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- Outline

The Structure of Creditions: The Role of Cognition, Emotion, and Appraisal

I <u>BACKGROUND</u> of the Concept of Creditions

- c> This proposal uses the term "theory of credition". This labeling might be overdrawn, as the "theory of credition" is a "theory in statu nascendi" (theory under construction).
- c> The Credition-Research-Project intends to clarify and elaborate the theory of creditions as well as to set up empirical research on their putative cerebral implementations.

"Credition" is a neologism which denotes the "process of believing" as it might appear in a religious or secular manner. In this sense credition is conceived as a psychological term (Angel et al. 2006; Angel 2009; Angel 2010; Angel 2011).

II <u>APPROACH</u> to the Concept of Creditions

.(a) Contrary to a considerable part of current research the concept of creditions focuses explicitly on the process character, i.e. on what happens when someone is doing what we call "he/she believes". This approach initiated a neuroscientific debate concerning the manifestation of religious experiences in the human brain (Runehov 2007). .(b) Of particular interest is the neuroscientific controversy about the question whether religious experience is cognitive rather than emotional in nature. Functional imaging experiments showed that the circumscribed areas of the neo-cortex are involved in religious experience (Azari/Seitz 2001). Quite differently, the limbic-marker theory (Saver/Rabin 1999) understands religious experiences as being created in the limbic system. From this point of view it may seem difficult to explain rationally one's religious experiences in words.

.(c) As a result of this controversy the term credition was introduced into the academic debate (Angel 2006a). It coincided with the basic notion that creditions are connected with emotions and cognitions to which they stand in a finely tuned balance. Creditions are conceived as mental processes, which is not exclusive to the notion that not all proc- esses of believing reach consciousness (Teske 2007/2008).

III <u>BASICS</u> of the Concept of Creditions (credition-theory):

The concept of creditions is conceptualized at the interface of attitude and action. Processes of believing are the result of attitudes, influencing them as well as they influence our actions. Creditions are proposed to be characterized by four interdependent bio-psychological functions.

(1) Enclosure - function

The enclosure-function is a cognitive process constituting or modifying propositions ("bab-configurations") such as vague ideas, confirmed knowledge, values or even moral claims. In this sense bab-configurations are subsets of so called mind-sets. In order to accommodate subliminal processes unconscious babs were designated as "blobs".

.(2) Converter - function

The converter-function of creditions is activated when bab-configurations are transformed into action. This transformation is complex and all the problems discussed in theory of mind might be relevant for this concept. Notably, the impulses coming from the bab-configuration will not provoke single acts. Rather, the converter-function is preliminary to the concrete act sketching out a "space of action". The term "space of action" is introduced to mark a middle stage between motivation and action. Creditions support via the converter-function the preparation of actions by reducing the number of choices and abbreviating the time of decision making. Functional neuroimaging has provided evidence for the leading role of the pre-supplementary motor area (pre-SMA) in such converter-functions (Seitz et al. 2008). Notably, the pre-SMA is considered the most likely generator of the so-called "Bereitschaftspotential" (Nachev et al. 2009).

(3) Stabilizer - function

The stabilizer-function of creditions is inevitable and brings creditions into touch with attitudes and mindsets. As bab-configurations are continuously modified by new experiences of the subject, they are likely to send irritating impulses to the converter-function. Therefore the stabilization of bab-configurations is the precondition for consistent "spaces of action". Many complex challenges of everyday life, as for instance decision-making, planning, or (re-)building of trust, are only possible on the basis of a coherently shaped space of action.

While the enclosure-process has the function to "produce" bab-configurations, the stabilizer-process has the function to "maintain" them. Most likely these functions are implemented on different stabilized neural circuits.

(4) Modulator - function

The modulator-function highlights in a specific way the differences of individuals and the differences of situations, in which creditive process can occur. It should be supposed that creditions have interrelations to body, to individual memory, to gender, to the state of cognitive and/or emotional development, to health, disability or psychic integrity. When regarding the modulation-function on the levels of cells, for example, we might see the influence of neural synchronizing processes. One the other hand the course of creditive-processes might be modulated by actual bodily states as stress, loss of trust, arches and pains, sadness or sexual arousal. It is an intriguing perspective in which way emotions and appraisal influence the modulation of creditions.

IV <u>RESEARCH QUESTIONS</u>:

Scientific inquiry concerning the theory of creditions ranges from conceptual issues to empirical studies about their psychological realizations and cerebral implementations. These include issues like:

- relations of creditions to cognition and emotions
- relations of creditions to the self-concept
- relations of creditions to theory of mind and empathy
- relations of creditions to action control
- relations of creditions to perception
- relations of creditions to memory.

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