] once also called *hypnotic transe* or *trance*

[2] It hasn't always been this way. At one time, based on the spirit of the times, we tended to consider 30-60 minutes a normal time to induce hypnosis, during which the induction faded into the conduct of hypnosis. In reality, this is still the case on average for psychotherapists [Casiglia & Gadotti, 2022], who have no time constraints and for whom time is actually monetized. For the doctor (who must resolve a morbid situation as quickly as possible) and for the scientist (who wants to dedicate his time to research and not waste it on preliminaries), such a long induction is unacceptable. So we began to purge induction of everything that seemed useless to us and after a while we arrived at what is described below. In all fairness, this process was triggered by the late Dr. Giuseppe Regaldo, who was the first to realize the uselessness of many of the frills that were then in vogue out of inveterate habit [Regaldo, 2015].

[3] it is sometimes used in the setting of entertainment hypnosis [Casiglia & Somma, 2015; Degrandi, 2025; Surchi, 1934], in the scientific and healthcare fields, in emergencies, for example in the Emergency Room [Casiglia & Giacomello, 2011; Casiglia & Mazza, 2013], in war scenarios [Colosimo, 1992], or in catastrophes [Lapenta, 2015]

vascular resistance indicative of a stress response. This increase in peripheral resistance, which ceases very rapidly and is subsequently overridden by the physiological decrease associated with hypnotic relaxation [Casiglia et al., 2012], is analogous to that previously observed through continuous intra-arterial monitoring of blood pressure and heart rate under conditions of extreme stress [Mos et al., 1989] or during hemorrhage [Casiglia et al., 1997] or some provocative tests [Casiglia et al., 1991, 1997a, 2007; Palatini & Pessina, 1987]. By contrast, slow induction is characterised by a lower degree of right-hemisphere activation, does not involve the posterior cortical regions, and is not accompanied by haemodynamic changes.

Scientific research has explained where induction occurs, but not why it occurs, nor why it is so easy to produce [Casiglia, 2008, 2012]. It should be emphasised that the process of induction, regardless of whether formal induction techniques are employed[4], is achieved with remarkable ease. Its occurrence depends upon the establishment of rapport between the operator and the subject, and it develops all the more rapidly as rapport becomes stronger and more immediate [Casiglia, 2025].

The reasons underlying this phenomenon are anthropological in nature and will be examined and discussed in the following section.

THE NATURE OF HYPNOSIS FROM AN ANTHROPOLOGICAL PERSPECTIVE

To understand hypnosis, it is necessary to look back in time: if you do not know where you are going, turn around and look at where you came from.

The genus *Homo* (a hominin of the family *Hominidae* within the lineage of the Great African Catharrine Apes) did not always possess consciousness (an Ego) [Jaynes, 1976]. For many million years, after the dichotomy between the genera *Homo* and *Pan* [Zihlman & Bolter, 2015], the at least 19 species of *Homo* that later became extinct [Casiglia, 2020], despite having developed peculiar characteristics[5], were much closer to *Pan* (*chimpanzees* and *bonobos*) than to modern man. Even the highly evolved species *Homo sapiens*, which emerged about 700-200 thousand years ago[6], was not initially conscious, despite being able to hunt[7], gather, domesticate, raise, cultivate, build, irrigate and even trade and develop a spirituality [Kuijsten, 2006; Jaynes, 1976]. For the purposes of the present discussion, let us restrict our attention to *Homo sapiens*, as it is the human species we know best. What was its mind like? It was profoundly different from that of modern humans, as can be inferred from both narrative records and physical evidence. The internal surfaces of fossil skulls preserve the impressions of blood vessels and nerves connected

[4] So-called *inductive techniques* are practical procedures implemented to facilitate induction. There are thousands of them: in practice, there are as many inductive techniques as there are hypnotists. Good hypnosis schools and the best hypnosis treatises explain very well that techniques don't matter; what matters is the relationship between subject and hypnotist. Once this is done, schools spend dozens of hours and treatises dozens or hundreds of pages illustrating the techniques [Regaldo, 2015]. We have never succumbed to this inconsistency and actually do without techniques, which are never necessary [Casiglia, 2025]; they can be used by those who don't know how to relate, such as novices, hypnotists with poor empathy, and show hypnotists. So-called Ericksonian hypnosis practically uses no techniques.

[5] and despite being *faber*, that is, *builders* capable of producing tools from stone and bone that were not only capable of modifying the world but also of producing other tools; *ergaster*, Latin name from the Greek *ἐργάτης (ergastes)* of one of the first known species of the genus *Homo*, also means builder, maker, worker, capable of doing things with the hands

[6] depending on whether they are used for dating fossil finds or genetic data [Stringer, 2016]

[7] even in packs, after mutual human/dog domestication [Tancredi & Crdinali, 2023]

to cerebral areas, making it possible to establish when specific brain structures emerged [Casiglia, 2020].

Today, egoig consciousness (the Ego) may be regarded as a complex, that is, a fragment of *ψυχή (psyché)* that has detached itself and acquired an autonomous existence [Jaynes, 1976]. Numerous complexes arise spontaneously; in the past they were thought to generate what were termed neuroses, whereas today they are more often interpreted as forms of conditioning. The Ego-complex, however, has achieved a particularly remarkable success [Jung, 2023] and a mode of diffusion that might be described as contagious [Casiglia, 2020]. Provided that it is correctly reinstalled in each newborn individual, it appears unwilling to disappear from the species *Homo sapiens*. The emergence of the Ego resulted from the interaction of three interconnected factors: (1) the appearance, during the evolution of *Homo sapiens*, of suitable bodily modifications, often originating from imperfections or mutations; (2) the development of specialised cerebral structures; and (3) a conjunction of external events.

The bodily modifications that favoured the emergence of consciousness were numerous [Biondi & Richards, 2023; Casiglia, 2020], but the most important was the tendency towards upright posture and obligatory bipedalism. By transferring the gravitational load of the skull onto the lower limbs, this adaptation permitted the development of a larger brain and consequently favoured offspring that remained longer in utero and were born in a more immature state, thereby requiring prolonged parental care. Such care promoted maternal instincts, which in turn facilitated culture and the transmission of information from adults to children. Individuals unsuited to this developmental trajectory were progressively eliminated from the evolutionary pathway leading to the emergence of the Ego.

The enlargement of the brain subsequently enabled the development of novel cerebral structures devoted to abstraction and language [Casiglia, 2020], functions that constitute the foundation of the Ego. External events linked these biological developments together, sometimes provoking them and sometimes exploiting them. Among the principal events were natural phenomena—particularly mutagenic cosmic γ-radiation, the prolonged Würm glaciation, and the volcanic eruption of the island of Thera (present-day Santorini), together with its long-term environmental and sociological consequences—as well as predatory animals, wars, and diseases [Casiglia, 2020; Jaynes, 1976].

All these factors directed *Homo sapiens* along an unprecedented evolutionary pathway, marked by the emergence of lithic craftsmanship involving the manipulation of three-dimensional objects (an activity that itself contributed to the development of the Ego), transformative craftsmanship, the ceramic period, the birth of metallurgy, and the appearance of symbols and myths. From these developments – and aided by the lowering of the larynx [Kay et al., 1998] – there emerged language and the modern Ego, which is founded upon language and, like language itself, must be learned [Casiglia, 2020a; Jaynes, 1976].

This entire process passed through a phase dominated by the bicameral voices of parents and deceased leaders, which guided the species *Homo sapiens* before it developed an Ego. It is now widely accepted that the Ego emerged relatively late, during historical rather than prehistoric times, and that it was preceded by several crucial stages. These included an instinctive period, during which *Homo sapiens* – although already human, upright, and *faber* – acted much like other animals under the influence of innate structures and conditioning; a period of the Unconscious

(approximately during the last 60000 years), in which behaviour was governed by symbolic experiences analogous to neurological commands (command→action), of which individuals were unaware because they lacked an Ego; and finally the period of unconscious voices [Casiglia, 2020; Casiglia, 2022b; Jaynes, 1976], which instructed *Homo sapiens* how to act without its being consciously aware of doing so.

The system of unconscious voices – perceived as genuine voices, although not through the ears but directly by the auditory centres of the brain [Jaynes, 1976] – may appear unusual, yet it seems to have functioned effectively for perhaps 30000 years. During this period, *Homo sapiens* was able to live, walk, eat, reproduce, develop religions, compose poems [Ὅμίρου, 2000] and sacred texts [Bianchi et al., 2021], build great temples and cities, conquer territories, travel, and perform countless other activities without conscious awareness, much as we ourselves continue to do for much of our daily lives.

This type of primitive mentality is termed bicameral because the brain functioned as two clearly differentiated hemispheres—two chambers. One hemisphere, usually the right, symbolic and directive hemisphere, dominated through its voices, while the other, motor hemisphere obeyed without awareness. Subsequently, owing to severe environmental pressures, the emergence of increasingly sophisticated cerebral areas, the formation of more numerous and strategically organised synaptic connections, and perhaps because the time was ripe, the voices fell silent during historical times [Casiglia, 2020; Jaynes, 1976]. *Homo sapiens* was thereby cast into a void, expelled from the earthly paradise of blissful unconsciousness.

The functional roles of the cerebral hemispheres became reversed, and those few individuals—presumably rare and initially concentrated within the Fertile Crescent—who were no longer merely unconscious but not yet fully conscious (that is, protoconscious) found themselves at a considerable advantage over those still dependent upon voices that no longer existed. They therefore rapidly gained dominance and became the ruling class.

From that point onward, the Ego became the norm, while those who remained bicameral became the exception, the pathological case, and were killed, expelled, ostracised, marginalised, or confined to ghettos [Casiglia, 2020; Jaynes, 1976], much as schizophrenic psychotics are today. These individuals may be regarded as surviving bicameral fossils, although unlike their ancient counterparts they almost always possess an Ego, albeit one that is weak or imperfectly developed.

The loss of bicameral voices, experienced for several centuries as a traumatic event by protoconscious individuals, as suggested by documents that have survived to the present day, including *Βιβλία*[8] (*Biblía*, the Bible) [Bianchi *et al*, 2021], *Ἰλιάς* (*The Iliad*) [Ὅμίρου, 2000], and the *Epic of Tukulti-Ninurta*[9] constituted the indispensable precondition for the emergence of the Ego. The Ego arose precisely through the aggregation of these voices into a metaphor which, acting recursively within an internal analogical space [Casiglia, 2020], eventually came to declare *I AM*

[8] The Greek *Βιβλία (Biblìa)* corresponds to the plural of *lĭbĕr*, meaning *the books* in Latin. Surprisingly, there are several versions of *βιβλία*: the Hebrew one is more properly called **תנך** or *Tanakh* or *TNK* or *Tenakh* and is made up of the sacred texts of Judaism known as *the canon*.

[9] Poem almost contemporary with *Ἰλιάς* which describes the war between Kashtiliashu IV and the Assyrian king Tukulti-Ninurta I

HERE, thereby identifying itself as the Ego. Evolutionarily speaking, however, it ought perhaps to say *we* rather than *I* being composed of previously distinct voices.

The directive and subordinate hemispheres now operate in concert, giving rise to the subjective Ego.

WHY INDUCTION IS EASY

It is at this point that the foundations of what is now called *hypnotic induction* are established. These primitive ancestors of ours, permanently dissociated, in close or sometimes exclusive symbolic contact with a world that they were unable to internalise due to the absence of an inner subjective dimension, and predisposed to neurological commands that appeared in the form of incorporeal voices perceived directly within the auditory cortex, and inclined to comply with what those voices instructed, represent the prototypes and precursors of modern subjects who enter hypnotic trance.

Once the Ego emerged through structures arising from genetic predispositions and contingent events, it never disappeared. One of its defining features is a strong tendency towards self-preservation, and another is its transmission through cultural processes. Transmission through speech, imitation, proximity, companionship, and empathy has ensured that the chain of the Ego has never been interrupted, except in cases of feral or abandoned children raised under animal-like conditions, in whom the potential for Ego development does not unfold. Numerous such cases are documented [Casiglia, 2020a].

The voices that have disappeared, but which in reality remain aggregated within the metaphor of the Ego, are still experienced today both as inner speech [Borghi & Fernyhough, 2023; Fadeev, 2023; Geva & Fernyhough, 2019; Langland-Hassan, 2021; Jack *et al*., 2019; Machková, 2023; Viacheslav et al., 2023], i. e. the internal whispering or chatter that all individuals perceive in everyday life without paying particular attention to it—and as conditioning [Jaynes, 1976; Tosello, 2012, 2015] (*"do not drive too fast", "be careful with children", "find a job", "get a degree", "avoid bad company", "be good",* and so on). These derive both from parental education deposited within the personal Unconscious and from ancestral legacies transmitted through the collective Unconscious [Dias & Ressler, 2014; Yehuda et al, 2016]. There are also less constructive voices, originating from harmful teaching and degraded environments[10].

Moreover, without resorting to psychotic conditions, there is still another mode of communication with bicameral voices today. As a residual cultural inheritance, we still address our deceased loved ones directly in moments of difficulty. Similarly, in Japanese Shintō (Shintoism), deceased heroes and ancestors are venerated as 神 (*shin, kami*, i.e. deities); notably, *kami* is formed by the combination of 示 (altar) and 申 (to speak), thereby representing deceased divinities speaking from the altar—bicameral voices in all respects [Casiglia, 2025]. Modern Japanese society, which also possesses a fully developed Ego, has arguably ritualised and rendered culturally explicit the bicameral voices of the dead more clearly than other cultures.

[10] This is where egoic consciousness meets moral conscience. Therefore, only subdued voices for us, only subliminal whispers (*sub limen*, subthreshold), no longer openly imposing voices, because when we embraced the verbal Ego, we abandoned symbolic thought, which today can express itself unconsciously or subconsciously only in dreams, intuitions, in certain disturbances, in general dissatisfaction, in free-flowing anxiety, and in certain psychoanalytic techniques.

Finally, the ancient bicameral voices, genuinely perceived by auditory cortical regions even if not through the ears [Casiglia, 2020; Jaynes, 1976], may still be experimentally reactivated today. Open-skull stimulation of specific brain areas using electrodes can induce in patients not only sounds but actual voices (of relatives or strangers) that produce coherent statements and are sometimes accompanied by dream-like visual experiences. In other words, auditory and visual hallucinations analogous to those observed in schizophrenia and in hypnotic states can be experimentally elicited, and for bicameral humans these constituted normal everyday experience [Casiglia, 2020; Jaynes, 1976].

Certain modern phobias, such as zeusophobia, placophobia, daemonophobia, and automatonophobia [Casiglia, 2025], are most likely remnants of the bicameral period, characterised by commanding voices, speaking idols, and personified deities. These entities were as present for the people of that time as the Ego is for us today.

At this stage, it should be clear that the voices within us – the legacy of an ancestral bicameral past – remain active. Since everything derives from the personal and collective Unconscious [Jung, 2023], whether repressed or unrepressed [Craparo & Mucci, 2016], these voices are also powerful: they guide us [Casiglia, 2022a] and are ready to reassume the decisive role of substitutes for the Ego that characterised the bicameral mind [Jaynes, 1976; Casiglia, 2022a].

Hypnotic induction is nothing other than the reactivation of these ancient voices arising from modern inner speech. In the bicameral era, the governance of thought and action was assigned to the right hemisphere, while the left hemisphere—due to the absence of an Ego—merely executed commands automatically and uncritically according to the scheme command→action [Jaynes1976]. In the modern era, the hypnotist, by evoking plastic monoideism whose ontological existence we have experimentally demonstrated [Casiglia, 2025; Casiglia et al., 2019], may substitute for or reactivate the bicameral voices, effectively engaging the right hemisphere [Casiglia et al., 2012] and thereby assuming control over the left hemisphere. The crucial difference is that, owing to the presence of the Ego, the commands must be accepted by the subject in an open and deliberate manner [Casiglia et al., 2018].With the activation of plastic monoideism as a trigger, hypnosis is achieved.

WHY HYPNOTIZABILITY HAS PERSISTED TO THE PRESENT DAY

Hypnotic induction is therefore a form of regression that is not only personal but also phylogenetic. In short, once upon a time (until the explosion of the volcanic island of Thera, now Santorini), thought was eminently symbolic, while verbal thought as we understand it today did not yet exist. Our ancestorts were *preconscious*, and their mind, and consequently its life, depended entirely on internal voices, heard as external, which gave instructions that resembled neurological commands (*listen→execute* without intermediation). In earlier periods hypnotic trance was constantly present, whereas today it may occur sporadically in a spontaneous manner as a result of the self-generative activity of the Unconscious [Zhang et al., 2025], or alternatively it must be elicited by an operator [Casiglia, 2025].

If in ancestral epochs (up to the emergence of the Ego) being in a hypnotic condition represented the norm, and if this open possibility has since been largely set aside, the question arises as to why hypnosis can still be induced today. If this capacity has persisted to the present, it must possess favourable characteristics; otherwise, it would have been eliminated by natural selection. According to Darwinian theory, variability within *taxa* arises through mutations, and—via natural

selection—only those mutations that are advantageous to the species are transmitted to offspring, whereas disadvantageous ones are eliminated [Biondi & Richards, 2023; Casiglia, 2020]. Only a small proportion of mutations derive from environmental factors (γ radiation, mutagens, etc.), while a far greater proportion originates from reproductive processes. In *Homo sapiens*, each male child contributes 1 to 5 new rapid linear mutations to the small Y chromosome, while each female child contributes slow but stable ribosomal DNA mutations, which accumulate over time. In the present era, with a global population of approximately 8 billion individuals, of whom about 5.5 billion are fertile, around 800 million heterosexual intercourses occur daily worldwide, resulting in approximately 50 million mutations per day [Kong et al., 2012; Rahbari et al., 2012; Scally, 2012; Twenge et al., 2017]. Across the entire prehistory and history of *Homo sapiens*, the estimated 100–120 billion individuals who have ever lived [Rutherford, 2016] have generated approximately 7,000 billion new germline mutations[11] [Auton et al., 2015].

Hypnotizability, however, has reached the present day while resisting natural selection, which eliminates harmful or useless traits. This implies that the serial mutations which, during the Palaeolithic and Neolithic periods—following the divergence of the genera *Homo* and *Pan*—gradually led in *Homo* to the faculty that may be described as easy plastic monoideism must have been evolutionarily advantageous; otherwise, they would not have persisted (Casiglia, 2020), particularly given that contemporary humanity is evolving at a rate approximately 1,000 times faster than in the Palaeolithic. Hypnosis may therefore be regarded as a positive trait. The reasons for this favourable nature of hypnotizability likely lie in its capacity to confer upon *Homo sapiens* not only improved resistance to pain in cases of illness or injury [Casiglia et al., 2007, 2016, 2018, 2020; Casiglia & Giacomello, 2011; Casiglia & Mazza, 2013] and to fatigue [Casiglia, 2025b; Casiglia & Tikhonoff, 2015, 2021; Tikonofff et al., 2012; Vercelli, 2015], as well as enhanced performance in everyday activities, including three-dimensional tasks [Casiglia, 2021; Casiglia, 2025b] and cognitive functions [Casiglia et al., 2015a], but also the ability to generate innate ideas [Casiglia, 2023], to contribute to volition [Casiglia & Gadotti, 2026a; Gadotti & Casiglia, 2026], to artistic expression [Cook, 2013], to creativity [Casiglia, 2020, 2022], and more generally to produce mental images [Casiglia, 2022b] that not only represent reality [Casiglia, 2025] but may even constitute reality itself [Casiglia & Gadotti, 2026a]. In the past, all of this occurred spontaneously, and it still occurs today under certain conditions; however, it can now be deliberately elicited within a structured setting that we refer to as induction.

WHY HYPNOTIC MANAGEMENT IS EASY AND WHY HYPNOSIS WORKS

Once again, we return to the theme of bicameral voices, now partly integrated into the metaphor of the Ego and partly present within each individual as unconscious inner speech [Casiglia, 2020; Casiglia & Gadotti, 2026b]. From an anthropological and narrative perspective, the hypnotic state that follows induction can be managed by the operator because the operator substitutes for the role once played by internal bicameral voices. In earlier times, over tens of thousands of years, such voices were followed according to the simple scheme voice→execution. In the modern condition, this system is mediated by the presence of an Ego, which remains active during

[11] Among the most relevant mutations for us we recall the PCDHX and PCDHY duplication of the gene encoding protocaredin (involved in the asymmetry of the hemispheres, manual ability and language), the deletion *Neu5Gc* in the CMAH gene (loss of fur and reduction of muscular strength in the genus Homo 2.5 million years ago, after the separation from the genus *Pan*), the variation of the FOXP2 gene (occurred in the species *Homo sapiens* 300,000 years ago and implicated in the origin of language) and the inactivation of the MYH16 gene which in apes codes for a strong masticatory musculature (the weaker musculature of *Homo sapiens* has reduced the bone crests allowing the enlargement of the skull to contain a larger brain) [Biondi & Richards, 2023; Stedman et al., 2004].

hypnosis: hypnosis is therefore a process of physiological modification (not elimination) of ego consciousness, requiring the active participation of the subject and their deliberate acceptance of the procedure according to the scheme voice→(Ego)→execution [Casiglia et al., 2018].

In this sense, hypnosis is indeed—consistent with the view of earlier psychiatrists and psychoanalysts—a form of regression, although not, in our view, a personal regression to an infantile stage of the individual as Freud would have argued [Stachey, 1968], but rather a regression to a primordial and collective stage of the species, as Jung might suggest [Jung, 2023]. The presence of a fully functioning Ego explains why hypnotic management requires active participation from the subject, and indeed why the subject themselves generates the hypnotic state, merely guided by the hypnotist [Casiglia, 2025]. This also explains the impossibility for the hypnotist to induce actions that contradict the subject's will, principles, or moral framework [Casiglia, 2025; Casiglia et al., 2018]: it is the Ego that resists[12].

However, stating that hypnosis is easy to conduct does not imply that it is accessible to everyone. On the contrary, considerable training and extensive medical, psychological, or even psychiatric expertise are required to handle hypnosis safely. Improvised hypnotic practice, as may occur in entertainment contexts or unregulated attempts, can produce adverse effects in psychologically healthy individuals and potentially catastrophic consequences in subapophanic psychotic patients [Casiglia, 2025].

From a scientific and experimental standpoint, hypnotic phenomena are explained by the action of endogenous psychoactive mediators released within the hypnotic context[13] [Casiglia, 2024]. The verbal, procedural, and non-verbal cues of the hypnotist activate specific receptor agonist and antagonist mechanisms that may, depending on the context, produce analgesia or anaesthesia [Casiglia et al., 2007, 2015b, 2016, 2028, 2020], hallucinations [Casiglia et al., 1997, 2006; Tikhonoff et al., 2018*], neglects [Casiglia at al., 2010, 2015; Priftis et al., 2011],* age regression [Giordano et al., 2012], enhanced performance [Casiglia, 2015; Tiknonoff et al, 2012], hypermnesia [Giordano et al., 2012], or conversely amnesia [Casiglia et al., 2015b, 2016], as well as physiological effects such as vasoconstriction, vasodilation, redistribution of blood flow between vascular territories, changes in peripheral vascular resistance, blister and wheal formation, conjunctival hyperaemia, miosis, and alterations in cerebral electrical activity [Casiglia, 2025].

Although this is considered a future frontier of hypnotic research, there is nothing inherently surprising in this phenomenology or in its receptor-based origin: all processes occurring within the organism are substrate-dependent [Casiglia & Gava, 1990], and there is no mechanism by which physiological effects can arise other than through the agonism or antagonism of specific receptors [Casiglia, 2024]. We can state this with confidence, as all the hypnotic effects listed in this section have been experimentally demonstrated within our research setting[14].

[12] Freud would perhaps say the *Über-Ich* (*Super-Ego* in Latin). But there is no need to dwell on such semantic problems because Ego and Super-Ego are only metaphors and have never been experimentally demonstrated; only the Unconscious has been [Casiglia et al., 2019].

[13] This is not the place to dwell on this topic, which has already been extensively discussed elsewhere [Casiglia, 2024].

[14] The experimental hypnosis setting we use in the university setting is briefly summarized in the paper *Measured Outcomes with Hypnosis as an Experimental Tool in a Cardiovascular Physiology Laboratory* [Casiglia et al., 2012].

POST-HYPNOTIC COMMANDS

So-called post-hypnotic commands are instructions that take effect at a later time, in the future with respect to the moment of the hypnotic session. They are nothing more than *conditioning* and have nothing to do with hypnosis. Hypnosis simply accelerates their onset, and promoting and enhancing their effect. The exact same commands (conditioning) could be administered in many other ways [Tosello, 2012, 2015]. Those administered under hypnosis, however, act – with the subject's implicit consent deriving from the therautic or experimental contract – exactly *as the hypnotist desires* and *at the time the hypnotist wants it to happen*. In this sense, they are much more effective than both classical and operant conditionings.

HOW TO INCREASE HYPNOTIZABILITY

As previously outlined, hypnotisability is an innate trait of *Homo sapiens* that arises from Darwinian evolutionary processes. Nevertheless, individuals do not exhibit equal levels of responsiveness to hypnosis.

The most common inhibiting factor is cultural in nature. Individuals who have witnessed hypnotic performances in non-clinical contexts, carried out by poorly trained, misguided, or non-patient-centred practitioners, may develop an aversion to hypnosis that is difficult to overcome and, in some respects, resembles a form of negative conditioning against which rational argumentation has limited efficacy [Tosello, 2012, 2015].

Outside these cases, and under equivalent operator conditions, individuals with very low intellectual quotient, those with limited educational exposure, those with highly monothematic cognitive profiles, those with significant autism spectrum disorders, obsessive-compulsive neurotic individuals, and more generally those characterised by a limited depth of internal psychological structure tend to be poorly or not at all hypnotisable [Casiglia, 2025].

Enhancing receptivity to hypnosis, although desirable, is not a task that can realistically be implemented at a population-wide level in a direct or uniform manner. However, given the intrinsic nature of hypnosis, interventions that increase hypnotisability are also those that tend to improve the overall quality of the population. In this sense, both objectives may be integrated within a broader programme of human improvement. An increase in population quality may be achieved, for example, by improving both the quantity and the quality of education, without thereby increasing selective academic filtering[15]. Limited attempts in this direction have been undertaken with considerable effort, teamwork, and commitment, but also with remarkable outcomes [Faitini, Gadotti, & Venuti, 2019]. The result is a highly inclusive educational system that integrates all individuals into an effective learning pathway regardless of background, initial abilities, or socioeconomic status, allowing each person to pursue secondary education and university access while expressing themselves in the domain in which they feel most competent [Gadotti et al., 2016, 2016a, 2020, 2021].

[15] Some Asian educational programs already address this, such as the *Gao Kao* or *Unified National Higher Education Entrance Examination (普通高等学校招生全国统考试)* in China and the *Duneung* or *University Ability Test (대학수학능력시험)* in South Korea. These highly selective tests identify the most talented and tenacious students, but they don't take into account the general population. This does nothing to improve the hypnotizability or quality of the general population. At the other end of the spectrum are some countries that have virtually no final exam. Curiously, these countries actually produce excellent personnel, but they are not significantly more qualified than those produced by the average European or American school system.

This model, currently in operation and under study at national and international level, appears to increase both population awareness and, consequently, hypnotisability [Casiglia, 2025].

CONCLUSION

The remarkable ease with which hypnosis can be induced, the effectiveness of hypnotic procedures, and the persistence of hypnotizability throughout human evolution may represent different manifestations of a common underlying reality. According to the perspective developed in this article, hypnosis is neither an anomalous state nor a marginal psychological curiosity. Rather, it appears to be the expression of a deeply rooted human faculty whose origins extend to some of the earliest stages of the development of the human mind. By integrating experimental observations with anthropological and evolutionary considerations, hypnotic responsiveness can be interpreted as the contemporary survival of cognitive mechanisms that once played a fundamental role in the regulation of behavior. The emergence of the Ego did not eliminate these ancestral structures. Instead, it incorporated, reorganized, and partially concealed them within a more complex architecture of consciousness. Hypnotic induction may therefore be understood as a controlled and reversible reactivation of latent psychobiological pathways that remain accessible within modern human cognition.

This interpretative framework offers a coherent explanation for several otherwise puzzling features of hypnosis: its widespread distribution among human populations, the relative ease with which it can be elicited, its capacity to influence both mental and physiological functions, and its persistence despite millions of years of evolutionary change. If hypnotizability has indeed survived natural selection, it is reasonable to assume that it has continued to provide adaptive benefits, contributing not only to the modulation of pain and stress but also to creativity, learning, symbolic thought, volition, social communication, and psychological resilience.

Although many aspects of this hypothesis require further empirical verification, the anthropological perspective proposed here encourages a broader understanding of hypnosis as a phenomenon intimately connected with the history of human consciousness. In this sense, hypnosis may be regarded not only as a therapeutic and experimental resource but also as a privileged window through which to investigate the evolutionary origins of the Ego, the enduring activity of unconscious processes, and the biological foundations of what it means to be human.

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