Role of Dreams in the Evolution of Human and Primates Mind

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This paper describes an evolutionary dispute for the role of dreams in the advancement of human and primates’ brain. While a theory by Revonsuo (2000) suggests that dreams permit for threat preparation and consequently deliver an evolutionary benefit. The objective of this study is to spread this argument by observing on new fitness-enhancing features of dreams. Despite of normal threat rehearsal process, it is claimed that dreams reproduce a more universal virtual rehearsal procedure that is probable to play a significant role in the growth of human intellectual capabilities. Various studies are based on existing work in cognitive neuroscience and thinking of mind in evolving the brain. However, a theory by (Revonsuo, 2000) suggests that dreams permit for threat rehearsal and consequently deliver a link between brain development and dreams. According to the evolutionary concepts, dreams have an association with the development of human cognitive abilities. Various theories of evolution have suggested a positive association with the dreams. However, scientist could not provide a clear statement regarding dreams and association of dreams with the development of brain.

(Freud, 1900) suggested that dreaming, particularly the noteworthy content of dreams linked to mental functioning and the unclear nature of dreams has prepared the proposal of empirically providing provision of, or fabricating this claim very challenging (Tsoukalas, 2018). The failure to read the possessions of dreams on mental functioning has persuaded various scientists to understand dreams as the result of unplanned neural process. If hypotheses regarding the unplanned nature of dreams are really true, then it turns out to be challenging to create a theory. Phenomenology of the dream could be better presented through an evolutionary research.

Dreams are of subjective nature, however, evolution cannot be considered external to the kingdom of systematic review (Morowitz, 2018). Cognitive theories have made the basis for dreams and brain that may create relationship between brain activity and content of the dream (Tsoukalas, 2018). There are two types of dreams; one is related to the slow wave dream and other one being the heavy wave dream. The second one, the most dangerous sleep type in which the human being encounters heavy movements in sleep. It has been observed that in this kind of sleep, body muscles become paralyzed and the eye ball rotates (Tsoukalas, 2018). This is the reason that this dream is also named as REM, the rapid eye movement. During this sleep humans have reported aggressive and rapid movements such as driving, flying and diving. This sleep has resulted in many evolutionary events.

REM sleep has a connection with evolutionary biology. It is evident from the studies that REM sleep should meet a particular criteria to fulfil the requirements of evolution such as genetic variations, mutations and inheritance (Morowitz, 2018). The studies have suggested that phylogeny of dreams and acquiring the characteristics of evolution is a knowledge that was shared years ago. It is also essential that the processes of REM must have evolved through natural selection. Considering the malleability of the mind with as tiny as 10–20 notes of motor-powered rehearsal a day on a definite job the motor cortex redesigns its structure in a phase of a few weeks. The time consumed in the dreams is the time in which brain reshapes and redevelop thoughts and behaviors. Also, in this time, the brain reorganizes its activities according to the redesigning and reshaping of the cortex. The experience acquired during dreaming, is the way how brain influences and interacts with the thoughts and body and in turn body interacts with the world. Sleep is also associated with the thoughts and is also linked with the fitness.

The evolutionary debate for the role of dreams in the growth of human intellectual progressions is quite an ancient. (Revonsuo, 2000) theory suggests that dreams allow for peril rehearsal and hence deliver an evolutionary benefit, the objective of this article is to outspread this debate by mentioning on additional fitness-enhancing phases of dreams (Fruth, Tagg, & Stewart, 2018). Instead of simple peril rehearsal tool, it is claimed that dreams reveal a more common cybernetic rehearsal tool that possibly play an essential role in growth of human intellectual capacities (Piattelli, 2018). This article is based on present-day work in intellectual neuroscience and knowledge of mind in evolving the argument.

Organisms do not always remember what they have experienced in dreams. During sleep, brain continue working and this is the reason that it act like paralyzed but remained busy in re-modification and re-designing the thoughts. Dreaming is a phenomenon where sleep is designed and shaped (Fruth, Tagg, & Stewart, 2018). Body prepares itself for evolving into a new body with new thoughts during sleep. According to threat simulation of dreams, it is proposed that philosophy about dreams is harder to understand. It is also evident from this theory that there is a link or a connection between biological functions and events. Dreaming activates and stimulates threatening events. Body need a therapy to rehearse these threatening events which in turn activates sleeping to get rid of the threatening events. This shows that ancestors of Homo sapiens were good dreamers. Ancestors use dreaming to exercise mental and physical stresses from life to survive in the world of depression. According to this theory, most remembering dreams are the threatening dreams or the negative dreams.

According to Activation-synthesis theory, it is not important to remember the events after waking up, it is also essential to report events after waking up precisely. This is difficult to depict but according to neuropsychological evidences, the tendency of brain to draw stories from dreams is the ability to gather information from dreams. If there is no link between dream and REM then it would be difficult to present a connection of dream with evolution. During REM sleep brain is more active and it performs maximum involuntary functions during this sleep. An additional thorough examination of dream content and the connection among REM nap and dreaming, however, establishes a connection with activation-synthesis theory. The brainstem mechanisms are involved in processing of dreams. However, brainstem mechanisms are not directly tangled in the occurrence of dreams. From the studies it has been evaluated that the part of brain, forebrain is linked with the production of dreams.

It can be expected that the brain is judgmentally intended for the dispensation of “real- world” sensual information. It is a process by which body interact and react to the outside would. Major portion of the brain is still not involved in processing of information, rather a large part of brain is involved in processing of what the body has to do when encountered an event or stimuli. These qualities of brain are probably involved in adaptation of behaviors and thoughts. It is evident from the researches that when positron emission topography is performed during visualizing some things, the portion of brain involved in visual reflexes become activated. Also, during visualization or imagination, the linked pattern of cortex in the motor cortex increases. The strength of dreams can be imagined after getting a nightmare, the heart rate increase, and the physiological functions of the body accelerated. Physiological functions of body requires adequate sleep to perform tasks appropriately.

It is believed that the organisms dream to restore and regain energy. In an evolutionary point of view, the purpose of dream is to evolve and adopt changes. It is suggested by the researchers that every organism sleep and invertebrates have a special sleep similar to the sleep pattern of primates and human. During dream, they develop and nourish themselves to become active and more powerful. It is assumed that the dream is directly linked with cognitive part of brain by which it solves problems, it analyses circumstances and it evolve according to the requirements (Fruth, Tagg, & Stewart, 2018). It is also evident from the studies conducted on human beings and primates that human body and primates start dreaming while in womb. Studies have revealed that human brain evolved and nurture itself during sleep. Problem based learning theory has suggested that cognitive part of brain is associated with the adaptation and modification of behaviors. This cognitive part helps in resolving issues and problems. Few studies were conducted on human beings which suggested that sleep helps in finding solutions. Scientists have not been successful in ascertaining the core relation between brain and dreams.

The dream-state is greatly subjective and a really special involvement making the logical examination of dreaming slightly prohibitive. Dreams regularly comprise material that is senseless and perplexing to understand logically, making the classification of dreams impossible to understand. Although we all dream there is implausible variability in the individual dream capability. Most people hardly remember their dreams and inaccurately consider that they don’t dream at all, whereas others experience intense dreams with ironic imaginings and sensitive content. Occasionally, the story that make up individual's dreams follow a straight history and have a fairly level transition from passage to passage, whereas at other periods dreams act as unreasoned and random associations missing a rational sense of flow. Few people have total control on their dreams, applying conscious command over the apparently random dreams.

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