

Master Thesis 2019
Philosophical Anthropology and Philosophy of Culture
Leiden University

Timon Krause

Hypnosis & Consciousness

*An Examination of the Relationship Between Hypnosis and the
Concept of Consciousness*

Thesis Supervisor: Dr. J. J. M. Sleutels

Contact Author:
Timon Krause
www.timonkrause.com

1. Introduction 1

- 1.1 Scope of Research 1
- 1.2 Importance of Research 1
- 1.3 Structure of Research 1
- 1.4 Reasons for this Particular Approach 2

2. Introducing Hypnosis 4

- 2.1 The Suspect Origins of Hypnosis 4
- 2.2 The Appearance of Hypnotic Behaviour 5
- 2.3 The Phenomenology of Hypnosis 5
- 2.4 Explananda of Hypnosis 6
 - 2.4.1 Explanandum One: Physical Phenomena 7
 - 2.4.2 Explanandum Two: Mental Phenomena 8
 - 2.4.3 Explanandum Three: Suggestibility 9
 - 2.4.4 Explanandum Four: Time Distortion 9

3. Hypnosis and Consciousness 11

- 3.1 Consciousness as “What it is Like” 11
- 3.2 Consciousness as Self-Consciousness 12
- 3.3 Ned Block’s A-Consciousness and P-Consciousness 12
- 3.4 Hypnosis and A-Consciousness 15

4. Explaining Hypnosis 17

- 4.1 Dissociation Theories of Hypnosis 17
 - 4.1.1 Hilgard’s Hidden Observer 18
 - 4.1.2 Dissociation Theories and Physical Phenomena 18
 - 4.1.3 Dissociation Theories and Mental Phenomena 19
 - 4.1.4 Dissociation Theories, Suggestibility and Time Distortion 19
 - 4.1.3 Dissociation Theory’s Mystery Process 20
- 4.2 Social Role-Taking Theory of Hypnosis 20
 - 4.2.1 Social Role-Taking Theory and Physical Phenomena 21
 - 4.2.2 Social Role-Taking Theory and Mental Phenomena 21
 - 4.2.3 Social Role-Taking Theory and Suggestibility 22
 - 4.2.4 Social Role-Taking Theory and Time Distortion 23
 - 4.2.5 The Hypnotic Subject’s Unawareness of Their Role 23
- 4.3 Cognitive-Behavioural Theory of Hypnosis 24
 - 4.3.1 Cognitive-Behavioural Theory and Isolated Hypnotic Phenomena 24
 - 4.3.2 Criticism of Cognitive-Behavioural Theories 25
- 4.4 The Problem of Consciousness in Modern Hypnosis Models 26

5. Julian Jaynes’ Theory of Consciousness 28

- 5.1 Consciousness as a learned process 28

5.1.1	Consciousness as Spatial Analog of the World	29
5.1.2	Spatialization	32
5.1.3	Analog "I" and Metaphor "Me"	32
5.1.4	Narratization	33
5.2	Jaynes' Theory of the Bicameral Mind	34
5.2.1	Sound and Obedience	35
5.3	Criticism of Julian Jaynes' Theory of Consciousness	37

6. Jaynesian Consciousness and Hypnosis 40

6.1	Reevaluating the Problems of Hypnosis	40
6.1.1	Hypnosis and A-Consciousness	40
6.1.2	Hypnosis and the Bicameral Mind	41
6.2	A Jaynesian Theory of Hypnosis	43
6.2.1	The Collective Cognitive Imperative as Engaging Suitable Belief Systems	44
6.2.2	Archaic Authorisation as Presence of a Suitable Executive Part	45
6.2.3	The Induction as Direct Verbal Communication and Suggestions	46
6.2.4	Trance as Restriction or Loss of the Analog "I"	48
6.3	The "How" of Restricting or Losing Access-Consciousness in Hypnosis	50
6.3.1	The General Bicameral Paradigm as Restriction of the Analog "I"	50
6.3.2	The General Bicameral Paradigm as Loss of the Analog "I"	52
6.4	Features of Jaynes' Model of Hypnosis	53
6.4.1	Narrowing Down of Consciousness	53
6.4.2	Lack of Access to Analog "I"	54
6.4.3	Diminishment of Narratization Abilities	54
6.4.4	Increase in Obedience	55
6.5	Hypnotic Explananda and a Jaynesian Theory of Hypnosis	55
6.5.1	Suggestibility and Jaynesian Hypnosis	56
6.5.2	Time Distortion and Jaynesian Hypnosis	57
6.5.3	Mental Phenomena and Jaynesian Hypnosis	58
6.5.4	Physical Phenomena and Jaynesian Hypnosis	59

7. Conclusion 61

7.1	Jaynesian Hypnosis in Relation to Other Theories of Hypnosis	61
7.2	Suggestions for Future Research	62

8. Bibliography 63

1. Introduction

1.1 Scope of Research

The focus of this essay will lie on analysing the relationship of hypnosis and consciousness. It is my claim that modernly held theories of hypnosis do not manage to fully account for all facets of this seeming psychological anomaly because they may be based on a faulty notion of consciousness. I will attempt to show what this notion of consciousness is and how the phenomenon of hypnosis challenges this notion. I will then propose the use of a radically different notion of consciousness by Julian Jaynes and show what a more successful theory of hypnosis based on this notion of consciousness might look like.

1.2 Importance of Research

Hypnosis has only become a serious point of strategic research fairly recently in scientific history, even though its therapeutic impact is well-known and is widely acknowledged by practitioners and clients alike. A deeper exploration of hypnosis will provide both researchers and therapists with the tools necessary to, firstly, better understand the processes involved in the phenomenon and, secondly, better use hypnosis as a tool to affect positive change within individuals in need.

Furthermore, a notion of consciousness must lie at the base of any number of disciplines. It is my view that seemingly inexplicable anomalies such as hypnosis, possession and hearing voices may be pointers to the fact that our commonly held notion of consciousness might be faulty. The fact that such anomalies may be integrated into a theory of consciousness successfully when the basic notion of consciousness is changed only serves to strengthen this point.

1.3 Structure of Research

Following this introduction (chapter 1) I will briefly lay out the origins of hypnosis and why this phenomenon seems to carry with it a less than favourable image. I will isolate recurring

classes of hypnotic phenomena and discuss what makes these phenomena so seemingly inexplicable (chapter 2). I will then move on to a discussion of our commonly held notion of consciousness and how it relates to hypnosis (chapter 3). The next step will be a discussion of different attempts at explaining hypnosis (chapter 4). Here I will point out the advantages as well as challenges of each of the theories presented, concluding that they all face difficulties based on their underlying notion of consciousness.

Following this will be a discussion of Jaynes's concept of consciousness, shedding light on the differences between his notion and the formerly discussed commonly held understanding of consciousness, as well as presenting potential criticisms of Jaynes' idea (chapter 5). I will then present Jaynes' theory of hypnosis, hoping to further flesh out, clarify and develop the different parts of his theory. This theory will then be shown to integrate the advantages of modern models of hypnosis while doing away with their formerly discussed challenges (chapter 6). Lastly, a brief conclusion with suggestions for further research is presented (chapter 7), followed by this essay's bibliography (chapter 8).

1.4 Reasons for this Particular Approach

Considering that hypnosis continues to evade successful explanation by commonly handled theories, it may be fruitful to approach it from a radically different angle, bringing to the table a differing notion of consciousness. Hypnosis seems to be a subject of fascination because it challenges what we assume to understand about consciousness, behavioural control and our free will. It therefore appeals to disciplines ranging from neuroscience to psychology to philosophy. Because the experience of hypnosis is difficult to measure, let alone difficult to prove, it may be viable to take the approach of conceptually analysing the phenomenon of hypnosis and its underlying structure of consciousness. We may then find that by challenging and changing what we think to intuitively know about consciousness that we find hypnosis to become explicable after all. Julian Jaynes' theory was chosen specifically because it brings with it such a vastly different understanding of consciousness.

All in all, I have chosen to approach the subject from this angle because I believe that hypnosis and consciousness cannot be treated in isolation from each other: any theory of consciousness must not shy away from but welcome its astonishing anomalies; while hypnosis must first and foremost be understood as a product of some effect or other on consciousness as we know it.

2. Introducing Hypnosis

2.1 The Suspect Origins of Hypnosis

The suspect image hypnosis seems to carry is due to three difficulties surrounding the phenomenon: its origin, its appearance, and its phenomenology.

Regarding the origins of hypnosis, depending on the exact definition of hypnosis its origins may be traced back to different points in time. Some form of healing that would today likely be attributed to suggestion, like healing with hands, can be found through “Sumerian, Persian, Chinese, Indian, Egyptian, Greek, and Roman” (Mongiovi 2014) and most other ancient cultures.

In more recent times, perhaps the man most credited with producing the origins of modern hypnosis is Franz Anton Mesmer (1734-1815), whose surname is responsible for providing us with the term *mesmerised* still used today. Mesmer, actually part of a longer line of practitioners coming before him, assumed that the effects of hypnosis were to be ascribed to so-called “animal magnetism”: a magnetic power inherent to all living things. Mesmer used the movements of his (magnetic) hands around his patients to affect their supposed internal magnetic flows, which would then produce a wide variety of effects in the patients, including spontaneous healing of ailments.

Hypnosis as we picture it today should probably be traced back to the research of Abbe Faria in India, 1813, and the subsequent establishment of the French Nancy School of hypnotism by Ambroise-Auguste Liebeault based on the teachings of Faria. It is here that we first find hypnosis as “not magnetism or the power of the hypnotist (...) but a power generated from within the mind of the subject” (Mongiovi 2014). The term “hypnotism” was coined around the same time in Britain, by Scottish surgeon James Braid, in an essay titled *Practical Essay on the Curative Agency of Neuro-Hypnotism* (Braid 1842).

From there onwards, hypnosis went through different iterations and explanations. Because of the nature of the phenomenon, hypnosis and its effects seemed to change over time, depending on what the common understanding of hypnosis was at the time. This has made it difficult to trace hypnosis as a single phenomenon from reports across time. The origins of hypnosis, coupled to the fact that hypnosis is today used both in therapy and in entertainment only seems to reinforce the shady image the phenomenon has been burdened with.

2.2 The Appearance of Hypnotic Behaviour

A second set of challenges for the credibility of hypnosis and research into hypnosis arises from the fact that hypnotic behaviour is behaviourally equivalent to role-play, or faking. An audience watching hypnosis for entertainment has no way of knowing whether or not the hypnotic subjects they are seeing are indeed in an altered state of mind, or whether they are merely pretending to be.

Furthermore, it is difficult for anyone observing hypnotic behaviour to imagine what such an altered state of mind might feel like. We seem to know our own consciousness intimately and, as such, are fairly certain of our own volition and behavioural control. This is why watching a hypnotic subject, perhaps even a person we know, behave radically different and with seemingly no volition calls into question some of the most basic assumptions we have about our own consciousness. For many, it may be easier to assume that hypnotic behaviour is simply role-playing than to believe that consciousness may be altered in such a way as to enable the non-volitional effects of hypnosis.

2.3 The Phenomenology of Hypnosis

Lastly, and directly related to my former point, is the fact that the phenomenology of hypnosis is difficult to describe. As we have seen, publicly observable behaviour is arguably insufficient to distinguish hypnosis from role-play. Research into hypnosis must therefore rely heavily on the reports of hypnotic subjects and hypnotic practitioners, both of which may be heavily biased. Researchers for the longest time have had absolutely no way of looking from

the outside into the hypnotic subject's mental facilities. Today, techniques of modern neuroscience enable at least some measurement of the actual neurological changes happening within a subject during hypnosis. Still, the fact remains that the actual *experience* of hypnosis and how it affects consciousness remains exclusive to hypnotic subjects.

I believe it is due to its suspect origins, its difficult to describe phenomenology and its outward behaviour that appears equivalent to role-play that hypnosis has been shoed away as a fringe subject of psychology and philosophy for the longest time. Today, however, hypnosis has finally begun to be regarded as a potential tool to further our understanding of the mind and consciousness. I believe this to be because hypnosis posits questions about the human mind which seem to affect our most basic notions about behaviour, volition, and the very concept of consciousness.

We will next look at what exactly the strange phenomena are that hypnosis brings with it, before considering how hypnosis relates to our common notion of consciousness, and how it challenges said notion.

2.4 Explananda of Hypnosis

Those who study the subject of hypnosis for any amount of time will eventually encounter a host of commonly reported remarkable phenomena. These may range from amnesia to catalepsy to changes in the perceived personal identity, pain resistance, time distortion and hypnotic hallucinations. Broadly, these hypnotic phenomena may be split into *physical* and *mental* phenomena. A third feature of hypnosis is *suggestibility*, a kind of instructability of the hypnotic subject, leading it to follow the hypnotist's commands. A fourth reoccurring phenomenon asking to be explained is *time distortion*, referring to the fact that hypnotic subjects seem to commonly heavily over- or under-estimate the time passed during a session of hypnosis.

Examining the broad overarching phenomena of hypnosis gives us the following four explananda:

1. Physical Phenomena
2. Mental Phenomena
3. Suggestibility
4. Time Distortion

A similar list of hypnotic explananda is handled by many researchers (see, e.g., Edgette & Edgette 1995, 13-14; Brann, Owens, Williamson 2012, 20-26; Jacquin 2007, 23-2; McGill 1996, 29-32). It must be mentioned that some phenomena of hypnosis may, depending on the model of hypnosis, be seen as belonging to a different category. Some physical phenomena may, for example, be explained as mental phenomena (in that the subject is merely behaving *as if* they are blind, deaf, unable to move) instead. A decision has been made here to sort the explananda of hypnosis into distinct categories for the sake of clarity.

2.4.1 Explanandum One: Physical Phenomena

Physical phenomena encompass every hypnotic phenomenon directly affecting the body. McGill describes that “various physiological effects can be produced in the state of hypnosis. (...) The pulse can be quickened or retarded, respiration slowed or accelerated, and perspiration can be produced all by suggestion. Even the temperature of the body can be affected” (McGill 1996, 31). Two of the most striking physical phenomena associated with hypnosis are analgesia, or “partial sensory loss” (Jacquin 2006, 23) and anaesthesia, or “total sensory loss” (Jacquin 2006, 23). Hypnotic analgesia and anaesthesia are commonly used in clinical environments, by general practitioners and dentists.

Some physical phenomena, like auditory and visual hallucinations, have repeatedly been shown to not actually occur, that is to say, the subjects are still exhibiting the same physical responses to physical triggers when presented with auditory or visual stimuli (Wagstaff 2018,

& Perlini, Spanos & Jones 2018, 200). These phenomena may by some be understood to be mental phenomena of hypnosis instead.

We may define physical hypnotic phenomena as the following: *the inhibition or excitation of physical responses, in the respective presence or absence of appropriate external triggers.*

2.4.2 Explanandum Two: Mental Phenomena

The group of mental hypnotic phenomena includes phenomena such as amnesia, perceived changes of identity, hypnotic regressions and hypnotic hallucinations. Mental phenomena involve the activation or inhibition of existing or new beliefs, existing or new expectations and existing or new feedback-loops.

Beliefs, in this case, are taken to be fundamental assumptions we take to be true about the world the subject inhabits, pertaining to the subject themselves, external objects, and the relations and dynamics between subject and objects, objects and objects, and subjects and other subjects. Several beliefs taken together may form a belief-system.

Expectations are understood to be inductively generated deviants of beliefs. They are future-projected and inform of what a subject finds more or less likely to occur in the near or distant future. Expectations, like belief, do not have to be consciously held but can be established, held and altered at an unreflected level.

Feedback-loops combine at least two elements into a self-reinforcing continuous loop.

With regards to mental phenomena in hypnosis, at least three elements must be combined to form an effective feedback-loop: beliefs, expectations and experience. Experience is any form of event, be it internal or external, that either confirms or disconfirms a subject's beliefs and expectations. Any set of beliefs will generate expectations. Any experience following these beliefs and expectations, provided it pertains to the same somehow, will either strengthen or

weaken the beliefs, thereby strengthening or weakening expectations. In the case of an experience that strengthens said belief, a self-reinforcing feedback-loop is created.

We shall define mental hypnotic phenomena as: *the activation or inhibition of existing or new beliefs, existing or new expectations and existing or new feedback-loops.*

2.4.3 Explanandum Three: Suggestibility

Suggestibility is understood to mean the hypnotic susceptibility of a subject. Different scales have been developed to measure the hypnotic susceptibility of a subject, with the Stanford Hypnotic Susceptibility Scale (Weitzenhoffer & Hilgard 1962) and the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne 1962) being two of the most widely used ones. Most suggestibility scales include tests for different mental and physical hypnotic symptoms and may take anywhere from 10 (Spanos et al 1983 & Barber & Wilson 1978) to 50 minutes (Weitzenhoffer & Hilgard, 1962). What is tested is how readily the hypnotic subject responds to suggestions. The true explanandum of hypnosis we are looking at here, however, is not *how* suggestible an individual is, but the fact that humans are suggestible *at all*.

Suggestibility, as we understand it here, may then be defined as follows: *the predisposition of subjects to put aside their own thoughts, reflections and objections in favour of following external commands.*

2.4.4 Explanandum Four: Time Distortion

Anthony Jacquin describes time distortion as the “contraction and expansion of the perception of time” (Jacquin 2006, 23), while Anne Williamson mentions that “time distortion seems to be an almost universal experience in hypnosis where people often greatly underestimate the time they have been in hypnosis” (Williamson 2012, 25).

Physical and mental phenomena as well as suggestibility can all be altered or influenced through the hypnotist’s prior suggestions and beliefs (Perlini, Spanos, Jones 2018; Wagstaff

2018), time distortion seems to consistently occur without the hypnotic subject's prior knowledge of the existence of this phenomenon. The fact that time distortion is not influenced through suggestion but seems to occur simply by engaging the subject in a process of hypnosis, as well as its universality, makes it a particularly interesting explanandum to include in our list.

Peter Naish researched time distortion (Naish 2007, & Naish 2013) more closely and observed that "after a session of hypnosis, the majority of people underestimate its duration, not uncommonly by as much as 50 percent"(Naish 2013, 126).

Time distortion as an explanandum of hypnosis may be defined as: *altered perception of the duration of a given amount of time.*

3. Hypnosis and Consciousness

One of the primary reasons hypnosis deserves to be examined more closely by psychologists and philosophers alike is that it calls into question some of the most fundamental assumptions commonly held about consciousness. To understand how exactly hypnosis relates to consciousness, and how it might threaten some of the basic assumptions we have about the concept, we must first understand what the term *consciousness* entails.

3.1 Consciousness as “What it is Like”

Thomas Nagel presents us with what is currently one of the most widely used notions about consciousness, suggesting that consciousness means there is “something it is like” for one to be experiencing a specific state from a first-person perspective (Nagel 1974). Nagel postulates that a creature is conscious when it is able to experience the outer world through its sense modalities and, therefore, there is “something it is like” for that creature to be that creature.

When we taste food or drink, or smell something, there is something it is like for us to experience this. For Nagel, this denotes the conscious state. It may be understood as a form of primal awareness by virtue of having experiences. Due to this, Nagel’s view is restricted to living organisms: there is something it is like to be a bat, but not something it is like to be a spoon.

While Nagel’s theory offers a very popular way to think about consciousness, someone enquiring into the nature of consciousness may in actuality want to know about the nature of self-consciousness, or of consciousness as being self-aware and able to reflect on thoughts, feelings and experiences. In this case, Nagel’s theory only covers one half of the issue: basic awareness. We still need to a definition and model for the other half, self-awareness.

3.2 Consciousness as Self-Consciousness

Where Nagel's definition of consciousness is primarily aimed at something in the external world, there is another way of thinking about consciousness. This second way understands consciousness as self-consciousness and proposes that consciousness must involve awareness of one's own experiences and mental states in one way or another. The self-consciousness definition of consciousness is advanced at length both by Immanuel Kant in his *Critique of Pure Reason* (Kant 1781) and Jean-Paul Sartre in *Being and Nothingness* (Sartre 1956).

More recently, the same idea has been championed further, under the name of Higher-Order Theories of Consciousness, by several philosophers, at the forefront David Rosenthal (1986, 2005), and including Uriah Kriegel (Kriegel 2004) as well as Rocco Gennaro (Gennaro 1996, 2004 & 2018, 142-169).

According to Gennaro and others, "what makes a mental state conscious is the presence of a suitable higher-order thought directed at it" (Gennaro 2005, 3). This way of understanding certainly redefines consciousness in a way that manages to include questions of self-awareness and self-consciousness. However, Higher-Order Theories, too, suffer from potential shortcomings. Higher-Order Theories presumably require a lower-order level of thought at which to direct higher-order thoughts or, indeed, from which to derive and develop higher-order thoughts in the first place. This means, as Drew McDermott formulates it, that "conscious thought then appears because of trickery going on at the nonconscious level" (McDermott 1997, 2). Neither Gennaro, nor Rosenthal, nor further defenders of Higher-Order Theories of consciousness seem to provide a particularly strong case for how low-level thought makes the transition to higher-level thoughts, nor do they provide a theory of non-conscious states, making it unclear what exactly is happening at the supposed lower levels of thought.

3.3 Ned Block's A-Consciousness and P-Consciousness

It would seem that both Nagel's "what it is like" theory as well as the Higher-Order Theories of consciousness suffer from their mutually exclusive definitions of consciousness. Nagel

limits his definition of consciousness to the level of primal experience, whereas Gennaro and his companions fail to include precisely this in their theories. A reconciliation of these two ways of understanding consciousness is offered by Ned Block in *Concepts of Consciousness* (Block 2002). Block draws a distinction between what he names Phenomenal Consciousness (P-Consciousness) and Access Consciousness (A-Consciousness). He considers these types of consciousness to be intrinsic to human nature, that is, to be genetically programmed and inherent in any normally functioning human.

According to Block, “P-conscious properties include the experiential properties of sensations, feelings and perceptions” (Block 2002, 2006). At large, P-Consciousness maps onto Nagel’s “what it is like” notion of consciousness. As such, P-Consciousness too denotes a kind of primal awareness all living creatures presumably possess merely by virtue of having experiences, again sharing extreme similarity with Nagel’s view in that a state is “P-conscious just in case it has experiential properties” (Block 2002, 206). Because P-conscious content does not require reflective awareness or mental accessibility, but only direct experience, it is always phenomenal in nature.

A-Consciousness, on the other hand, refers to the accessibility of mental representations. A representation is found in A-Consciousness “if it is broadcast for free use in reasoning and for direct ‘rational’ control of action (including reporting)” (Block 2002, 208), meaning a thought or perception is A-conscious when it is introspectable, possible to be reflected upon and can be reported upon by the subject. According to Block, it does not suffice for an A-conscious thought to be *available* for use in reasoning. Instead, it must be “poised” (Block 2002, 208), that is, it must be at the ready for the control of behaviour. By way of example: we may technically have access to a specific mathematical formula. However, its mere availability does not make this formula A-conscious. Only once accessed and directing our behaviour does the thought become A-conscious.

Considering that any A-conscious content must be available for reasoning, and that any mental content available for mental manipulation must be representational, Block concludes

that A-conscious content is always representational (Block 2002, 209), as opposed to the always phenomenal P-conscious content.

Even though Block offers conceptual examples to the contrary (Block 2002, 211-212) he submits that in actuality A-consciousness is dependent on P-consciousness and may “come and go against a backdrop of P-consciousness” (Block 2002, 210). This makes sense, as for us to access a mental representation, we must first be there and be *experiencing*, which is to say there has to be something which it is like to be us at the moment. Only against the backdrop of this may we access mental representations. Block offers the example of a “super-duper blindsighter” who has a certain blindspot in their vision (Block 2002, 211). This person, however, may make themselves “guess” and correctly identify what is in their blindspot without being phenomenally aware of what is there. Block accepts this as a conceptually possible (although in actuality probably impossible) example of A-consciousness without P-consciousness. I would argue that there is, however, still P-consciousness involved. The A-conscious insight of what the super-duper blindsighter has in their blind spot still happens against a backdrop of “what it is like” to be them, even though no specific P-conscious experience of the thing in their blindspot is happening.

As may be apparent, A-consciousness carries strong similarities to the aforementioned Higher-Order Theories of consciousness. The reflective direction of higher-level thoughts towards an experience would certainly require a module similar to Block’s A-Consciousness to be able to access and willingly manipulate a mental representation in a way that Higher-Order Theories would deem conscious. In fact, Block imagines a subject only becoming A-conscious of the sound of a pneumatic drill after a certain period of time has already passed. The same subject becomes then aware that it is now, and has been, hearing the sound of the pneumatic drill and thus gets higher-order thought (Block 2002, 212). In this example higher-order thought is dependent on A-Consciousness and can only follow once a mental representation of the drill’s sound became mentally accessible in an A-conscious way. Block himself also points out that A-Consciousness, similarly to the understanding of Higher-Order

Theories of consciousness, is “typically the kind of consciousness relevant to use of words like ‘conscious’ and ‘aware’” (Block 2002, 210).

As can be seen, Block offers a theory of consciousness reconciling ideas from Nagel’s as well as Rosenthal’s and Gennaro’s understanding of consciousness. It is this dual notion of consciousness as being composed of A-Consciousness and P-Consciousness which seems to be underlying common attempts to understand the phenomenon of hypnosis, This leads to certain difficulties.

3.4 Hypnosis and A-Consciousness

Hypnosis poses a challenge to Ned Block’s dual notion of modern consciousness.. It seems as if, within some instances of hypnosis, the hypnotic subject is reduced to exhibiting P-Consciousness without A-Consciousness. It seems as if, through a suitable induction procedure, the hypnotic subject’s sense of self is diminished completely. The subject may even display complete amnesia to demonstrate this fact.

This loss of self may be taken to point towards the fact that the subject does not operate A-Consciousness anymore, for it is A-Consciousness that is required to sustain a sense of self. Block himself describes self-consciousness as “the possession of the concept of self and the ability to use this concept in thinking about oneself” (Block 2002, 213), reaffirming that without A-Consciousness no concept of self can be sustained. A loss of self may result in a loss of time, for it is only through thinking about oneself as *having done* certain things, or as *going to do* other things, that a temporal continuity of the self can be established and, thus, a sense of time ensues dependent on the concept of self.

Furthermore, the loss of self disables the subject to reflect on and subsequently deny the hypnotist’s commands, leaving it vulnerable to immediately following the suggestions given by the hypnotic operator. It may be assumed that A-Consciousness would also be relevant for both the creation and the retrieval of representational memory. To bring up a picture from one’s past is, in fact, nothing else but to access and subsequently manipulate a mental

representation of the same. However, to make memories one must translate the experiences made into mental representations. Before even that, one must be imbued with a sense of self to assign the experiences and their prospective mental representations to oneself. Here again the fact of hypnotic subjects being unable to access memories during hypnosis and their inability to remember the proceedings after the hypnosis is resolved would, in Block's understanding, have to point to a diminishment of A-Consciousness.

The hypnotic subject seems to become, for all intents and purposes, a sort of *zombie*, with P-Consciousness but no A-Consciousness, yet outwardly able to behave *as if* A-Consciousness were available. Considering that Block understands A-Consciousness to be *genetically inherent* to human nature, it would seem impossible that it should simply be diminished and disappear, yet all outward behaviour and any observations made of hypnotic subjects seem to suggest this very idea. How could something genetically programmed into human nature simply be "turned off"?

The fact that Ned Block has written curiously little about hypnosis (which is to say: seemingly nothing) while apparently being most interested in the concept of consciousness seems to confirm my suspicions that this phenomenon, like many other fringe phenomena of consciousness such as possessions, prophecy and schizophrenia, might have been swiped under the proverbial table as they do not sit well with the rest of his theories. As we will see shortly it is certainly true that Block does not feel kindly towards the idea of potential "zombies" with P-consciousness, behaving as if but not having A-consciousness. This becomes apparent in his critique of Julian Jaynes and his radically different model of consciousness. First, however, we will discuss attempts to explain hypnosis within the framework of consciousness being an inherent part of human nature.

4. Explaining Hypnosis

Having laid out the explananda a model of hypnosis should be able to account for - physical and mental phenomena, suggestibility and time distortion -, we shall now look at the current mainstream models of hypnosis and what approaches to explaining hypnosis they offer. The models of hypnosis that will be discussed are:

1. (Neo)Dissociation
2. Social Role-Taking
3. Cognitive Behavioural

These schools of thought are generally regarded to represent the current main streams of thinking when it comes to hypnosis (see, for example, Lynn & Rhue 1991; Nash & Barnier 2008; Lynn, Rhue, & Kirsch 2010).

4.1 Dissociation Theories of Hypnosis

Dissociation theories of hypnosis generally state that, during the process of hypnosis, the subject's consciousness is split into two or more compartments, one of which becomes "hypnotised". While originally developed by Pierre Janet (1859-1947), the Dissociation theory of hypnosis was further developed and championed by André Muller Weitzenhoffer (1921 - 2004) and Ernest Hilgard (1904 - 2001); both of whom also developed the Stanford Hypnotic Susceptibility Scales we briefly examined above.

Weitzenhoffer understood hypnosis to be "the dissociation of awareness from the majority of sensory and even strictly neural events taking place" (Weitzenhoffer 1953), the suggestion here being that the hypnotic subject would be fully unaware, possibly by way of splitting off their consciousness, of any sensory input given to them. Weitzenhoffer understood this dissociation process to be a protective mechanism of the human mind; as did Hilgard, who further developed the approach in his book *Divided Consciousness: Multiple Controls in*

Human Thought and Action (Hilgard 1977). It is Hilgard's work which is commonly termed as NeoDissociation theory¹.

4.1.1 Hilgard's Hidden Observer

Hilgard questioned the fact of whether in hypnotic dissociation the subject could be harmed, or be made to harm others, or whether some part of conscious volition would be retained and be ready to intervene if need be. Famously, his experiments (Hilgard 1977a, & Hilgard 1977b, 48-59) led him to the discovery of what Hilgard termed the "hidden observer". The hidden observer, according to Hilgard, would be an entity² keeping watch over the hypnotised subject during the process of hypnosis. This entity would also be able to process and report back on what was truly happening, while the subject itself remained dissociated from the proceedings.

4.1.2 Dissociation Theories and Physical Phenomena

A clear focus in dissociation theories is put on explaining how a subject can undergo painful proceedings, such as an operation, seemingly without perceiving any discomfort. According to the dissociation model of hypnosis, this is due to the subject splitting their mind in two as it were, thus partly dissociating from any discomfort.

While it would seem that this theory explains physical phenomena such as analgesia well enough, some things remain unclear. One of the most pressing questions dissociation theories of hypnosis seem to gloss over consistently is why the hidden observer, that is, the part of the subject that does remain conscious, if fully aware, does not seem bothered by the pain being inflicted.

One explanation may be found in changing the common understanding of the hidden observer away from it being a conscious entity. Hilgard himself revised his definition of the hidden observer in stating that "the 'hidden observer' was intended merely as a convenient label for

¹ Although there are some differences to be found, Dissociation theory and Neodissociation theory of hypnosis will be referred to interchangeably within this essay.

² Entity, in this case, would not refer to any external or supernatural being, but instead to a dissociated part of the subject's consciousness.

the “information source capable of a high level of cognitive functioning, not consciously experienced by the hypnotised person” (Hilgard 1992, 77). While this would potentially overcome the question of why the observant part of the subjects consciousness does not suffer (because, in this interpretation of dissociation theory there would be no separate conscious entity) it remains somewhat unclear how this highly functioning information source is able to access and control the hypnotic subject’s behaviour, and how exactly it relates to the subject’s ‘actual’ consciousness.

All in all, however, taking hypnosis as the process of dissociating consciousness from external events does provide a reasonable explanation for physical phenomena, especially where they relate to canceling out external stimuli as observed in hypnotic analgesia.

4.1.3 Dissociation Theories and Mental Phenomena

Regarding mental phenomena in hypnosis, dissociation theory does not necessarily carry as much explanatory power. The mere dissociation from outside events does not directly translate into the activation or inhibition of new or existing beliefs. Beliefs may, of course, be changed somewhat by virtue of the subject experiencing an event they expected to be painful and then not perceiving of any pain at all. Maybe this expectation of pain led to a severe fear of this particular procedure in the subject. This fear may now be cured, due to the subject having an unexpectedly positive experience, thus changing their belief by proxy.

4.1.4 Dissociation Theories, Suggestibility and Time Distortion

If we assume dissociation to have similar effects on the subject as the absence of A-Consciousness, dissociation theory may very well offer coherent explanations for both suggestibility and time distortion. Dissociation may produce similar effects as the absence of A-Consciousness because the self-aware part of the subject’s mind seems to be dissociated and averted from the happenings. This speculative “turning away” of self-consciousness would presumably leave the subject in some state akin to phenomenal awareness, but nothing to reflect upon it with.

Time distortion might then be explained by assuming that the subject, during the process of hypnosis, is not experiencing the happenings in reference to a self and thus does not inject them into an ongoing timeline sequence. The hypnotic subject may not even be making memories, which would make an estimation of the time passed after the hypnosis session extremely difficult.

Suggestibility might be explained by the fact the the hypnotic subject's reflective "defences" are down: in the absence of self-consciousness, the subject has no access to a process of reflection and subsequent denial of the suggestions given.

4.1.3 Dissociation Theory's Mystery Process

Dissociation theories do bring several excellent ideas and approaches to explaining hypnosis. They do, however, leave two crucial points out of their explanations. Firstly, it is not made clear where exactly the dissociated part of consciousness goes, or what exactly happens to it. That is to say, dissociation theories are not clear on what supposedly happens to the subject's "normal" part of their consciousness. Does it go into a hidden corner of the mind? Is it put into stand-by? Does it disappear completely? The latter point would be hard to argue for, as long as we operate under the assumption that consciousness is biologically inherent to human nature.

Secondly, dissociation theories seem to have little to say about how the dissociation process works precisely. They offer no mechanism to explain how the mind is split into two or more parts and how, subsequently, consciousness reconciles into one.

4.2 Social Role-Taking Theory of Hypnosis

The social role-taking theory of hypnosis, championed by Theodore R. Sarbin posits that a hypnotic subject, during the process of hypnosis, takes on what they believe to be the behaviour of a hypnotised person (Sarbin 1972). This does not mean the hypnotic subject is consciously faking being hypnotised. In fact, Sarbin stresses the difference between *playing* a

role and *taking on* a role. The latter case involves much greater involvement on the part of the subject and may have the subject believing in their own role.

4.2.1 Social Role-Taking Theory and Physical Phenomena

Social role-taking theory makes a compelling case regarding the occurrence of physical phenomena. A study involving delayed auditory feedback showed that hypnotic subjects who had been suggested deafness were not, in fact, deaf but merely behaved as if (Barber, Calverley 1964). Within the study, subjects were hypnotically suggested to be deaf. They were then asked to read a text while wearing a set of headphones playing their own voice back to them. Upon the introduction of a slight delay in the auditory feedback, the subjects began to stutter, proving they were not actually deafened by the suggestion.

Several pieces of research indicate that most if not all of the reports of hypnotic subjects producing negative hallucinations (i.e. blindness, deafness) are largely influenced by social demands compliance tendencies on the part of the subject. Spanos, Perlini and Jones note that “the behavioural evidence indicates that sensory functioning is not appreciably interfered with by negative hallucination suggestions, whereas verbal reports are greatly influenced by social demands and compliance pressures independent of any change in perceptual functioning” (Perlini, Spanos, Jones 2018, 217).

According to these researchers, it is unlikely that an actual sensory hallucination is occurring. Instead, while subjects might even believe that such a hallucination occurred, they are merely slipping into the role of how they understand a hypnotised person to behave.

4.2.2 Social Role-Taking Theory and Mental Phenomena

Social role-taking theory approaches mental phenomena in the same way as physical phenomena: instead of the subject actually experiencing amnesia, they may merely behave as if they did; fascinatingly even convincing themselves of their own role as a person ‘in’ hypnosis.

For social role-taking theorists, some of the physical phenomena mentioned above, like hypnotic deafness, are considered to really be mental phenomena: the subject merely believing to be deaf. Social role-taking theory will still have to account for truly physical phenomena, not the least of which is analgesia. Upon closer inspection it should strike anyone as counterintuitive that taking on a role should render a subject immune to pain. While pain certainly is somewhat dictated by the way different individuals respond mentally to an external stimulus³, it is unlikely that the stimulus and the corresponding response should be all-together annihilated merely through taking on a social role.

4.2.3 Social Role-Taking Theory and Suggestibility

The issue of suggestibility in and of itself might prove to be another stumbling stone for social role-taking theorists, with the question being why exactly subjects choose to behave in what they believe to be hypnotic behaviour in the first place. Defenders of the theory might generally offer one of two responses. Firstly, it might be claimed that the belief in hypnosis has grown so strong as to subsequently influence the subject's behaviour, without the subject being aware of it. In other words, the subject unconsciously taking on the role of a hypnotised person follows the hypnotist's suggestions because they wholeheartedly believe that is what a hypnotised person would do.

The second approach to explaining suggestibility would be to simply claim the power of authority as the engine of the hypnotic process. Many notable pieces of research have been done into exploring the reach and effect of authority⁴.

The full reach of authority has been demonstrated impressively in Stanley Milgram's *Milgram experiment on obedience to authority figures* (Milgram 1963). Participants in the experiment

³ Heller & Steele, in discussing psychological factors in the experience of pain, write: "Augmenters [individuals who mentally enhance negative sensory perceptions] recover from illness or surgery more slowly, with more complications, and more complaints than a reducer [individuals who mentally decrease negative sensory perceptions]." (Heller, Steele 1987, 104).

⁴ See, e.g., Philip Zimbardo's well-known *Stanford Prison Experiment* in 1971.

were instructed to deliver increasingly severe electric shocks to other individuals, up until the electric voltage delivered would have been lethal. Even though the electric shocks delivered were fake and the electrocuted individual was merely pretending to be in pain (unbeknownst to the participants), the experiment revealed a very real willingness to obey the instructions of an authority figure.

However, Milgram himself noted that “the extreme willingness of adults to go to almost any lengths on the command of an authority constitutes the chief finding of the study and the fact most urgently demanding explanation” (Milgram 1974). Thus, while this and several other experiments showed that authority carries with it the power to subvert the volition of those subjected to it, they do not conclusively explain why obedience to authority and, directly related, extreme suggestibility seem to be inherent to human nature.

4.2.4 Social Role-Taking Theory and Time Distortion

Time distortion seems to be a hypnotic symptom not brought on by social demands or through role-taking, simply because the large majority of hypnotic subjects does not know of this particular phenomenon. It is, as Naish suggests, a “modification to perception that is intrinsic to hypnosis” (Naish 2013, 126) that social role-taking theories do not readily offer an explanation for.

4.2.5 The Hypnotic Subject’s Unawareness of Their Role

As mentioned above, social role-taking theorists handle a distinction between *playing* a role and *taking on* a role. While the distinction is conceptually clear, social role-taking theories do seem to lack an explanation for two related problems.

Firstly, it is not clear why the subject is unaware of their playing a role. Social role-taking theories seem to assume that there is some mechanism through which the subject processes information regarding the hypnotic process (i.e., that hypnotic subjects are obedient, or that they develop spontaneous amnesia), which is then translated into a set of behaviours, which the subject then takes on and acts out *without being aware of the fact that they are acting them*

out. How can it be that a hypnotic subject convinces themselves of having seen a letter on a blank page, when the sensory input was never there? How can this conviction persists even when this conviction is tested, as is done in the delayed auditory feedback test described above? When we play a role, we usually play it consciously. The mechanism for *taking it on*, i.e. convincing ourselves that the role is real, would seem to be an important part of completing social role-taking theories.

Secondly, it is unclear how or why the difference between playing a role and taking on a role occurs. A subject may, at one point, be asked to fake being hypnotised and act as if they hallucinated a letter on a blank page. The same subject may then be hypnotised and asked to hallucinate the same letter on a page. Seemingly nothing changed, yet the subject reports back with a subjectively very different experience on the two trials. Social role-taking theories do not describe what process exactly differentiates the playing a role and taking on a role.

4.3 Cognitive-Behavioural Theory of Hypnosis

The cognitive-behavioural theory of hypnosis approaches hypnosis not as a single phenomenon, but as a collection of several phenomena and processes collected under the term *hypnosis*. Barber and colleagues deconstruct the phenomenon of hypnosis into several individual phenomena mediated through social pressure, belief, expectancy, motivation, attitudes, retrospective reframing and compliance demands all working on the individual (Barber, Spanos, Chaves 1974).

4.3.1 Cognitive-Behavioural Theory and Isolated Hypnotic Phenomena

Thus, cognitive-behavioural theory can offer up different processes as an explanation for different phenomena. By claiming these phenomena to be unrelated to each other because they were wrongly categorised as part of the same phenomenon (that is, hypnosis) cognitive-behavioural therapy attempts to successfully explain hypnosis, and does so with some success.

Nicholas Spanos, one of the developers of the cognitive-behavioural theory of hypnosis, also famously explored whether or not hypnotic subjects could be trained to become more susceptible to suggestion. Essentially, Spanos' approach entailed the subject consciously behaving as if they were hypnotised and to then reinterpret the experience as having been caused involuntarily. Suggestions delivered to hypnotic subjects included instructions such as "(...) you must lift your arm up and (...) you must actually make it seem real" (Gorassini & Spanos 1986).

If we assume the phenomenon of hypnosis to be more than a mere retrospective reframing of a volitional experience, we must realise that the most that can be said to be gained within this specific approach of Spanos' would be an experience of what it might be like to have been hypnotised, but certainly not an actual experience of hypnosis. Cognitive-behavioural theories of hypnosis are, in this way, very similar to social role-taking with the difference being that in social role-taking theories the experience seems to be reinterpreted during the proceedings, while cognitive-behavioural theories claim this reinterpretation to be retrospective.

There is a clear difference between retrospectively interpreting an experience as involuntary and actually experiencing something as involuntary in the moment. As Jørgen Rasmussen states, this cognitive-behavioural approach to training hypnotic susceptibility merely "gets people to behave in a compliant way as well as to reinterpret volitional experiences as if they were non-volitional" (Rasmussen 2015, 153).

4.3.2 Criticism of Cognitive-Behavioural Theories

The one criticism of cognitive-behavioural theories of hypnosis I wish to put forward is the fact that they look at hypnotic phenomena in isolation. While each of our four explananda hypnosis may occur outside of hypnosis individually, they uniquely come together time and time again within the process of hypnosis. It would therefore seem to be misguided to isolate these features and explain them individually instead of attempting to find an underlying unifying process with the explanatory power to account for all of them at once. Cognitive-behavioural theory offers compelling explanations for each of our explananda and more on its

own, but fails to show why it is that they seem to consistently occur *together*. This is why I have the suspicion that instead of explaining hypnosis as a whole, cognitive-behavioural therapy may be overlooking an underlying unifying process of hypnosis.

4.4 The Problem of Consciousness in Modern Hypnosis Models

All three of the above models bring to the table their own set of insights as well as shortcomings. Some of these shortcomings are due to the specific model, such as the missing explanatory mechanism for dissociation, while others may be more general in nature.

It occurs to me that each of the models presented above may find it hard to manoeuvre around certain problems because they were built with the same commonly held notion of consciousness in mind: that of consciousness as inherent to human nature and as invariably defined by Access-Conscious on top of Phenomenal-Consciousness.

Social Role-Taking theory will have difficulty explaining how subjects convince themselves of their own role because they face the issue of A-Consciousness. With A-Consciousness present, it becomes hard to conceive how the hypnotic subject does not have access to the fact of their own pretend-behaviour.

Dissociation theories may deal with this same problem by assuming that A-Consciousness is dissociated or averted in some way. They do, however, lack a dissociation mechanism. Yet even a dissociation mechanism would bring with it explanatory issues if one is to assume that A-Consciousness and P-Consciousness usually go together. Furthermore, dissociation theories might be troubled by the inherent nature of A-Consciousness, suggesting that A-Consciousness is an indisputable fact of our experience as humans. If the reports of hypnotic subjects are to be believed, A-Consciousness however seems to not be involved in at least some occurrences of hypnosis, with the subject losing all sense of self.

Cognitive-behavioural theories will effectively face the same challenges as social role-taking theories: they are lacking the mechanism to explain how the subject convinces themselves of

the hypnotic nature of their experience. This problem is less severe for cognitive-behavioural theories than for social role-taking theories because the reframing happens after the fact, thus with A-Consciousness presumably restored (if it was ever gone). Cognitive-behavioural theories do, however, lack an answer as to why specific hypnotic phenomena seem to occur predictably alongside each other.

While each of the theories may have their own advantages and disadvantages, each of them has at least one major challenge that may be led back to the fact that they share an underlying understanding of consciousness as inherent and as defined by the operation of A-Consciousness as well as P-Consciousness. I therefore suggest that a viable approach may be to look at hypnosis with a radically different theory of consciousness in mind and to explore what model of hypnosis might be designed from there on.

5. Julian Jaynes' Theory of Consciousness

A radically different theory of consciousness upon which to build a potential new model of hypnosis can be found in the thought of Princeton psychologist Julian Jaynes (1920-1997). The theories Jaynes shared in his book *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Jaynes 1976)⁵ are as provocative today as they were upon their initial release. They are alternatively seen as enlightened or crazed.

While Jaynes' full theory is generally understood to consist of four parts, only two of these are of importance in our exploration of consciousness and hypnosis. Firstly, Jaynes' proposition for a different understanding of the structure of consciousness and its make-up, namely as not innate but acquired. Secondly, a proposed alternative way of using our mental facilities in what Jaynes' describes as a *bicameral mind*.

5.1 Consciousness as a learned process

Julian Jaynes' claim here is that consciousness is not an inherent emergent feature of the human brain as Block would have it, but a learned process mediated through language and the social environment we find ourselves in. Consciousness, then, is not a feature of the brain nor mind itself but a way in which we use these faculties.

While this may sound counterintuitive at first, it is necessary to understand that Julian Jaynes had a very specific, limited notion of consciousness. Over the course of this essay, we shall refer to Jaynes's notion of consciousness as J-Con — an abbreviation borrowed from John Limber's essay *Language and Consciousness* (Limber 2006). To quote from the same, “for Jaynes, consciousness was limited to what was introspectable and also limited in its overall contribution to human behaviour” (Limber 2006, 173).

⁵ Abbreviated: *Origin*

To see what Jaynes considers consciousness to be exactly, we shall turn to *Origin* and directly to Jaynes' words:

“...consciousness is an operation rather than a thing, a repository, or a function. It operates by way of analogy, by way of constructing an analog space with an analog ‘I’ that can observe that space, and move metaphorically in it. It operates on reactivity, excerpts relevant aspects, narratives and conciliates them together in a metaphorical space where such meanings can be manipulated like things in space. Conscious mind is a spatial analog of the world and mental acts are analogs of bodily acts.”(Jaynes 1976, 65-66).

We shall take a closer look at the features of Jaynesian consciousness as described in the above quote.

5.1.1 Consciousness as Spatial Analog of the World

One of the key aspects of J-Con is that it is generated through our metaphorical use of language. Jaynes analyses any process of understanding to be an application of metaphor. Metaphor means “the use of a term of one thing to describe another because of some kind of similarity between them or between their relations to other things” (Jaynes 1976, 48).

According to Jaynes, when we attempt to understand or describe a new thing, we really strive to arrive at a familiar metaphor for said thing. By being able to describe what something “is like” we approximate that thing and an understanding of the same. We may fit it with a new term and over time may understand this term to denote that thing exactly, while forgetting about the original metaphor. Eventually, the thing and its term may become the metaphor used to describe another new thing.

Alternately, we may use a term denoting a familiar thing to describe a new circumstance, thus conjuring up an understanding of what we are attempting to communicate to the other by way of the term used. The term we use to denote this new circumstance, with its familiarity and all its corresponding associations, thus functions as a shortcut to understanding. Julian Jaynes

gives the example metaphor of snow blanketing the ground (Jaynes 1976, 57). In this case, we use the term ‘blanket’ to describe just how the snow relates to the ground: it is presumably covered completely, and associations like that of deep slumber and silence are triggered⁶. In Jaynes' words, “the lexicon of language (...) is a finite set of terms that by metaphor is able to stretch out over an infinite set of circumstances, even to creating new circumstances thereby” (Jaynes 1976, 52). Consciousness, or J-Con, is, as we shall shortly see, such a newly created circumstance.

J-Con is generated as an analog of the spatial external world. It is generated when we attempt to understand the way in which we solve problems, or relate to the external world. It is, however, slightly different from the way metaphor was described to work above. As Jaynes puts it,

“if understanding a thing is arriving at a familiarizing metaphor for it, then we can see that there always will be a difficulty in understanding consciousness. For it should be immediately apparent that there is not and cannot be anything in our immediate experience that is like immediate experience itself” (Jaynes 1976, 53).

Part of Jaynes’ project is to show how consciousness is generated. If consciousness must first be generated, metaphor naturally cannot be applied: even if we had a fitting familiar term, there is nothing yet to which it can be applied, nothing yet which can be understood through

⁶ Julian Jaynes introduces specific, if somewhat unfamiliar, jargon for the different parts of a metaphor. The familiar term used to denote that which is unfamiliar he calls *metaphier*; the unfamiliar thing or circumstance compared to the former is called the *metaphrand*. Each metaphier carries with it specific associations, the *paraphiers*. These paraphiers automatically carry over into becoming associations of the metaphrand, and are then called *paraphrands*.

In the above example, the blanket is the metaphier, the way in which the snow covers the ground is the metaphrand. The ideas of slumber and silence are paraphiers of the word “blanket”, which then become paraphrands of how the ground is covered in snow. (Jaynes 1976, 57)

While effective for Jaynes’ purposes in *Origin*, these terms are not strictly necessary for our discussion in this essay and are, thus, left out for the time being.

metaphor; nothing but immediate experience, that is. Instead of consciousness being something that already exists, and which is then understood by way of metaphor, consciousness, according to Jaynes, is created as an *analog* of the external world.

An analog, Jaynes explains, “is at every point generated by the thing it is an analog of. (...) it is constructed from something well known, if not completely known” (Jaynes 1976, 54). We are offered the example of a map. The map itself is not a metaphor for the actual lay of the land, but an analog of it - a model created, at every point, from the land. The relation between the map and the land, however, is one of metaphor. To use the map to describe the land, or to gain an overview of the land, is to apply metaphor and, through it, understand that the relations of certain points on the map are similar to the relations of certain actual points in the land.

Understanding the generative force of metaphor and its associations as well as how an analog operates, we may now see how J-Con finds its origin in a similar manner. To stay with an example Julian Jaynes provides us with, we shall assume that we encountered a problem, subsequently solved it and, now, exclaim the very fact by stating that we finally see the solution (Jaynes 1976, 58). When we do this, we now of course apply the metaphor of “seeing” to the process of finding the solution. As we know, every familiar term applied to a new or abstract circumstance brings with it its own set of associations. The most important association, with the metaphor of *seeing*, is that of a *space* in which something is seen, and that of objects that can be seen. This association carries over and creates a new association, namely that of a mental space, and of mental objects which can be mentally seen.

It is in this way, yet on a much grander scale, that an introspective mind-space is created. This mind-space is an analog of the world, generated through the associations of the metaphors we use to describe our mental processes. This is why, says Jaynes, “the structure of that world is echoed (...) in the structure of consciousness” (Jaynes 1976, 59).

It must be noted that consciousness, once generated, takes on a use of its own. As Jaynes puts it, “a cardinal property of an analog is that the way it is generated is not the way it is used” (Jaynes 1976, 59). That is to say, once consciousness is generated from the associations of metaphors used, it now becomes the holder of familiar metaphor itself, applying itself to the process of metaphorically understanding the unknown world.

It should now be clear what Jaynes meant to express in the above quote, when stating that “conscious mind is a spatial analog of the world and mental acts are analogs of bodily acts” (Jaynes 1976, 65-66). J-Con brings with it several other features, all of which are dependent on mind space, and the three most important of which shall be introduced below.

5.1.2 Spatialization

The first and “most primitive aspect” (Jaynes 1976, 59) of J-Con is that of spatialization. Spatialization is a direct derivative of the introspective mind-space we generate and then operate. Spatialization refers both to actual objects we “inject” into this mind-space, turning them into mental objects in the process, and to things which in actuality do not have a spatial quality but, in our mind-space, are made to have one.

Jaynes gives the example of time which in itself does not have a spatial quality. Time is not to the left or right of, or above or below, anything. Yet when we think of any stretch of time, we mentally lay out the minutes, days or years in a spatialized manner, creating what one might call a timeline. Jaynes even goes so far as to claim that “you cannot, absolutely cannot think of time except by spatializing it” (Jaynes 1976, 60).

5.1.3 Analog “I” and Metaphor “Me”

Once an analog mind-space is created, we can then place ourselves within this mind-space as an analog “I”.

Similar to how we may, within our mind-space, move around and manipulate things or even now-spatialized and formerly abstract concepts, we operate the analog “I” to see and act upon

these objects and concepts within the mind-space. When we “see” something in front of our “inner eye”, it is actually our analog “I” that is seeing.

The analog “I” naturally depends on J-Con with its introspective mind-space.

Similar at first glance to the analog “I” is the metaphor “Me”. However, where with the analog “I” we “look out from within the imagine self” (Jaynes 1976, 63), with the metaphor “Me” we “step back a bit and see ourselves” (Jaynes 1976, 63).

This difference can be lead back to differentiation of analog and metaphor. The analog “I” is a model of ourselves directly generated from the real world, within our analog mind-space. The metaphor “Me” is a metaphorical representation of ourselves within that mind-space; one which behaves “like us” and which may have very similar relations to the objects represent within our mind-space as we may have to actual objects. We may regard the metaphor “Me” as a model of ourselves which we view in what would be a third-person perspective.

This metaphor “Me” is used to play through novel situations and potential responses to the same. We may lead this version of ourselves through different ways of reacting to a new stimulus, imagining the outcomes and eventually judging and deciding which path best to take.

5.1.4 Narratization

Narratization refers to our tendency to narratize potentially unrelated events into a single, ongoing storyline - namely, that of our own life, with “our vicarial selves as the main figures” (Jaynes 1976, 63). Narratization “brings things together as a story” (Jaynes 1976, 65) in mind-time.

While the events may influence the story itself, Jaynes notes that eventually “new situations are selectively perceived as part of this ongoing process” (Jaynes 1976, 63) with “perceptions that do not fit into it” (Jaynes 1976, 63) remaining unnoticed or being expelled from the story. This means that, to some extent, the narratization influences itself and partly becomes a self-fulfilling prophecy, where we only process and integrate those experiences that are congruent with the story we have of ourselves.

Summing up, consciousness as Jaynes understands it is that which is introspective and, therefore, that which depends on and happens within the analog mind-space. Because this mind-space is an analog, and because consciousness is not a thing but rather a process, consciousness can never be a direct copy of experience.

5.2 Jaynes' Theory of the Bicameral Mind

According to Jaynes, modern consciousness was a relatively recent development in human history. Following the theory laid out in *Origin*, before man acquired mind-space, the mind functioned in a bicameral⁷ manner.

Essentially, Jaynes claims, this bicameral mind was split in two, “an executive part called a god, and a follower part called a man. Neither part was conscious” (Jaynes 1976, 84).

God and *man*, for our argument in this essay, may be dismissed as terms, instead opting for *executive* and *follower*.

The basic idea is that bicameral man was unconscious, that is to say, possessed no J-Con or mind-space and, thus, did not have access to an analog “I” by way of which to play through novel situations.

Because bicameral man was thus unable to narratize possible solutions in a mind-space when new situations came up, the follower part was aided by an executive part. This executive part would appear in the form of hallucinated voices or, sometimes, as a visual hallucination, instructing the follower part of bicameral man’s mind on how to act. The bicameral hallucinated voice would “with the stored-up admonitory wisdom of his life (...) tell him nonconsciously what to do” (Jaynes 1976, 85).

This process of hallucinating a bicameral voice was, according to Jaynes’ theories, a tool for decision-making when new situations occurred. In Jaynes’ words,

“volition, planning, initiative is organised with no consciousness whatever and then ‘told’ to the individual in his familiar language, sometimes with the visual aura of a familiar friend or authority figure or ‘god’, or sometimes as a voice alone. The individual obeyed

⁷ meaning “two-chambered”

these hallucinated voices because he could not ‘see’ what to do by himself” (Jaynes 1976, 75).

To be clear, Jaynes understood bicameral people to have experienced literal auditive and sometimes visual hallucinations telling them how to react to a novel situation.

According to Jaynes the eventual change from bicameral mind to modern J-Con was not brought about by biological changes in our mental hardware, but by something akin to a software update: the way in which we use our minds was changed. Daniel Dennett expresses this point succinctly in his essay *Julian Jaynes’s Software Archeology* (Dennett 1986), when he says that “for us to be the way we are now, there has to have been a revolution— almost certainly not an organic revolution, but a software revolution—in the organization of our information processing system, and that has to have come after language” (Dennett 1986, 8). This change could only have happened so quickly if consciousness was not emergent from our human biology, but instead an optional and learned process.

5.2.1 Sound and Obedience

Jaynes puts forward the question of why these hallucinated voices were believed and obeyed. The reason seems to be simple: “Sound is a very special modality. (...) We cannot push it away. (...) We can close our eyes, hold our noses, withdraw from touch, refuse to taste. We cannot close our ears though we can partly muffle them. Sound is the least controllable of all sense modalities” (Jaynes 1976, 96-97).

Because of sound’s special place amongst our sense modalities, it holds a special authority, one where we are somewhat forced to listen to what is heard.

Connected to the question of why hallucinated voices would be believed, we must understand Jaynes’ notion that to hear is actually to obey.

Jaynes point out that when listening to someone, “we let him become part of us for a brief second. We suspend our own identities, after which we come back to ourselves and accept or reject what he has said” (Jaynes 1976, 97).

Jaynes refers here to the fact that in listening and attempting to understand someone, we must supersede the distance between speaker and listener. That is to say, to understand what another person is saying, and to successfully interpret their meaning, we must for a moment assume their position and view what is said from their point of view, effectively leaving our own identity behind. Once understanding has been approximated, we then return to our own point of view to pass judgement on, and react to, what was heard.

However, should what is communicated be a command, the understanding of this command will in a certain sense be obedience. Understanding the spoken command while at the same time having lost our own identity will leave us defenceless, so to speak, and unable to disobey until we return to our own point of view. This process is amplified when what is spoken comes from an authority figure, where even when returning to ourselves we are inclined to obey.

Bicameral man would have, according to Jaynes' theory, considered the hallucinatory voices to be Gods and thus they were “omnipotent voices that could not be categorized as beneath you” (Jaynes 1976, 98), resulting in total and immediate obedience.

Jaynes mentions two ways of controlling this direct obedience to heard commands. The first is simply spatial distance or the inability to hear the command. The second way would be through the opinions and judgements we hold over other people. A command coming from someone we hold in low regard would be easily brushed aside, while a command from an authority figure we hold in high esteem might be less easy to disobey. In fact, Jaynes says, “we constantly rate others (...) simply to regulate their control over us and our thoughts” (Jaynes 1976, 98).

Where bicameral man was concerned, their voices were both considered absolute authority and, due to theirs being hallucinated, could not be escaped, resulting in direct compliance with their commands.

5.3 Criticism of Julian Jaynes' Theory of Consciousness

Julian Jaynes' theory of the bicameral mind is, essentially, a theory about P-Conscious A-zombies: beings that outwardly behave, communicate and behave like humans with modern consciousness but who lack this consciousness. Jaynes' bicameral man, expressed in Block's notion of consciousness, would have been P-conscious but not A-conscious while functioning and operating within the world; very much reminiscent of the behaviour and state of a hypnotic subject.

As was hinted at before, Ned Block's theory of consciousness will have serious trouble accounting for such zombies. That being the case, Ned Block unsurprisingly has become one of Julian Jaynes' foremost critics.

His first point of criticism against Jaynes is accusation that Jaynes fails to differentiate between A-Consciousness and P-Consciousness. This is, of course, a weak point to make as Jaynes' argument may simply be adjusted to state that man has not always had Access-Consciousness, instead of broadly stating that man has not always had consciousness in general. Jaynes would probably not have argued that bicameral man would not have had P-Consciousness. He probably would have been willing to give that there was something it was like to be a bicameral man. This point of Block's criticism, then, becomes a matter of semantics.

Jan Sleutels, in his essay *Greek Zombies* (Sleutels 2006), does raise the question of whether lower beings without Access-Consciousness (and thus, Jaynes' bicameral man, too) can really be attributed P-Consciousness:

“I am quite skeptical about attributing P-consciousness to beings that are constitutionally incapable of rational access to their alleged contents of consciousness. This strikes me as a merely gratuitous projection of our own self-image, for how could it ever be established that their alleged P-consciousness is more than a simple physiological reaction?” (Sleutels 2006, 189).

In other words, there may be nothing “it is like” to be a creature in Nagel’s sense of consciousness if one does not have rational access to the contents of this mode of experiencing⁸.

Block’s argument against Jaynes further entails that it should be “obvious” that both P-Consciousness and A-Consciousness are genetically programmed into any human being. While it may be intuitively available that most creatures feature P-Consciousness to a certain degree (or not, as Sleutels argues), if Block were to show that A-Consciousness was inherent in our genetic makeup this would posit a serious problem for Jaynes’ theories.

However, as Jan Sleutels points out, Block does not offer a compelling argument for this claim in his works (Sleutels 2006). Block bases his argument on the assumed incredulity of ancient minds not possessing and having access to mental concepts, which he assumes would have been necessary to operate and communicate in the world.

Sleutels goes on to differentiate two kinds of concepts, based off of Block’s own distinction: A-Concepts within Access Consciousness, and B-Concepts within the bicameral mind. A-Concepts would be “determined by their place in an articulate and sufficiently large network of concepts” (Sleutels 2006, 188), whereas “Minds with B-concepts have no ‘access’ to anything like ‘inferential relations’ between B-concepts, for there is no such access and there are no such relations” (Sleutels 2006, 188). B-Concepts, which may have been held by bicameral man, would then hold no inferential power but instead merely denote a thing within its class of behaviourally equivalent things. A B-Concept of a cow would then mean “cows and all other entities (pictures of cows, stone figures, whatever) that elicit the same stock neural responses” (Sleutels 2006, 188). Today, we may of course look at evidence of B-

⁸ Perhaps a solution may be found in not strictly separating A-Consciousness and P-Consciousness, but instead understanding them to be the two extremes of a scale: Phenomenal-Consciousness may simply denote the very minimum of Access-Consciousness in that one has, at least, access to “what it is like” to experience at that moment. There would be no rational access involved, but a minimum of awareness. An increase in A-Consciousness (which would, then, be the only kind of consciousness) would result in fully formed self-awareness and introspection.

Concepts (such as cave paintings of a cow) from our A-Consciousness and interpret them in an A-Concept way.

Making this distinction between A-Concepts and B-Concepts enables Sleutels to refute Block's statements about the incredulity of the possible former existence of a bicameral mind in a twofold way. Firstly, by showing that while P-Consciousness does not interfere with Jaynes' ideas, A-Consciousness is not *obviously* available to all creatures. To this I would like to add that Block's Access-Consciousness seems to presuppose a concept such as Jaynes' mind-space. It would seem that any A-conscious activity has to happen within some sort of mind-space. Block would probably hardly be able to contest this claim, again showing that the thing that seems to bother him most about Jaynes' theory is the idea that consciousness is not inherent, but may be a learned process instead. For this Block has, as Sleutels has shown, pitifully little arguments beyond appealing to his reader's intuitions.

Secondly, while bicameral man may have had concepts, they could have been B-Concepts instead of A-Concepts, which Sleutels shows would have been enough to operate and navigate within the world. Sleutels states that bicameral people may have had "minds fed on B-concepts without A-consciousness, who may nonetheless have been P-conscious in Block's sense of the word" (Sleutels 2006, 188). Which, essentially, gives us the P-conscious without being A-conscious philosophical zombies Block seems to consider to incredulous.

6. Jaynesian Consciousness and Hypnosis

For the purposes of this thesis, the most important novelty in Jaynes's theory is the idea that A-Consciousness (or J-Con, for all their similarities) is a social-culturally learned feature and, thus, may be unlearned again. Furthermore, Jaynes presents us with a reasonable if somewhat speculative alternative to how our mental facilities may be used lacking A-Consciousness: that of a bicameral mind.

6.1 Reevaluating the Problems of Hypnosis

Having seen now that Julian Jaynes handles a notion of consciousness considerably different from the commonly handled idea of consciousness as inherent to human nature, we may reevaluate the problems of explaining hypnosis, shedding light on the phenomenon from both approaches of consciousness to compare. As Marcel Kuijsten notes: "the prevailing view of consciousness as biologically innate is likely inaccurate and thus leads to confusion about the nature of hypnosis" (Kuijsten 2012, 213).

6.1.1 Hypnosis and A-Consciousness

A hypnotist attempting to hypnotise us might run into several possible difficulties, each of which are due to a distinct feature of our modern consciousness.

The hypnotist might point a finger at us and exclaim "Sleep!", hoping we might enter some altered state of mind. We, of course, might simply introspect and wonder "am I asleep?", likely coming to the conclusion that, no, we are neither asleep nor in any altered state of mind.

Herein we encounter the feature of Access-Consciousness that has led to the imaginary hypnotist's failure. This feature is our ability to introspect: upon receiving the instruction to "Sleep!", our analog "I" turns its analog eye inwards, checking onto itself to see whether anything out of the ordinary has happened. We might even look at our internal metaphor "Me" and realise that, in all conceivable outcomes of the hypnotist's command, we remain as we are. This realisation will have direct impact on our behaviour which, in this case, will mean we remain as we are, reacting to the hypnotist's command in whichever way we see fit.

Our analog “I” and metaphor “Me” provide us with an excellent tool for critical thinking and critical, reflected judgement on whatever is presented to us. In this case, we are presented with the claim that a command will put us into a trance, and our critical judgement, after playing through the options in our mind-space, might just be that said command has no effect at all. Which, if this happens to be our judgement, will be the case.

As we have seen before, this feature of access control and self-reflection may prove to be a serious stumbling stone for theories of hypnosis as long as they attempt to hold on to the idea of Access-Consciousness as inherent and unchangeable.

6.1.2 Hypnosis and the Bicameral Mind

Next, let us imagine that same imaginary hypnotist had managed to lead us into hypnosis. What might we experience now?

Reports from both academic researchers, hypnotic subjects from around the world and practicing hypnotists tell us that, in many cases, the subjects seem to instantly and unquestioningly obey suggestions given by the hypnotist. Furthermore, subjects report on a narrowing down of consciousness, where it seemed as if the sole focus of one's attention had to be directed towards the hypnotic operator's voice or instructions.

While in hypnosis, no suggestions given seemed nonsensical. In fact, even where suggestions were nonsensical subjects were quick to interpret them in such a way as to make sense of them, or to behave in a way that they felt was in accordance with the suggestion given but dealt with any inconsistencies effectively. Jaynes describes a case in which a hypnotic subject was suggested to be blind to a chair in the middle of the room. When asked to walk across the room, the same subject “walks around a chair (...) rather than crashing into it” (Jaynes 1976, 390). This phenomenon is termed *paralogic compliance* by Jaynes: hypnotic subjects making sense of what is nonsensical and not finding anything amiss.

When led out of hypnosis, subjects reportedly have difficulties describing what exactly happened. Speaking from experience with my own subjects, subjects often recall merely single scenes or separated images, but rarely the whole hypnotic sequence beginning to end.

We realise that a hypnotist runs into potential difficulties when faced with the features of modern consciousness. This may be why reports of hypnosis seem so incredible to us: we know, from our own conscious experience, that we have the faculties to simply refuse the hypnotists command.

Yet at the same time, we observe reports of hypnotic subjects with a striking set of features that are repeated over and over again. Upon closer inspection, we may come to see that these features bear a close resemblance to features found in bicameral man as described by Jaynes.

The subject's instant reaction to the hypnotist's command may be very much likened to a state in which to hear is to obey. The narrowing down of consciousness onto the hypnotist's commands would make the suggestions given as immediate and as inescapable as hallucinated bicameral voices emerging from within the subject.

Hypnotic subjects' paralogic compliance may be likened to the subduing of access to certain reflections and ideas. The subject seems to be unable to access ideas and reflections that would make the ongoings seem nonsensical to a person not engaged in the hypnotic process. Thus, in hypnosis we see a core principle of modern consciousness to be missing, or subdued, while the subjects seem to find themselves, again, in a state similar to bicameral man.

Reports of subjects remembering only fragmented scenes from their experience, furthermore, are highly indicative of the subduing of narratization. Here, too, we find a similarity with what bicameral man's mind might have been like, for the absence of mind-space results in the absence of an analog "I", and thus in the absence of continuous narratization.

Notice that what seems to prevent phenomena commonly associated with hypnosis from happening are all features stemming from J-Con and its access features. Furthermore, features commonly associated with hypnosis seem to directly correlate with features of the bicameral mind as described in *Origin*.

I believe it is for this reason that Jaynes speculated hypnosis to be a vestige of the bicameral mind. Unlike other thinkers, Jaynes did not simply shrug off seeming anomalies such as hypnosis, but in fact embraced them, stating that “any theory of consciousness and its origin, if it is to be responsible, must face the difficulty of this deviant type of behavioral control” (Jaynes 1976, 379).

6.2 A Jaynesian Theory of Hypnosis

Jaynes claims that hypnosis, as well as other presumed vestiges of the bicameral mind such as schizophrenia, can be explained in terms of the subjects engaging a so-called “general bicameral paradigm”. This paradigm, according to Jaynes, would be a “hypothesized structure behind a large class of phenomena of diminished consciousness which I am interpreting as partial holdover from our earlier mentality” (Jaynes 1976, 324).

The general bicameral paradigm, according to Jaynes, consists of four parts.

- 1) Archaic Authorisation
- 2) The Collective Cognitive Imperative
- 3) The Induction
- 4) The Trance

Jaynes suggests that hypnosis, as a vestige of the bicameral mind, is enabled through the presence of these four aspects and bases his model of hypnosis on this assumption.

Unfortunately, Jaynes goes into woefully little detail on both what these four aspects of his general bicameral paradigm entail and what exactly the general bicameral paradigm itself is supposed to be.

The rest of this essay will focus on clarifying the content of the four aforementioned aspects of the general bicameral paradigm with the aim of understanding what the paradigm itself is. Having gained a clearer picture of Jaynes’ general bicameral paradigm, we will then go on to examine how this paradigm relates to modern consciousness and, finally, how our hypnotic explananda may find their explanation in Jaynes’ theory of hypnosis.

6.2.1 The Collective Cognitive Imperative as Engaging Suitable Belief Systems

The collective cognitive imperative, according to Jaynes, is “a culturally agreed-on expectancy or prescription which defines the particular form of a phenomenon and the roles to be acted out within that form” (Jaynes 1976, 324). With regards to hypnosis, the collective cognitive imperative seems to be an aspect both social role-taking theories as well as cognitive-behavioural theories have pointed towards repeatedly: the fact that the hypnotic subject’s behaviour seems to be heavily determined by their preconceived notions about hypnosis and hypnotic behaviour.

Julian Jaynes provides us with an example of this facet of hypnosis, describing that a “psychology class was casually told that under hypnosis a subject’s dominant hand cannot be moved. It was a lie. (...) Nevertheless, when members of the class at a later time were hypnotized, the majority (...) were unable to move their dominant hand” (Jaynes 1976, 385). Here, part of the subject’s collective cognitive imperative (“a hypnotised person cannot move their dominant hand”) directly influenced their experience of, and behaviour in, hypnosis.

Following the example Jaynes gives, I propose to adjust this aspect’s description from *collective cognitive imperative* to *engaging a suitable belief system within the subject*. While a subject’s belief system may be fitted into Jaynes’ collective cognitive imperative, they seem to me to be not quite the same. Jaynes’ collective cognitive imperative seems to be much broader and much more linked to definitions of a phenomenon given by society, whereas a belief system may be a rather more personal thing, possibly held by an individual in isolation of society’s collective cognitive imperative.

Continuing with Jaynes’ line of thought, to engage the subject in a process of hypnosis, the operator must first identify this particular subject’s belief system. Should it be found to be insufficient to enable the process, this belief system must be altered until suitable.

A subject holding the firm belief that “only unintelligent people can be hypnotised” might refuse to let themselves be drawn into the process should they consider themselves intelligent. Being hypnotised would create a case of cognitive dissonance, and thus it is easier for the subject to remain as they are. This may be helped by the operator casually mentioning that “hypnosis works particularly well on people with above average intelligence”. If the hypnotist carries any authority, this may be enough to alter the belief system. Once a suitable belief system has been identified, it may then be engaged, giving us the first of the four aspects of Jaynes’ general bicameral paradigm.

6.2.2 Archaic Authorisation as Presence of a Suitable Executive Part

Jaynes describes archaic authorisation to be “a god, but sometimes a person who is accepted by the individual and his culture as an authority over the individual, and who by the collective cognitive imperative is prescribed to be responsible for controlling the trance state” (Jaynes 1976, 324). It would seem that Jaynes’ understanding is that the hypnotist forms this perceived authority figure, and thus, within the general bicameral paradigm, takes over the role that would formerly have been fulfilled by the hallucinated bicameral voices. At the same time, the hypnotic subject will take on the role of what Jaynes describes as the “follower” part of the brain. It will take on a role of active obedience, that is, of waiting for orders which to actively and immediately carry out. Jaynes somewhat confirms this same point when writing about hypnosis specifically: “the more godlike the operator is to the subject, the more easily is the bicameral paradigm activated” (Jaynes 1976, 395).

For the hypnotist to be perceived as a suitable possible executive part, they should be someone upon which the hypnotic subject can project authority and a deep sense of trust.

Authority because the voice of the hypnotist should be imbued with a deep sense of urgency and directness; it should be experienced rather like the “omnipotent voices that could not be categorized as beneath you” (Jaynes 1976, 98).

Placing authority and competence within the operator brings with it, by proxy, a deep sense of trust. It is difficult to mistrust those we see as deeply competent. This is why, according to

Jaynes, “students of the subject insist that there must be developed a special kind of trust relationship between the subject and the operator” (Jaynes 1976, 394). The placement of trust and the placement of authority within the operator naturally reinforce themselves: the more trusted the person, the more likely we may be to perceive them as skilled; the more skilled the person, the more likely we are to trust them.

I believe it is this perception of the hypnotist specifically as an authority figure that suffices to fulfil this second aspect of Jaynes’ general bicameral paradigm with regards to hypnosis.

6.2.3 The Induction as Direct Verbal Communication and Suggestions

To Jaynes, the induction procedure signifies a “formally ritualised procedure whose function is the narrowing of consciousness by focusing attention on a small range of preoccupations” (Jaynes 1976, 324). While, it may be enough to go through any kind of ritual, even non-verbal, I would like to add to this that the induction in the case of hypnosis is in most cases verbal. The hypnotic subject likely has preconceptions of hypnosis as *following verbal commands* and, thus, will be entering a state in which they are waiting for these commands to occur.

If there is, as Jaynes seems to suggest by calling this state a “general bicameral paradigm”, to be some kind of reversal to bicamerality, then the use of verbal commands becomes of fivefold use.

Firstly, verbal instructions are the prime way of communicating any idea or concept between hypnotist and subject. The subject, especially if engaged in a process of hypnosis where they believe in a need for their eyes to be closed, will have virtually no other means of following the hypnotist’s guidance than through listening to what they have to say.

Secondly, to fully cast the hypnotic subject into the role of bicameral follower, the hypnotist must fully cast themselves into the role of bicameral executive part.

The subject, behaving as the follower chamber, must be given instructions to follow. These instructions must be provided verbally by the hypnotist.

According to Jaynes, the bicameral voices were hallucinated as offering guidance in novel situations, or when decisions needed to be made. In the bicameral era, “anything that required any decision at all was sufficient to cause an auditory hallucination” (Jaynes 1976, 93). We may draw a parallel here and consider the hypnotic process to be a completely novel situation for the hypnotic subject. Not only does the subject find themselves in a novel situation, they also find themselves confronted with what seems to be a never before experienced way of operating their mind. The hypnotist, taking on the role of hallucinated voices, would have to keep their verbal commands and instructions going at regular intervals to keep the general bicameral paradigm active.

Should the subject be cast into the role of follower chamber, and subsequently have to wonder how to react or how to behave, then this might lead to considerable decision-stress. The most readily available way out of this decision-stress would be to revert to modern consciousness, where Access-Consciousness will provide the behavioural solutions to any new situation. To prevent this reversal from happening, just as “the divine voice ends the decision-stress before it has reached any considerable level” (Jaynes 1976, 94), the hypnotic operator will keep the potential decision-stress experienced in this novel situation at bay by continuously providing the subject with verbal instructions and suggestions on how to behave.

Thirdly, the hypnotist’s use of language offers the advantage of what Julian Jaynes termed as the “authority of sound” (Jaynes 1976, 94). As already discussed in this essay, sound is a special modality in that we find it difficult to tune it out, or turn our attention away from it. Even though we may cover our ears and muffle the sound, we still automatically process (and in processing understanding, and in understanding obey) that which we hear. This fact coupled with the hypnotic operator being held in high esteem by the hypnotic subject will lend special authority to the words being spoken.

Fourthly, words being spoken by the hypnotist and understood by the subject lead to an automatic diminishment of the subject’s control of their own obedience.

To repeat Jaynes' words, "If you wish to allow another's language power over you, simply hold him higher in your own private scale of esteem" (Jaynes 1976, 98). The combination of the hypnotic subject's belief systems, their reverence of the hypnotic operator, their focus on the process and the hypnotist's suggestions creates a sense of immediacy that makes it harder and harder to disobey by the operator's suggestions the longer the subject is involved.

This holds especially true considering that a large amount of the verbal communication offered up by the hypnotist consists of implied direct instructions, such as "you go deeper and deeper", "your arm begins to rise into the air all by itself" or "your body becomes heavier and heavier as your eyes shut".

The fifth and last use of the hypnotist's language within the induction is the communication of an idea of hypnosis.

It must be made clear to the subject that a change of their mental construct is expected to happen for exactly this to happen. Part of this is achieved through the subject's belief system, but another part must be done through the hypnotist's suggestions.

Direct or implied suggestions provide the subject with a mental picture of what their new mental state will be like. The hypnotist might say "and with each word I say, you go deeper and deeper", implying metaphorically that the subject sinks off into some different state.

Exclaiming the command of "Sleep!" implies that the subject is expected to find themselves in a state differing from being awake. The subject, listening to the hypnotist's suggestions, understands and then obeys them, and with each command they obey they more and more accept the role of themselves as follower.

6.2.4 Trance as Restriction or Loss of the Analog "I"

Trance, in Jaynes' view, is the "lessening of consciousness or its loss, the diminishing of the analog "I", or its loss, resulting in a role that is accepted, tolerated, or encouraged by the group" (Jaynes 1976, 324).

The former part of this definition of trance carries with it strong similarities to dissociation theories of hypnosis: consciousness is lost, or split off, enabling a state of trance. The latter

part of this definition again resembles processes commonly discussed within cognitive-behavioural and social role-taking theories, where social expectations and demands directly shape the hypnotic subject's behaviour.

Jaynes focus with regards to trance seems to very much be the loss of Access-Consciousness. In discussing hypnosis specifically, he writes that in hypnosis there is a "diminution and then absence of normal consciousness. Narratization is severely restricted. The analog 'I' is more or less effaced. The hypnotised subject is not living in a subjective world. He does not introspect as we do, does not know he is hypnotized, and is not constantly monitoring himself as, in an un hypnotized state, he does" (Jaynes 1976, 387).

As was discussed before, A-Consciousness would seem to stand directly opposed to most phenomena seen in hypnosis. This being the case I would consider this last point of Jaynes' four aspects of the general bicameral paradigm to be the most crucial of the four, as it refers directly to the diminishment of A-Consciousness. This may be somewhat misleading by virtue of Jaynes calling this aspect simply "trance". Yes, this may be called trance, but the focus should be put on the diminishment or restriction of the analog "I", as this is what enables the remarkable phenomena and experiences of hypnosis.

For this reason, I would even go as far as to claim that this diminishment of the analog "I" really *is* the general bicameral paradigm Jaynes argues is being engaged here. The former three aspects - authorisation, engaging belief systems & verbal induction - may then be understood in terms of being the *necessary conditions* for the analog "I" to disappear, or for the analog "I" to be restricted in this way.

Speaking in terms of consciousness, we earlier concluded that hypnotic subjects are essentially P-conscious A-Zombies. For someone to go from modern consciousness to this state, the hypnotic subject must of course lose A-Consciousness. This lack of A-Consciousness would seem to be the essence of the hypnotic mentality, just as it was the essence of the mentality of bicameral man, and would thus be a fitting candidate to be considered to be in itself Jaynes' general bicameral paradigm.

6.3 The “How” of Restricting or Losing Access-Consciousness in Hypnosis

One point Jaynes remains vague about in *Origin* is what exactly the “general bicameral paradigm” is supposed to be. I have suggested that the diminishment or restriction of the analog “I” is the essence of this paradigm, due to the fact that the lack of A-Consciousness seems to be essential to both a bicameral and a hypnotic mentality.

This still leaves us with the question of what exactly happens to A-Consciousness when it is restricted in this way. I want to suggest that there are two different potential processes that may be at work in the general bicameral paradigm: either A-Consciousness is severely restricted, or A-Consciousness disappears completely.

6.3.1 The General Bicameral Paradigm as Restriction of the Analog “I”

Jaynes himself seems to be not quite decided on what exactly he believes is happening when he describes trance as the “lessening of consciousness, or its loss, the diminishing of the analog ‘I’, or its loss” (Jaynes 1976, 324). He does, however, seem willing to believe that A-Consciousness is not completely lost but merely severely limited.

This is an intuition I share with Jaynes. I am under the impression that it would be a stretch to claim that A-Consciousness is completely lost through the process of hypnosis. Instead, my immediate assumption would be that A-Consciousness is limited, but pertains, and that the subject does not return to true bicamerality but instead merely *emulates* it. This assumption, however, comes with some serious challenges. I will begin by showing what such an emulation of bicamerality might look like, to then discuss the problems this approach brings.

The emulation of a bicameral mind may be understood as a construct layered over A-Consciousness. This emulation has the subject behave as if it were functioning in a bicameral way.

Using a software analogy, the computer (brain) would superimpose an operating system onto its own, still behaving and acting for all intents and purposes as if this second operating

system were the only one running, while in actuality the original operating system is preserved. My assumption here would then be that the subject's analog "I" becomes preoccupied through the hypnotic process. This preoccupation prevents it from accessing its mind-space as well as from realising that its narrating itself as being hypnotised. What follows is my attempt at describing how exactly this emulation of bicamerality might look.

The subject carries with it a belief about hypnosis being a form of unconsciousness featuring the diminishment of volition and limitation of self-reflection. As soon as the hypnotic process begins and all aspects of Jaynes' general bicameral paradigm are fulfilled, the subject emulates bicamerality and, in doing so, narrates itself as being in hypnosis. This narratization happens through the analog "I". An essential part of this internal narratization about hypnosis is that self-reflection and self-awareness are unavailable to the subject. The narratization entails that the subject is the follower, while the hypnotist provides instructions. In order to keep the internal narratization intact, to avoid cognitive dissonance and to stay in line with (1) the belief system or collective cognitive imperative, (2) the authority given to the hypnotist and (3) the internal narratization, the subject now denies itself access to Access-Consciousness. Instead of the analog "I" disappearing, the analog "I" is preoccupied with successfully narrating the process of being hypnotised, which includes restricted availability of A-Consciousness.

The biggest problem here is of the same form as the problem I have pointed out in discussing social role-taking theories of hypnosis earlier. While the subject may deny themselves access to A-Consciousness, the question remains of how this process comes to be perceived as involitional by the subject. We know that the hypnotic subject is presumably not continuously denying itself access to A-Consciousness deliberately and consciously, but feels as if it truly has no choice in the matter.

Just like social role-taking theories failed to explain when *faking* turned into *taking on* a role, this approach to explaining the diminishment of the analog "I" offers no non-circular explanation of why the subject does not simply "snap out of it", that is to say, simply stops denying itself access to A-Consciousness and thus terminates hypnosis.

6.3.2 The General Bicameral Paradigm as Loss of the Analog "I"

Considering the problems with assuming A-Consciousness to be merely restricted in trance, I now turn to what feels like a more extreme alternative: It may be so that in hypnosis A-Consciousness disappears completely.

Looking at the phenomenon of hypnosis from the viewpoint of Jaynesian consciousness, this becomes a real possibility. A-Consciousness is no longer inherent to our biology but instead a learned process and, as such, may be unlearned too. Similar to a computer that is provided with a different software, our brain may be able to delete the old software (J-Con) and run a different one instead (bicamerality). In this case, we would find a true reversal to bicamerality, with the difference that the hypnotic subject provides only one of the chambers while the hypnotist represents the second chamber externally.

Intuitively I find this point of view hard to agree with, however, for perhaps a reason too simple. If J-Con was truly unlearned through the hypnotic process it must be relearned afterwards. It is not made clear in *Origin* how long exactly Jaynes believes the acquisition of access-consciousness to take in any one individual. Presumably mind-space is slowly generated bit by bit as the human grows up, starts to use language metaphorically and is taught to do access mind-space by society and culture. To assume that what took years to acquire was truly instantly "deleted" in hypnosis, only to be relearned in just a few moments at the termination of hypnosis, seems like a stretch.

This point of objection to the idea of the analog "I" being completely lost in hypnosis is, of course, somewhat similar to Ned Block's impassioned objections against the idea of consciousness being a learned process. In the light of having seen the potential pitfalls of taking a softer approach to the fate of the analog "I" in hypnosis, I am very willing to cast my intuitive objections aside.

If Access-Consciousness is truly lost in hypnosis, this would leave us with hypnotic subjects that are P-conscious A-zombies. They may react, speak and interact with the hypnotist and

other people but lack internal access to self-reflect and deny the hypnotist's suggestions. Perhaps, then, Access-Consciousness is truly unlearned in hypnosis, or turned off, and is relearned or turned on again afterwards. For lack of a more precise explanation, we may strive to understand this in terms of a computer again: either the A-operating system is deleted only to be reinstalled again later, or it may be momentarily turned off in favour of a bicameral operating system, to be turned on again once hypnosis is finished.

Assuming that the analog "I" is completely lost in hypnosis certainly brings with it greater explanatory power and less challenges when it comes to explaining the phenomenon of hypnosis and our four initial explananda. It may, therefore, be the preferable path to take.

6.4 Features of Jaynes' Model of Hypnosis

Independent of whether we assume A-Consciousness to be restricted or completely lost during hypnosis, the Jaynesian model brings with it several features which will aid us in explaining our original four hypnotic explananda.

These features are distinctly different from the standard form of modern consciousness, or J-Con. They are:

1. Narrowing down of consciousness
2. Lack of Access to Analog "I"
3. Diminishment of narratization abilities
4. Increase in obedience

6.4.1 Narrowing Down of Consciousness

Consciousness within hypnosis is narrowed down in two ways.

Firstly, the subject finds itself cast into the role of a follower. The subject leaves their own volition behind to some degree, waiting for instructions from the hypnotic operator.

Secondly, consciousness is narrowed down with regards to attention. The subject excerpts extreme focus onto the hypnotic operator and the suggestions given. This intense focus aids the hypnotic process in that suggestions will be obeyed more easily.

The narrowing down of consciousness furthermore forms a self-serving loop. By listening intently to the hypnotist's suggestions and following them, the subject wanders deeper and deeper into the role of the hypnotic follower. Doing so will, again, make suggestions easier to obey, thus strengthening the cycle.

6.4.2 Lack of Access to Analog "I"

As discussed before, within hypnosis the analog "I" is either limited or completely lost.

This inaccessibility of the analog "I" has a twofold effect.

Firstly, the subject will find it close to impossible to envision itself disobeying the hypnotist's suggestions or breaking out of hypnosis. The hypnotic subject is unable to self-reflect and realise that it has any choice other but to follow the hypnotist's commands.

Secondly, narratization outside of the hypnotic process becomes impossible. This forms the next feature of the construct.

6.4.3 Diminishment of Narratization Abilities

With the analog "I" being unavailable to the subject, all other narratization abilities will be diminished during hypnosis. The diminishment of narratization abilities can be led back to a pair of causes.

Firstly, the new input entering consciousness is extremely limited. In fact, one might say that due to the extremely narrow focus during hypnosis, no perception that needs to be narratized enters consciousness at all. The subject is highly focused on the hypnotic operator, thus filtering out any other input.

Secondly, even though narratization as it is described in *Origin* includes the "assigning of causes to our behaviour" (Jaynes 1976, 64), the hypnotic subject does not need to concern itself with any such cause, as its behaviour is automatically attributed and understood to be caused by the hypnotist. This holds true even if Access-Consciousness were merely limited and not completely lost.

Depending on the hypnotist's suggestions, it seems as if a meta-level of narratization may open up in which we find what Jaynes termed *paralogic compliance*. The subject, if presented with illogical instructions, will behave in such a way as to narratize these instructions into a seemingly coherent whole. This occurrence of paralogic compliance seems to me to be indicative of some rest of Access-Consciousness being available to the subject in an involitional manner: I believe that to narratize in this way would require mind-space and direct access to mental concepts which to manipulate.

6.4.4 Increase in Obedience

A direct result of the narrowing down of consciousness as described above is an increase in the subject's obedience to the hypnotist's suggestions.

The focus exerted by the subject upon the hypnotic operator imbues suggestions and instructions given with a certain sense of immediacy. As described in discussing Jaynes notion of consciousness, when commands are given by an entity held in high esteem, or when they seem inescapable, to hear eventually becomes to obey. The subject has none of the features of modern consciousness available with which to control its own obedience.

It is thus that obedience in the subject increases exponentially when A-Consciousness is unavailable or severely restricted.

6.5 Hypnotic Explananda and a Jaynesian Theory of Hypnosis

Upon embarking on our exploration of the relation between hypnosis and consciousness, we did so searching for the explanations to four explananda of hypnosis:

1. Suggestibility
2. Time Distortion
3. Mental Phenomena
4. Physical Phenomena

It was my suggestion that the explanations for these four phenomena tended to fall short because they were based on a potentially faulted notion of consciousness. We shall now reconsider these four explananda from the viewpoint of Jaynes' notion of consciousness, and within a Jaynesian Theory of Hypnosis.

6.5.1 Suggestibility and Jaynesian Hypnosis

We formerly defined suggestibility as “the predisposition of subjects to put aside their own thoughts, reflections and objections in favour of following external commands”. Looking at this occurrence through the lens of our newly founded model of hypnosis, we find a threefold explanation.

Firstly, the subject is put into a position in which to hear and understand the hypnotic operator becomes equal to obeying the hypnotic operator. Not only does the subject temporarily lose itself in trying to understand the operator's commands. The operator's commands come directly from a place of authority, with the subject considering themselves as follower, and are through the subject's narrowed consciousness experienced with an added sense of immediacy and inevitability, much like the hallucinated voices would have had for Jaynes' bicameral man.

Secondly, the hypnotic subject is missing operative access to its analog “I”, meaning all narratization abilities are inhibited as discussed above. The analog “I” in a subject with full access to modern consciousness would normally provide a defence line in the form of critical judgement against seemingly random claims of the hypnotist.

Lastly, the subject's focus is narrowed down in the extreme. This means it becomes almost impossible for the subject to turn their attention away from commands given, making them somewhat inescapable.

Thus, the subject when losing its analog “I” in hypnosis has no choice but to immediately follow commands given by the hypnotic operator. There are, ideally, no own thoughts and reflections to be put aside in favour of the hypnotist’s commands. In this position, the subject is prepared to directly follow any commands given.

Where suggestibility fails, the hypnotist may have failed to provide instructions with enough regularity, or one of the conditions necessary to engage the subject in hypnosis may not have been founded strongly enough within that particular subject.

6.5.2 Time Distortion and Jaynesian Hypnosis

The mind, as analog of the external world, spatializes time. As such, mind-time is dependent on access to mind-space, access to the analog “I” and access to narratization faculties. The hypnotic subject loses all three to some extent.

Where the analog “I” is not available for narratizing within mind-space what is happening during the hypnotic process, time distortion will occur.

Furthermore, with the analog “I” unavailable, there is no analog “I” to access the mind-space in the first place! No access to mind-space means no access to mind-time which, again, results in perceived time distortion.

We have, in our discussion of time distortion, defined the phenomenon as “the dramatically altered perception of the duration of a given amount of time”.

We must conclude that within the hypnotic construct time simply is not perceived, at least not in a stringent spatialized way. Thus when the subject considers the hypnotic experience in retrospect, all they will have access to are isolated moments, but no measure against which to estimate the actual time that has passed.

Julian Jaynes, discussing the same phenomenon, points to a similar idea when mentioning that

“we, in our normal states, use the spatialized succession of conscious time as a substrate for successions of memories. (...) But the subject in a hypnotic trance, like the

schizophrenic patient or bicameral man, has not such a schema of time in which events can be time-tagged. The before- and afterness of spatialized time is missing” (Jaynes 1976, 391).

6.5.3 Mental Phenomena and Jaynesian Hypnosis

In our initial discussion of mental phenomena, we described these as the “activation or inhibition of existing or new beliefs, existing or new expectations and existing or new feedback-loops”.

To account for the occurrence of mental phenomena of this sort in hypnosis, we must look to several aspects of Jaynesian hypnosis.

For one, we might find an explanation in which the subject behaves as if they possessed a new or changed belief. That is to say, the hypnotist’s suggestion that “you believe you are Elvis Presley” might be understood to mean “behave *as if* you were Elvis Presley”. Mental phenomena of this class would be explained by our model in the same way suggestibility was explained above: the subject has been cast into a follower role and to understand a suggestion is to obey the same. This is an interpretation close to social role-taking and cognitive behavioural models of hypnosis.

When it comes to the actual establishment, or manipulation, of beliefs the hypnotist may do so in two differing ways.

Firstly, beliefs may be established through controlling narratization.

If the hypnotic operator succeeds in feeding the hypnotic subject a somewhat coherent narratization introducing a formerly not held belief, the subject may be inclined to take on this belief under the umbrella of paralogic compliance. As described above, a second level of narratization may be imposed upon the base hypnotic narrative of *being hypnotised*, in which the subject sees itself taking on, and acting in accordance with, the suggested belief. After the hypnotic process is over, this belief may remain, potentially to avoid cognitive dissonance on the side of the subject.

Secondly, the hypnotic operator may use the subject's narrowed focus to manipulate its beliefs.

The operator may choose to have the subject perceive of only certain thoughts or emotions which then directly influence or change the subject's belief. The operator may also attempt to have the subject perceive of, and process, only certain choice things in the external world, which then, too, will directly affect the subject's beliefs.

6.5.4 Physical Phenomena and Jaynesian Hypnosis

We have described physical phenomena as “the inhibition or excitation of physical responses, in the respective presence or absence of appropriate external triggers”.

Before attempting to explain physical phenomena, we must remember that some physical phenomena are not physical phenomena at all. Like with mental phenomena, the suggestion “as you are reading these lines, you are getting a light itch on your right arm” may be taken to mean “as you are reading these lines, behave *as if* you had an itch on your right arm”, resulting in the subject scratching their right arm. These phenomena would be more akin to mental phenomena, and might be explained in the same way suggestibility in itself was explained above. We are, however, seeking an explanation for actual phenomena, our prime example being hypnotic analgesia.

These phenomena are, again, explicable through the absence of the analog “I”. Much like dissociation theories of hypnosis claim the subject to not feel pain because it is dissociated from the experience, a Jaynesian hypnotic subject may simply have lost Access-Consciousness and, thus, the ability to reflect on pain - or, even, to reflect on the idea of being harmed, meaning that external stimuli formerly interpreted to be painful would now be merely physical stimuli. With the analog “I” absent there would presumably be no emotional aspect of self-preservation or the subject wanting to not get hurt, which would potentially grant the ability to simply withstand physical phenomena without them being framed as being painful per se. There may even, as Sleutels suggests (Sleutels 2006, 189), be no P-Consciousness for

the hypnotic subject when A-Consciousness is lost. In this case, there would be nothing “it is like” to be inflicted pain for the subject and, thus, hypnotic anaesthesia ensues.

We thus find reasonable explanations for our four hypnotic explananda as soon as our focus shifts from Access-Consciousness - the biggest problem in explaining hypnosis - as biologically inherent to being a learned construct instead.

7. Conclusion

We have seen what a Jaynesian model of hypnosis might look like, and which advantages it brings with it. Here I will sum up how the Jaynesian model of hypnosis relates to other modern theories of hypnosis, and offer suggestions for further research into the Jaynesian model of hypnosis presented here.

7.1 Jaynesian Hypnosis in Relation to Other Theories of Hypnosis

A particularly attractive feature of Julian Jaynes' theory of hypnosis is that it makes use of the excellent ideas from other prevalent modern theories while leaving behind their potential issues.

Dissociation theory offered up viable explanations for physical phenomena such as hypnotic analgesia and anaesthesia. A Jaynesian model of hypnosis may still hold on to these explanations. Yet where dissociation theories did not offer a mechanism for the dissociation itself, Julian Jaynes suggests such a mechanism in assuming the operation of a bicameral mindset. It may be somewhat speculative, but it does bridge an explanatory gap and is undermined with a host of reasonable arguments by Jaynes.

Furthermore, as we have seen, a Jaynesian theory of hypnosis does hold on to the importance of beliefs and expectations in social-role taking theories. The collective cognitive imperative, or the engagement of suitable belief systems, is extremely similar to how social role-taking theories describe the effect of the subject's preconceived notions about hypnosis.

However, where social role-taking theory fails to account for the involitional experience of hypnosis, a Jaynesian model may do so if we assume that the analog "I" is completely lost.

Lastly, all the practical insights taken from cognitive-behavioural therapy may also be retained, yet a Jaynesian theory of hypnosis has no need to view hypnotic phenomena in isolation. The shift from understanding A-Consciousness to be inherent towards viewing it as

a learned concept enables all these phenomena to be explained through a single underlying factor: the absence of Access-Consciousness.

7.2 Suggestions for Future Research

After our exploration of the Jaynesian notion of consciousness and its relation to hypnosis, two questions remain. It is these questions that I submit for further research, should someone consider it worth their time to attempt to further fill out a Jaynesian theory of hypnosis.

Firstly, the question remains whether A-Consciousness truly disappears or whether it is merely limited. I have discussed the challenge of claiming that A-Consciousness is merely limited, namely that of why the hypnotic subject does not simply access the fact that it is being hypnotised, to subsequently deny the hypnotist access. Assuming that A-Consciousness vanishes completely in hypnosis circumvents this problem.

Secondly, assuming that A-Consciousness disappears in hypnosis, I am still left with the question of how exactly Access-Consciousness might be unlearned during trance, only to be relearned again later. Alternatively, if it does not vanish but is turned off, the question becomes by what mechanism A-Consciousness seems to be turned on and off.

Finding an answer to this question would both make it more credulous that A-Consciousness should vanish instead of being limited, and would serve to stabilise this critically necessary cornerstone of a Jaynesian theory of hypnosis.

8. Bibliography

Barber, T. X., and Calverley, D.S. (1964). "Experimental studies in "hypnotic" behavior: Suggested deafness evaluated by delayed auditory feedback." *British Journal of Psychology*, 55: 439-446.

Barber, T.X., Spanos, N. P., and Chaves, J. F. (1974). *Hypnosis, Imagination and Human Potentialities*. New York: Pergamon Press.

Barber, T. X., and Wilson, S. C. (1978). "The Barber Suggestibility Scale and the Creative Imagination Scale: Experimental and Clinical Applications." *American Journal of Clinical Hypnosis*, 21: 84-108

Block, N. (1995). "Concepts of Consciousness." *Behavioral and Brain Sciences*, 18: 227-247

Braid, J. (1842). *Practical Essay on the Curative Agency of Neuro-Hypnotism*. Unpublished.

Brann, L., Owens, J., and Williamson, A. Edited (2012). *The Handbook of Contemporary Clinical Hypnosis*. Hoboken: John Wiley & Sons, Ltd.

Dennett, D. (1986). "Julian Jaynes's Software Archeology." *Canadian Psychology*, 27: 149-154.

Edgette, J. H., and Edgette, J.S. (1995). *Handbook of Hypnotic Phenomena in Psychotherapy*. New York: Routledge.

Gennaro, R. J. (2004). "Higher Order Theories of Consciousness: An Overview." In *Higher*

Order Theories of Consciousness: An Anthology, edited by J. Benjamins, 1-16. Amsterdam: John Benjamins Publishing Company.

Gennaro, R. J. (2005). "The HOT theory of consciousness: Between a rock and a hard place." In *Journal of Consciousness Studies*, 12: 3-21.

Gennaro, R. J. (2018). "Higher Order Theories of Consciousness." In *The Bloomsbury Companion to the Philosophy of Consciousness*, edited by M. Jacquette, 142-169. London: Bloomsbury Publishing Plc.

Harrington, D.L., Haaland, K. Y., and Hermanowicz, N. (1998). "Temporal processing in the basal ganglia." *Neuropsychology*, 12: 3-12.

Heller, S., and Steele, T. (1987). *Monsters and Magical Sticks*. Tempe: The Original Falcon Press.

Hilgard, E. R. (1977). "*Divided Consciousness: Multiple Controls in Human Thought and Action*." Hoboken: John Wiley & Sons, Ltd. (a)

Hilgard, E. R. (1977). "The problem of divided consciousness: A neodissociation interpretation." *Annals of the New York Academy of Sciences*, 296: 48-59. (b)

Jaynes, J. (1976). *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. New York: Houghton Mifflin Harcourt Publishing Company.

Jean, R., McInnis, K., Campbell-Mayne, L., and Swainson, P. (1994). "Hypnotic underestimation of time: The busy beaver hypothesis." *Journal of Abnormal Psychology*, 103: 565-569.

Jacquette, M. Edited (2018). *The Bloomsbury Companion to the Philosophy of Consciousness*. London: Bloomsbury Publishing Plc.

Jacquin, A. (2007). *Reality is Plastic*. Derbyshire: UKHTC Ltd.

Kant, I. (1781). *Critique of Pure Reason*. Translated by Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press.

Kuijsten, M. Edited (2006). *Reflections on the Dawn of Consciousness*. Henderson: Julian Jaynes Society.

Kuijsten, M. (2012). "Hypnosis as a vestige of the bicameral mind." In *Contemporary Hypnosis & Integrative Therapy*, 29: 213-224.

Kuijsten, M. Edited (2016). *Gods, Voices and the Bicameral Mind: The Theories of Julian Jaynes*. Henderson: Julian Jaynes Society.

Kunzendorf, R. G., Spanos, N. P., and Wallace, B. Edited (2018). *Hypnosis and Imagination*. Boca Raton: CRC Press.

Limber, J. (2006). "Language and Consciousness." In *Reflections on the Dawn of Consciousness*, edited by M. Kuijsten, 169-202. Henderson: Julian Jaynes Society.

Lynn, S. J., and Rhue, J.W. Edited (1991). *Theories of Hypnosis*. New York: The Guilford Press.

Lynn, S. J., Rhue, J. W., and Kirsch, I. Edited (2010). *The Handbook of Clinical Hypnosis*. Washington: American Psychological Association.

McDermott, D. (1997). *Higher-Order Thought Rendered Defenseless*. New Haven: Yale University.

McGill, O. (1996). *The New Encyclopedia of Stage Hypnotism*. Bancyfelin: Crown House Publishing Ltd.

Milgram, S. (1974). "The Perils of Obedience." *Harper's Magazine*, 247: 62-77.

Mongiovi, J. (2014). "A History of Hypnosis." Published October 22nd 2014. Accessed June 12th 2019.

<http://johnmongiovi.com/blog/2014/10/22/a-history-of-hypnosis-from-ancient-temples-to-modern-psychology>

Nagel, T. (1974). "What Is It Like To Be A Bat?" *The Philosophical Review*, 83: 435-450.

Naish, P. L. N. (2007). "Time distortion, and the nature of hypnosis and consciousness." In *Hypnosis and conscious states: The cognitive neuroscience perspective*. Edited by G. A. Jamieson, 271-292. New York: Oxford University Press.

Naish, P. L. N. (2013). "Hallucinations in Hypnosis." In *Hallucination: Philosophy and Psychology*. Edited by Macpherson, F., and Platchias, D., 121-146. Cambridge: MIT Press.

Nash, M. R., and Barnier, A. J., Ed. (2008). *The Oxford Handbook of Hypnosis*. Oxford: Oxford University Press.

Perlini, A. H., Spanos, N. P., and Jones, B. (2018). "Hypnotic Negative Hallucinations: A Review of Subjective, Behavioral and Physiological Methods." In *Hypnosis and Imagination*.

Edited by Kunzendorf, R. G., Spanos, N. P., and Wallace, B., 199-221. Boca Raton: CRC Press.

Rasmussen, J. (2015). *Provocative Suggestions: A No Bullshit Combination of Hypnosis, Nlp and Psychology with Difficult Clients*. Self-Published.

Rosen, S. (1982). *My Voice Will Go With You: The Teaching Tales of Milton H. Erickson, M.D.*, New York: W. W. Norton & Company Inc.

Rosenthal, D. M. (1986). "Two Concepts of Consciousness." In *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 49: 329-359.

Rosenthal, D. M. (1986). *Consciousness and Mind*. Oxford: Oxford University Press.

Sarbin, T. R., and Coe, W. C. (1972). *Hypnosis: A Social Psychological Analysis of Influence Communication*. New York: Holt, Rinehart and Winston.

Sartre, J.-P. (1956). *Being and Nothingness*. Translated by Hazel E. Barnes. New York: Philosophical Library Inc.

Shor, R. E., and Orne, E. C. (1962). *Harvard Group Scale of Hypnotic Susceptibility: Form A*. Palo Alto: Consulting Psychologists Press.

Sleutels, J. (2006). "Greek Zombies." In *Philosophical Psychology*, 19: 177-197.

Tripp, J. (2010). *Hypnosis Beyond the Trance Myth*. Self-Published.

Wagstaff, G. F. (2018). "Compliance and Imagination in Hypnosis." In *Hypnosis and*

Imagination. Edited by Kunzendorf, R. G., Spanos, N. P., and Wallace, B., 19-40. Boca Raton: CRC Press.

Weitzenhoffer, A. M. (1953). *Hypnotism: an objective study in suggestibility*. Oxford: John Wiley.

Weitzenhoffer, A. M., and Higrard, E. R. (1962). *Stanford Hypnotic Susceptibility Scale: Forms C*. Palo Alto: Consulting Psychologists Press.

Williamson, A. (2012). "Hypnotic Phenomena and Hypnotisability." In *The Handbook of Contemporary Clinical Hypnosis*. Edited by Brann, L., Owens, J., and Williamson, A., 19-30, Hoboken: John Wiley & Sons, Ltd.