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THE DISUNITY OF THE SELF. FROM JAYNES' BICAMERAL MIND TO THE ILLUSION OF THE UNITARY SELF

A.E.C.

University of Turin Medical School (2001)

There's a blind man here with brow As big and white as a cloud. And all we fiddlers, from highest to lowest, Writers of music and tellers

of
stories,
Sit at
his
feet,
And
hear
him
sing
of the
fall
of
Troy.

E. Lee Masters, Spoon River Anthology (1916)

A multidisciplinary approach to the problem of consciousness and its development in the evolutionary process that shaped Homo Sapiens cannot leave apart the analysis of Julian Jaynes' theory of the origin of consciousness in the breakdown of the preconscious "bicameral mind" (Jaynes 1976).

Jaynes claims that consciousness arises from the power of language to make metaphors and analogies.

Metaphors of "me" and analogous models of "I" allow consciousness to function through

introspection and self-visualization. According to this view, consciousness is a conceptual, metaphorgenerated analogous world that parallels the actual world and is intimately bound with volition and decision. Man, therefore, could not experience consciousness until he developed a language sophisticated enough to produce metaphors and analogous models.

Jaynes recognizes that consciousness itself is only a small part of mental activity and is not necessary for sensation or perception, for concept formation, for learning, thinking or even reasoning. Thus, if major human actions and skills can function automatically and unconsciously, there could have been at one time human beings who did most of the things we do – speak, understand, perceive, solve problems – but who were without consciousness.

Man's earliest writings (hieroglyphics, hieratic and cuneiform) are very difficult for us to translate and deeply understand, especially when they refer to anything psychological. Thus, if we want to look for any historical evidence of consciousness — an analogous "I" narrating in a mind-space — we should go to a language with which we have some cultural continuity, and that is of course ancient Greek.

The earliest Greek text of sufficient size to test the question about any evidence of consciousness is the

Iliad. Well, the Iliad never mentions subjective thoughts or the contents of anyone's mind. The soldiers of the Iliad were not able to make decisions, no one was introspecting or even reminiscing. They were noble "automata" who were not aware of what they did. Iliadic man did not have subjectivity as do we; he had no internal mind-space to introspect upon. Some lexical oddities in the Homeric text (such as absence of a single word translating the "consciousness" or "mind" or "soul", or even "body") lead Jaynes to formulate the hypothesis that the Iliad was composed by nonconscious minds, which automatically recorded and objectively reported events. The transition to subjective and introspective writings of the conscious mind occurred in later works, beginning from the certain passages of the Odyssey.

Iliad-aged men learnt to speak, read, write, as well as carry out daily life, all while remaining nonconscious throughout their lives. Being nonconscious, they were not responsible for their actions. Then, who made the decisions? Jaynes' answer is that whenever a significant choice was to be made, an auditory hallucination came in telling people what to do. These voices, in the Iliad always and immediately obeyed, were called Gods. Before the "invention" of consciousness, the human brain was organized in a

bicameral fashion: the right hemisphere (the synthetic, poetic, "god-brain") used to transmit hallucinatory verbal instructions hemisphere (the analytical, rational, "man-brain"), especially in unusual or stressful situations. It means that human mentality was divided in two parts, a decision-making part (located hemisphere) and a follower part (in the left hemisphere), and neither part was "conscious". This kind of "bicameral mind" is to be observed not only in the most ancient literature but also in the contemporary cases of throwbacks to bicamerality, such as hypnosis and schizophrenia, since verbal hallucinations (VHs) can be regarded as a remnant of this early mentality.

The bicameral mentality allowed a large group to carry around with them the directions of the king as VHs. The leaders used the stress-generated "voices" to lead the masses in cooperative unison. The bicameral mind enabled men to build societies and the earliest civilizations (Near East, Egypt, Southern Africa, India, China, Mesoamerica), developed through common hallucinating voices attributed to Gods and other rulers – i.e. external "authorities" – and to various symbols as graves, temples, and idols. Jaynes thinks that the development of human consciousness began only about 1400-600 B.C., when men were evolutionary forced to change their mentality by the chaos of huge migrations induced by overpopulation and natural catastrophes – and the

advent of writing.

There are many troubles with Jaynes' sophisticated hypothesis: the present work focuses on three main critical arguments.

The first argument arises when considering the theory under a neurophysiological and neuropsychological perspective: Jaynes' neurological model for the bicameral mind relies on the structural and functional differences between the two cerebral hemispheres, as they emerged from the brain laterality studies. The notion of the right hemisphere as a generator of hallucinatory experiences is derived from Penfield's experiments involving the electrical stimulation of the brain of epileptic patients (Penfield 1963). This was the only neurobiological knowledge about the "silent areas" of the right temporal lobe available around 1970. The role of the right-sided areas corresponding to Broca's and Wernicke's areas is not completely clear yet, but recent neuroimaging findings (Dierks 1999; Lennox 1999; Olin 1999) seem to confirm the hypothesis that the right middle temporal gyrus represents the source of auditory hallucinations in some schizophrenic patients. However, the variety of hallucinatory phenomena observed in different neuropsychiatric disorders,

ranging from schizophrenia to epilepsy, shows that the stress situations suggested by Jaynes are a too simplistic model for a common aetiological process (Asaad 1987). Furthermore, Jaynes' speculations appear to be shaped by the striking insights derived from the studies of split-brain patients made by Sperry and coworkers (Sperry 1968; Gazzaniga 1970). The unexpected findings about independence of the two hemispheres after the surgical removal of corpus callosum led some neuroscientists to postulate the coexistence of two parallel streams of consciousness (Marks 1980; Brooks 1995). Jaynes' bicameral mind requires some sort of underlying interhemispheric disconnection in the brain architecture. However, its relatively recent existence is postulated regardless of any coherent evolutionary perspective. Roughly speaking, it takes either a millenary evolutionary process or the drastic neurosurgical procedure of commissurotomy to disrupt the highly interrelated function of the cerebral hemispheres. 3000 years are just not enough for such a dramatic structural difference.

The second argument is a philological and anthropological one: the Iliad is a collection of oral poetry composed by a long succession of "aoidoi" or bards from different traditions, and later assembled at around 700 B.C (Parry 1971; Ong 1982; Havelock 1986). This heterogeneity represents the most likely

explanation for the numerous incongruities classical philologists have detected in the text since their earliest critical analyses (Leaf 1892; Kirk 1985-1993). Several passages appear to confirm Jaynes' hypothesis about the bicameral mentality of the represented characters. However, considered as a whole, the narration of the Iliad is not always consistent with the thesis of the noble "automata" (Kirk 1985-1993). Arguably, Jaynes should have confined his speculations to specific passages and to the oral traditions they could have stemmed from.

The third and perhaps most controversial remark is a philosophical one, concerning both contemporary philosophy of mind and philosophy of language. Jaynes' definition of consciousness is quite selflimiting, since it doesn't take into consideration the existence of any subjective phenomenal experience, or "qualia" (Nagel 1979). Such a concept resembles much more a theory of self-awareness than a complete explanation of what consciousness is. In this sense, bicameral minded people could be said to lack some sort of self-monitoring or higher-order awareness, rather than subjective consciousness. In technical words, Jaynes' view of an iliadic hero cannot be compared to a philosophical "zombie" (Chalmers 1996), because the former lacks some cognitive - and not phenomenal - features of consciousness. As a consequence, the so-called "hard problem" of consciousness is not addressed by Jaynes' hypothesis.

Jaynes' assertion that consciousness depends on language involves the seemingly endless philosophical debate on the role of language in conscious thoughts. Which came first? Nobody can provide an answer to this question, yet it is now

much more familiar to both neuroscientists and philosophers of mind to assume that language simply contributed to some higher faculties of consciousness (Searle 1998), rather than regarding it as a prerequisite for any kind of consciousness. Romantic love, for instance, could represent a by-product of language, whilst sexual attraction doesn't need any verbal component.

Furthermore, in his review of Jaynes' book, Block (1981) argued that even bicameral minded people could have been conscious long before they had the concept of consciousness. Dennett (1986) replied that since mental phenomena as consciousness are partially created by the arrival on the scene of a certain set of concepts, men could not have conscious experiences unless they had developed the concept of consciousness. The ambiguities surrounding the exact meaning and the use of the term consciousness seem to play a crucial role in further entangling these philosophical and anthropological concerns.

The most remarkable credit of Jaynes' speculative theory is that it bridges the gap between distant disciplines by establishing intriguing links between some of their unsolved issues. It has been mentioned that the exact role of the temporal structures of the right hemisphere is yet to be explained. The issue of the development of a conscious mind, from a phylogenetical perspective, is one of the key topics of current philosophical and neuroscientific debates. Another astonishing mystery is the unique iliadic view of man as an aggregate, both physical and

psychological – a problem already arisen by the greatest classical philologists of the past century, namely Bohme (1929), Snell (1946), Dodds (1951), Onians (1951), Frankel (1962), Adkins (1970), among others. Unlike posterior writings, the iliadic vocabulary lacks a single word for the concept of consciousness, or even mind (Wilkes 1988; Taylor 1989). Instead, there exists a multitude of terms, referred to by Jaynes as "preconscious hypostases", that are thought to relate to physiological processes associated with mental life (Justesen 1928; Bremmer "preconscious 1987). These hypostases" expressed by words like "psyche" (the living breath departing from the dead) (Darcus 1979), "thumos" (either the blowing breath or the flowing blood) (Caswell 1990), "phren" (almost always in the plural form "phrenes": presumably, the inflating lungs) (Darcus 1988), among others. Such lexical oddities apparently disappeared in subsequent Western literature milestones, beginning from the Odyssey. The deep psychological analysis and the rich mental vocabulary that characterise Aeschylus' Agamemnon or Euripides' Medea (V-IV century B.C.), for instance, don't show any significant difference from what is found in most modern and contemporary literature. This is not the case for the composite text of the Iliad, peculiarly devoid of any psychological

insight. As such, it stands out as an unique and unexplained example in Western culture (Taylor 1989).

Similarly, it has been pointed out that in early Mycenaean figurative art, the human body was depicted as a curious aggregate of limbs, with marked joints and a fairly inconsistent trunk (Snell 1946; Feyerabend 1975). Greek classical art, on the other hand, closely resembled more recent figurative styles.

Quite surprisingly, such a concept of the Self happens to meet some of the findings emerged from cognitive neuroscience studies during the last few decades, beginning from the early experiments on split-brain patients (Sperry 1968). Theories involving concepts as "society of mind" (Minsky 1986), "modularity" of brain functions (Fodor 1987), and "cognitive homunculi" (Dennett 1991) have been thoroughly investigated and discussed by both neuroscientists and philosophers. According to Baars' "global workspace theory", consciousness emerges as a result of the highly integrated activity of multiple brain unconscious processes (Baars 1988). Baars claims that the prefrontal areas involved in the regulation of selective attention are the brain module playing the key role of the "internal observer" in "theatre of consciousness". In addition, a growing body of

psychiatric literature have focused the fragmentation of the Self, through the recognition and description of dissociative disorders, that in the most recent APA classification (1994) comprise depersonalisation disorder and dissociative identity disorder, formerly called multiple personality syndrome (Wilkes 1988). Therefore, the debate arisen by Jaynes' hypothesis supports some contemporary efforts in deconstructing the misleading concept of an unitary Self, coherent centre of consciousness and engine of human actions. This accumulating evidence seems to suggest that our common sense-based intuition of the unitary Self could be considered as an illusion created by West cultural and social paradigms, born after the Homeric Ages and philosophically enhanced by Plato's thought in terms of mind-body dualism (Dennett 1991). Both Christian religion and Cartesian doctrine have deepened this misleading way of thinking ourselves, that shapes folk psychology and pervades most theoretical reflections on consciousness.

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