In classical mythology, Athena, the symbol of wisdom and progress, was born after Zeus, the father of the gods, experienced a sort of “cerebral pregnancy” which culminated in a splitting headache. This legend can be taken as a starting point for analysing the relationship between headache and civilisation and for exploring aspects of the interconnection between brain architecture and the complexities of the world. In an increasingly rapid crescendo of stimuli, the brain responds with an increase in its volume and an analytical differentiation of its neural structure (holosphere of origins, specialised cortical areas, hemispheric lateralisation …). According to the model proposed years ago by MacLean (1971), the brain’s present structure is the result of the overlapping of “three brains” (the triune brain): the sensory-motor “reptilian” brain of the “fight and/or flight” response, responsible for the control of elementary visceral functions; the “feline brain”, which is the forge of great passions and the seat of mood and emotional knowledge, and the “third brain”, that of the primate, which is the seat, in man, of self-control of primitive instincts and of language, logos, creativity, and culture. It must now be assumed that, in the infinite process of evolution, this model, being unable to express itself in a physical space that had reached saturation point, was forced, in its quest to find more advanced evolutionary dimensions, to evolve gradually in a virtual space or superior domain (a “Neverland”): consciousness.

Hence, we can talk of the quadriune brain (fourth brain). In this new model, consciousness is no longer understood as a purely metaphysical emanation of highly complex neural circuits, but rather as an out-and-out expansion of the brain into a communication space. It is, in fact, a virtual cortex (place of synthesis/quantum attractor) that, working in an integrated manner with the real brain, uses digital conversion algorithms (neuroquantum/the world of qualia; innocent pain/semantic machine/quantum migraine).

Clearly, we are now navigating the shadowy waters of ideas that lie on the border between metaphysics, clinical phenomenology, neuroscience research and neurophilosophy. There is, however, some basis for the hypothesis that migraine attacks, together with the comorbid disorders that accompany them, are triggered by recurrent factors of default daily living, on the one hand through processes of reduction/resetting of the precious balance of systems of adaptation to the turmoil of emotions, and on the other through processes of eliciting/reinforcing of higher nociceptive functions (levels of consciousness/pain scale; circular model of awareness of pain). The dynamics of interactions between a person and the world (milieu intérieur/habitat/clan-based models/lifestyle) have, over time, undoubtedly been subjected to a gradual increase in functional demands/stressors, which, in turn, have tested the systems of organisation and management of experience employed by the Homo line ever since the time when, around two million years ago, the brain of Homo habilis, more or less the size of an orange, began to grow to the size of the brain of today’s Homo sapiens!
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