

Genesis of the Emotional Systems

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Abstract

The registers of memory exist already during intrauterine life? In our opinion they do exist, and in all probability, they are some of the first structures to be formed in the "Neural tube". Probably, they are particularly active both, during their formation and immediately after.

Keywords: *Helicobacter pylori; Intrafamilial transmission and Childhood*

Opinion

The connection times of the neurons during intrauterine life are measurable in periods of a few seconds. The time of reflex-action between perception and feeling in the foetus is much shorter than in adults: somatization - that in adults is a physiological-pathological response with a partial alteration of physiological components - in the foetus gives expression to the construction of cellular structures and neuronal structures or interconnections. Basically, the reflex-action from perception to sensations is converted into constructive "material" for the foetus [1].

Jack Panksepp has opened new horizons in fascinating discoveries of enormous scientific importance. His many years of work open "doors" that give access to immense universes which can be explored in the future.

How do the emotional systems discovered and described by Panksepp come into the world? From which moment onwards do they begin to exist and to work?

These are the two basic questions for many experts in neurology, psychology and psychiatry [2].

Is there a nativism in these brain districts, which allows us to progress in our lives as human beings?

Absolutely yes. The American researcher defined distinct systems in particular brain areas, which are present in primary structures since the 6th/7th month of intrauterine life.

The "search" system (one of the 7 identified and studied systems, the most active and adaptive) can be taken as an example to try to understand, or assume, the genesis of all consequential factors from the mother to the foetus [3].

The "seeking" system provides activation (arousal) that stimulates the interest in the world around us. In some way this system can be "measured" only after birth; this allows the identification of some relational characteristics for adaptive purposes. Its structural development starts with the construction of the SO-CALLED "Neural cord" and of the vesicles that are going to build both, the central nervous system and the brain mass.

The environmental perception of the mother generates the “material” for the structures of the foetus first neural networks. The maternal, environmental perceptions transformed in sensations through the psycho-immune-system, are the “basis” on which the foetus develops the organization of its physiological (cellular, neurological and hormonal) systems. The mother’s perception of the world defines in general the initial neural system -setup in of her child. One should also think of a general influence on the morphological development [4].

The processes from perception to sensation of the outside to the inside world lived by the mother affects the development of the foetus totally and, consequently also its future emotional systems. One of the dilemmas of this itinerary of development is, if the registers of memory exist already during intrauterine life, or not. In our opinion they do exist, and in all probability, they are some of the first structures to be formed in the “Neural tube”. Probably, they are particularly active both, during their formation and immediately after.

The connection times of the neurons during intrauterine life are measurable in periods of a few seconds. The time of reflex-action between perception and feeling in the foetus is much shorter than in adults: somatization - that in adults is a physiological-pathological response with a partial alteration of physiological components - in the foetus gives expression to the construction of cellular structures and neuronal structures or interconnections. Basically, the reflex-action from perception to sensations is converted into constructive “material” for the foetus. For this reason B. Lipton, describing parental epigenetics, speaks of “genetic engineering”: the way of living of the adults is quickly translated into a constructive and evolutionary project for the unborn child [5].

Emotional systems, such as the system of SEARCH, are therefore already present in the foetus long before birth. Panksepp states: “The search system, for a long time known as the system of “reward” (seeking), may also be associated with terms such as ‘curiosity’, ‘interest’ and ‘expectation’ (or even ‘anticipation’).” From the perception point of view, everything satisfies the expectation generated by the feeling that something “good” will happen, if we explore the environment or interact with it. If the parents, but above all the mother, are animated by this general attitude towards the world, it is not said, that it will be the same also for her child. However, for sure it will happen, that the foetus is going to develop, on an implicit perceptual level, an amount of input related to those integrated structures, which can be defined as “empty containers of memory”, i.e. neuronal formations built on activated maternal perceptions [6].

The direct perception of all this is in the sensations which only the mother experiences: in this way, before birth, the emotional system of research has got a wealth of potential memory “without any purpose”, which must be “uploaded” by a direct experience with the world. We are talking about a neuronal system designed to receive future input in a way similar to the activity of those games, in which one must put the right shape into a pre-constructed matching space. Panksepp says that, in part, the behaviour in research varies from species to species and depends on the type of need which needs to be satisfied. The need that activates the system, promotes, once by once, typical actions such as sniffing, touching and oral exploration.

After birth the child shows primary search behavior. Little by little it will develop more and more sophisticated systems based onto the implicit perception transmitted during his intrauterine life. Time will expand its storage of explicit memory by adding more and more complex datas. From an operative point of view, it seems also, that the system of research in adults “does not know what it is looking for”; in psychoanalytic terms, it could be said that it “doesn’t have an object.” This confirms the fact that maternal perceptions transmitted to the foetus whilst in the womb, only produce a “neuronal research premise”.

Therefore, the primary root in development of emotional systems distincted by Panksepp is, of epigenetic origin. All this, however, does not want to support, sic et simpliciter, that personological trait is transmitted only from parents to the child, but that the basic structure of neuronal character is transmitted epigenetically from maternal perceptions to the foetus. The period of gestation acquires a new and, if possible, even more fascinating aspect; often defined as a moment of passive expectance of the” birth event “, it appears to be something much more complex than one could imagine. Its complexity is further enlarged considering the cultural influences under which motherhood is lived: let us think of the Aboriginal people of Tasmania, the tribal African ethnic groups and others. The partial conclusion of these hypotheses on the formation of the emotional systems is, that the energetic environment is working on the foetus in an exponentially accelerated way, encouraging the construction of the affective systems through the same effective process, as the

transformation from perception to sensation in adults. The same thing, which in us adults' acts on a psycho-neuro-immunological level as an elaboration of sensations, in the foetus becomes material that, in a versatile way, produces the evolution of the neural tube and all further structures of CENTRAL NERVOUS and the vagal SYSTEM [7].

This principle is valid for all seven affective systems. They would have the same genesis with parallel developments. The system of Research has the same system development as the system of Pleasure like in other brain structures, which, harmoniously, are defined by the same process. This could be the matrix of what has been described as unconscious according to the psychoanalytic language and is referred to be the implicit process by the neuropsychological literature. The ability to locate the brain areas which are the deposit of these operations and the description of their genesis generates a new aspect of the psychic human universe, connecting everything with the protein, neuronal and cellular dimension.

According to the process described until here, the origin of the unconscious would be epigenetic. In summary, those "empty containers" in the construction of emotional systems described previously would behave as a kind of receptors, and there is even more. During the period of the foetus' development, they would have widely demonstrated links with the nucleus accumbens and with the cortex. These would allow the cortex to receive the energetic frequencies, which determine the genesis of all the systems, through the maternal perceptive-sensory system. At birth the cortex in its role as department in charge of the final action, would enable the child, to a "general search" of the womb and all that had been transmitted during the period of gestation. The unconscious seems to develop as a process of "Dialogue with epigenetic matrix" between the emotional systems during their formation and the cortex (also in development).

The "hidden" part of this process would have its origin in the epigenetic route of maternal origin that would lead to the formation of primitive, "no object", memory networks, which are able to activate a "blind implicit research".

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