
EDITORIAL COMMENTARY

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WHY IS IT SO EASY TO HYPNOTIZE? AN EDITORIAL COMMENTARY ABOUT THE RECENT ARTICLE BY M. KUIJSTEN

THE MYSTERIOUS CONSCIOUSNESS

What is hypnosis, and why is it so easy to hypnotize? Why are humans so predisposed as to enter a state of modified consciousness simply on the request of another (Casiglia, 2008)? There are people around the world who are trying to answer this question. This group of scientists, not always working together—and not even in direct connection with each other—is composed not only by psychologists or neurologists (those who are in a certain way qualified to study ‘the head’ where it is commonly supposed that hypnosis happens), but also by linguists, biologists, historians, philosophers, palaeontologists, archaeologists, and theologians. In a word, by anthropologists. These scientists are interested in consciousness and, as a consequence, hypnosis. In fact, if hypnosis is modified consciousness, first of all we must ask ourselves what is consciousness and where does it come from. Marcel Kuijsten, who wrote the article ‘Hypnosis as a Vestige of the Bicameral Mind’ which appeared in the 29(3) issue of this journal (Kuijsten, 2012b), is one of these men. He is the heir of Julian Jaynes, a knowledgeable psychologist (1920–1997) who dealt with consciousness for a large part of his life and in 1976 published *The Origin of Consciousness in the Breakdown of the Bicameral Mind*.

The subjective consciousness is that particular function that makes us aware of ourselves. How difficult to define consciousness! This is, of course, a conscious process in itself which could lead us to believe that consciousness pervades the whole mind. In reality, subjective consciousness is neither omnipresent nor always present. It is rather an intermittent phenomenon, even if in some obscure way it appears to us to be continuous.

Just as it does not exist continuously throughout the day, subjective consciousness has not always existed throughout the evolution of human kind. At first mention this seems like a paradox but on closer inspection it is quite obvious. In ancient times there were primates which evolved into hominids and then into the ‘human species’ (e.g. *Homo habilis*, *neanderthalensis* and *sapiens*) (Schwartz, 2006), only the last one surviving until today. Since animals are not conscious and humans are, it is evident that in the course of evolution, at some stage, subjective consciousness appeared. Consciousness then provided an evolutionary advantage.

THE ORIGIN OF CONSCIOUSNESS

What is still to be clarified—according to Jaynes (1976) and Kuijsten (2012a, 2012b)—is when this process actually took place. Jaynes’s thesis is that this evolutionary (and revolutionary)

process concluded rather recently, not in the prehistoric but in the historical age, i.e. after the development of writing. This hypothesis is based on archaeological findings, on the analysis of ancient texts and chronicles, and on anthropological reflections. According to this hypothesis, there was a time when the exponents of the genus *Homo* did not feel will but simply acted upon instinct, which is what still happens in animals. Then, very slowly, an 'unconscious' developed which produced an interior life, fertile but still non-conscious. Early humans—still without consciousness—had a non-conscious life, acting in response to commands from the unconscious, of which obviously they were unaware, and therefore were probably similar to the voices heard today by schizophrenics and by many normal people in particular conditions (Ian et al., 2010).

Also in today's psychotics, the voices usually are numinous and often indisputable (in short, they are accepted and obeyed without further ado); for early humans they probably even had the effect of neurological commands, such that hearing → obeying was an automatic process. Jaynes and Kuijsten believe that these voices/commands originated from the right hemisphere (which was probably more separate from the dominating left than it is today) and were non-consciously understood by the left hemisphere (the so-called 'bicameral condition'). We can imagine this individual divided into two parts (both non-conscious): one impositive and directive and the other acquiescent and subject. Only much later did the voices fall silent and become incorporated into a new, unusual function that had never existed before in the universe, in which the **subject** part and the **directive** part of the brain were united, giving life to the *subjective* function which we now call consciousness.

Several factors may have contributed to this synthesis, both biological and social (Kaiser & Varier, 2011): bipedalism leading to larger pelvises allowing foetuses to be born with larger craniums thus leading in turn to a positive selection of evolutionary brains (O'Higgins & Elton, 2007); specialization of the now free upper limbs into organs dedicated to carrying out fine work; neuron plasticity with environmental adaptability; agriculture supplying nutrition for the development of genetic instruction (Erren & Erren, 2004) and more time to think; spontaneous mutations; natural selection in favour of humans who along the way had become conscious; human migration; and, above all, language, writing, and the consequent onset of abstraction.

Abstraction arose for very concrete reasons, such as recognizing strands of yellow grass in the savannah from the yellow strands of the lion's mane or between the black and yellow patches of the forest and the cheetah's markings. Individuals with the capacity to abstract had a better chance for survival and procreation; they are surely the ancestors of modern abstractive humans. From very concrete origins, abstraction led to narratization and 'abstract concepts' such as life, death, the dead, and their voices. Today we define 'abstract' as what we are unable to perceive through the senses; at that time, 'abstract' was what was experienced as intuitive immediacy without the need of the senses because it was immanent. The progress from abstract immanence to metaphors to the meta-metaphor called egoic consciousness was in part cultural and in part evolutionary, and is repeated today for every new human being.

DOES THE UNCONSCIOUS EXIST?

What is summarized above (Jaynes's main idea) is certainly plausible; but is it demonstrable or nothing more than a hypothesis? If it is difficult to demonstrate the existence of the unconscious, it is even more difficult to demonstrate experimentally that non-conscious activity

takes place in everyday life. My co-workers and I are particularly interested in demonstrating experimentally that the unconscious exists, and we often use hypnosis as a tool for this purpose. For instance, we can induce hallucinations (Casiglia et al., 1997), we can make a subject negligent to a side of the world (Priftis et al., 2011) or to written language (Casiglia et al., 2010), or we can modify his/her reaction times to visual or auditory stimuli (Casiglia et al., 2010), or we can block his/her pain perception (Casiglia et al., 2007; Facco et al., 2011).

All these effects are unconscious, of course, and their modification therefore confirms the existence of a non-conscious part of the mind. Certain neurological diseases can also be of help in revealing the unconscious. For instance, showing a subject with right optical cortex lesions (i.e. suffering from blindness of the left side of the world) an object on his left side, he will say that he cannot see it, but on demand he can touch it with precision (so-called 'blind vision'). The explanation of this apparent mystery is very concrete: the fibres coming from the ocular bulb go to the optical cortex and then onto the parietal lobe (the 'conscious area of how'), the temporal lobe (the 'conscious area of what'), and finally to the superior colliculus (the 'ancient non-conscious way'). The ancient non-conscious way works also when the conscious optical cortex is injured, allowing non-conscious visual information (Ramachandran, 2003). This blind vision shows that we can carry out non-conscious activities in response to external events; catching of a man with blind vision must be slightly similar to that of non-conscious individuals taking action (Leh et al., 2006). Non-conscious information also can be used and memorized in the absence of conscious activity. In ancient times, this was the normal way of thinking and living.

THE ANCIENT MIND

If you go to Bozen in Italy to visit Ötzi, the hominid mummy of a 45-year-old man murdered by an arrow 5,300 years ago and preserved perfectly in ice, and the guide says that 'Ötzi was thinking exactly like us', please be sceptical because this is not true. An individual living in the Alps in 3300 BC did not know writing and was therefore unable to think like us. Actually, our way of thinking derives completely from the written language (Jaynes, 1976; Crow, 1997).

What were bicameral individuals like? Probably they were very similar to modern schizophrenics, who are able to lead an apparently normal life. But modern schizophrenics can also have a very well developed *I* (ego) most of the time as well as a subjective consciousness, while the bicameral individual was lacking these. His/her life was regulated by non-conscious mental organizations which we can call *personae* in the Latin sense of the term. As such, functions like thinking, willing, and so on were undifferentiated and pre-conscious (Jung, 1941). Conscious thought did not exist and thoughts simply and spontaneously 'happened' like bubbles from the sea floor. Due to this chronic crepuscular state, it was impossible to establish whether a man had dreamt of doing something or if he had actually done it (in actual fact, this query was absurd). He did not invent myths; he lived them as revelations of the pre-conscious soul and as unintentional by-products of non-conscious processes (Jung, 1941, 1968, 1971; Jaffè & Jung, 1961).

In time, the non-conscious *personae* became able to integrate themselves into a recursive auto-referential structure. This process of internalization of the voices/*personae* required the preliminary development of an internal space, one which had never existed before, in which the world could be portrayed. In this inner analogue—in which, as on a road map, every mental

point corresponds to a point in the world—those metaphors became mental representations. And, as on a map it is plausible to draw a cross and say *I am here*; a meta-metaphor of these internal metaphors gave rise to the articulation *I am here*, therefore becoming '*the I*'. Writing greatly contributed to this development, enabling the vision of what could only be heard before and thereby driving internalization and memory. Consciousness created time and space. Things—which in the physical-behavioural world of bicameral individuals had no spatial quality—acquired it in the frame of consciousness.

EASY HYPNOSIS

If the hypothesis of progressive internalization of the *personae* and metaphors within a functioning consciousness is correct, if the *directive* part has really been melted with the *subject* part to produce the meta-metaphor of consciousness, and if all this took place very recently (in the blink of an eye with respect to the evolution of mankind), then we have to consider that voice, language, and metaphors still mean much today. Consciousness is an active phenomenon consuming energy, requiring libido, and tiring easily (calling for, in Westerners, nothing more than periodic sleep, but in more pre-industrialized populations also interruptions during waking periods) (Jung & Jaffè, 1961). It also requires to be actively passed on from parents to children, from aunts and uncles to nephews and nieces, through stories, myths, education, and today also through television.

WHY IS THE WORD SO POWERFUL?

Some considerations about the basis of modern hypnosis from the Jaynes/Kuijsten perspective. Consciousness is in favour of the survival of the species, but it is also accompanied by epiphenomena that are not always welcome, such as awareness of the immanence of death, the passing of time, guilt, and regret; in short, the loss of Eden. This loss is so recent, consciousness is so precarious (this ship on the non-conscious sea) and a yearning for the return of the pre-conscious paradise on Earth is so desirable, that it takes very little to 'forget' the real state of emancipated humans and go back temporarily to the latent bicameral condition. This is possible through cerebral ischemia, electric stimulation of the brain (Penfield, 1959), events with a dissociating potential, poetry, music, certain rituals of numinous value, symmetrical body movements (e.g. dancing, running, or EMDR) (Scheck et al., 1998), and the practice of hypnosis.

The person performing hypnosis momentarily takes over the bicameral voices, temporarily annulling the role of consciousness that has taken over for the last three thousand years. This allows the individual to return back to being *subjected*, renouncing for a while being *subjective*. It is an operation that the hypnotized person is more than happy to undergo, having an enormous desire to abandon tiring consciousness and return to Eden. Studies on functional imaging show that, in hypnosis, areas of the right hemisphere corresponding to the Wernicke's area in the left hemisphere are activated. These are the same areas that, if electrically stimulated, produce the perception of voices and the sense of the numinous.

The commands of the hypnotist are potent and numinous, just as it must have been with bicameral non-conscious voices and also, as it is today, in certain cases, with the voices of modern schizophrenics. This explains why the word is so effective in the hypnotic frame. Bányai's research on active-alert hypnosis in movement (Bányai & Hilgard, 1976) fits in well, reproducing a condition similar to that which must have been the normal state of pre-conscious

bicameral individuals: vigilant, able to work and avoid danger, busy and alert in daily activity, guided by the voices/*personae* of his own or of his tribe.

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