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No Believing Without Emotion: The Overlapping of Emotion and Cognition in the Model of Credition

HANS-FERDINAND ANGEL

Abstract

The term *credition*, which appeared in print for the first time in 2006, is to be understood as 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 in such a way that it is tightly related to cognition and emotion. Processes of believing are called “creditions” (lat.: *credere*). The term is built as neologism in analogy to emotion (lat.: *movere*) and cognition (lat.: *cogitare*). The question to be raised is “*what happens when someone is doing what he/she believes?*”? The basic notion is that creditions are connected with emotions and cognitions, working together in a finely tuned balance. Creditions are conceived as mental processes, which is not exclusive of the notion that not all processes of believing reach consciousness. Creditions are assumed to operate in the same manner regardless of whether they refer to religious or non-religious experiences. Moreover, the process character of creditions might be emphasized, which leads to an understanding of creditions as contribution to a “theory of mind in process”. Specifically, the concept of “babs” and “bab configurations” will be explained. Babs are understood as basic cognitive-emotional units of creditions. They are relevant for all creditive functions which have been identified until now. Based on a rough knowledge of these concepts, it will be shown how to describe the “content aspect”, the “emotional loading”, the “mightiness” and the “degree of certainty” in a “bab configuration”. As the model of credition opens a new understanding of the relation of “knowing” and “believing” it might be applied in various fields like interreligious, interdenominational, or intercultural communication. But it might also be applied in concepts of conflict resolution, education, or partnership training. Thus, it is hoped that the model of credition is helpful for bridging the religious and non-religious domains of everyday life as well as for a fruitful exchange between science and theology.

Keywords

Process of believing, credition, cognition, emotion, valuation, lateral prefrontal cortex, bab configuration, religiosity/religiousness.

1. The actual state of the Credition Research Project

THE TERM *credition*, which appeared in print for the first time in 2006, is to be understood as a neologism, which denotes the “process of believing” as it might appear in a religious or secular manner (Angel 2006b: 73). The origin of scientific discussions concerning “creditions” is located in a former research project which intended to improve the understanding of “religiosity/ religiousness”. These interdisciplinary discussions are known as the “Regensburg Symposia” (2002 – 2006). As the discussions took place in German the main scope had been, of course, to understand the meaning of the German term “religiosity” (Angel *et al.* 2006). It is not a marginal bagatelle to mention this aspect which is bound to one single language. The German “Religiosität” is not congruent with one of the terms which are provided by the English language, such as “religiosity”, “religiousness” or “spirituality” (Angel 2013b).

It is noteworthy that the discussion in the Regensburg Symposia was also aware of neuroscientific approaches to religious experiences (Angel 2006a). There could be observed theoretical differences between a more emotion-based approach to religious experiences – which may be known as the “limbic-marker theory” (Saver and Rabin 1999) – and a cognitive-based understanding of religious experiences (Azari *et al.* 2001). This theoretical discrepancy was understood to be the result of a certain psychological anthropology which is based merely on emotion and cognition, and is thus not sufficient to understand human religiosity (in the sense of the German term). In consequence this lack of explanatory vigor stimulated the introduction of the term “credition” into the scientific discussion.

It is important to note that creditions are not understood as being restricted to religious experiences. Moreover, “mental” or “cognitive” believing processes run in the same way, regardless of the religious or secular contexts of experiences. And in addition it is most important to mention that they only partly reach consciousness.

The process of credition is understood as a multi-functional process which takes place in between perception and the prefiguration of a space of action. Four processes have been identified: the enclosure-function (which is mainly

related to perception), the converter-function (which is mainly related to the preparation of an action), the stabilizer-function (which is related to learning and maintaining balance), and the modulator-function (which is related to the individuality of a person). These functions have been described elsewhere (cf. Seitz and Angel 2012; Angel 2013a; Runehov and Angel 2014).

2. “Bab” as the basic unit of a creditive process

As credition is conceived as a process (i.e. to believe as verb), questions must be answered that are quite unusual in their concepts, which reflect the notion of belief or faith (i.e. as noun).

Interest in the process character brings a question to the floor: *what happens when someone is doing what “he/she believes”* or, in other words, *“when he/she is believing”*? (The question also reads nicely if you use “what happens when someone is doing what we call ‘believing’?”) To articulate this process we see the need to identify – or better to formulate – a basic unit for this kind of process. The coinage “bab” was proposed as the term to denote this basic unit and thus “babs” are understood as basic cognitive-emotional units of “creditions” (Runehov and Angel 2014: 205–219). The term is derived from a Russian toy known as a babushka (or in some regions – maybe more appropriate - as a matryoschka). The reason why this Russian toy inspired the creation of the term “bab” will be explained later.

The question has to be raised: Why is it necessary to introduce a new artificial term into the scientific discussion? To make this step more easily understood we have to focus on the relation between emotion and cognition. Of course we must not forget that both emotion and cognition are theoretical constructs naming certain experiences or processes within beings. Nevertheless, the relation of emotion and cognition was and is a subject of vivid discussions.

I’d like to recall the well-known discussion in the history of psychology concerning the primacy of cognition or emotion, which even led to the formation of a scientific camp. This discussion started as a result of the presentation of the so called “two factor theory of emotion” (Schachter 1964) and was advanced by the protagonists Richard Lazarus (Lazarus 1982) and

Robert Zajonc (Zajonc 1984). The question touches deeply, of course, on the understanding of religious experiences (Azari, Missimer and Seitz 2005).

Important for the shaping of a theory of credition is that this debate meanwhile becomes a new (unifying) dimension by recent discoveries in neuroscience (Gray *et al.* 2002; Yarkoni *et al.* 2006; Schaefer and Gray 2007; cf. for the following also Seitz and Angel 2014). Though emotion and cognition are considered as two different domains covering separate and often contradictory aspects of brain function, there is empirical evidence from neuroimaging findings that emotion and cognition are processed in overlapping areas of the lateral prefrontal cortex, by which both can contribute to the control of thought and behaviour (Gray *et al.* 2002). Moreover, current data provide converging evidence that working memory and neural activity in the lateral prefrontal cortex can be influenced by affective variables. While emotions have been shown to involve the amygdala and the orbitofrontal cortex (Rolls 2006), cognition comprises different aspects of mental activity such as speech production, memory processes, attention, and learning processes which are processed across widespread circuits in parietal, temporal, and frontal cortical areas as well as in the amygdala (Schaefer and Gray 2007).

3. The overlapping of emotion and cognition in the model of credition

The fact that emotion and cognition are processed in overlapping brain areas is crucial for the model of credition because creditions are conceived as *interrelated* with emotion and cognition. That means that cognitive processes, such as representing or articulating a proposition, are in one way or another always shaped in an emotional sense. In a pointed phrase one can say: There is no proposition (or content) without an emotional tinge. From this it follows that whenever someone uses the term “bab” within the model of credition, he or she has to give two explanations for the “bab”: What is the content of the bab? And he or she has to answer: What is its emotion? The propositional aspect and the emotional aspect are two indispensable assignments of any bab. Bab is the term which represents the overlapping of cognition and emotion. That is the answer to the question of why it is necessary to introduce a new artificial term into the scientific discussion.

As far as the term “bab” is accepted to represent an indispensable cognitive-emotional interconnection, a new dimension of conceiving the character of babs can be opened. When we have accepted the concept of an emotional tinge of a proposition represented by the term “bab”, then we have to realize that the same type of emotion can be different with respect to its intensity. Thus, obviously, there is a need to express the different intensity of emotional loadings of a bab. Propositionally identical babs can differ by the “weight” or “mightiness” of their emotional loadings. To express this dynamic we proposed to introduce the terms “mega-babs” or “mini-babs” to identify the mightiness of an emotion. By this we have a means to express the potential emotional fluidity of a bab. Thus, in an agent the same propositional content might change from situation to situation and be “filled” or “coloured” with a different mightiness of emotional loadings. This fluid or dynamic character of the emotional mightiness of a bab might be called the “babushka-effect”, an expression which can sometimes be found in different contexts but without a clear scientific labelling until now. From this metaphor the term “bab” is derived. In analogy to the wooden toy babushka which accommodates several figures of the same shape but different sizes, we can understand a “bab” as a fluid basic unit which transports “content” (i.e. an abstract proposition) in combination with the specific mightiness of emotional loadings.

In the model of credition, babs exist in configuration. In some sense, a bab-configuration might be similar to what is better known as a “mind-set”. The different babs in a bab-configuration are supposed to be interconnected. A bab-configuration is understood as a structure, which is highly modifiable as well as somehow stabilized. The bab-configuration is relevant for the different functions (Runehov and Angel 2014). For example, the so-called enclosure function is a cognitive process constituting or modifying bab-configurations in the sense of emotionally shaped propositions, such as vague ideas, confirmed knowledge, values, moral claims, and intuitions. Thus, bab-configurations are subsets of mind-sets which are activated when a process of believing starts. Furthermore, this concept can also give new perspectives on vivid discussions such as “religious fundamentalism” (Hood, Hill and Williamson 2005).

Of course, it is not possible to explain the different functions and their significance for creditive processes. It is similarly not possible to explain in more detail the characteristics of a bab. Finally it must be mentioned that it is not presupposed that all processes of believing reach consciousness. In order to accommodate subliminal processes (or even subliminal persuasion), “non-conscious babs” were designated as “blobs” which nevertheless are effective by influencing affects and motivation as well as actions (cf. Angel 2013a). This means that we have to add to the term “bab” a second term which explicitly stands for the subliminal aspects. We call it “blob”. The term “blob” represents a “bab” which does not reach the consciousness but nevertheless might influence the believing process.

As conclusion:

The term “bab” is a cover-term denoting aspects of content (proposition), of emotion, of mightiness, and of certainty. In order to describe a single “bab”, it is necessary to name its propositional content, its emotional loading (for instance fear, joy, anger, and so on), its subjective importance (mega-bab vs. mini-bab) for the “bab-owner”, and its (subjectively felt) certainty (doubt vs. certainty). Hence, a bab-configuration is an ensemble of different babs. In some sense, a bab-configuration might be similar to what is better known as a “mindset”. The different babs in a bab-configuration are supposed to be interconnected. A bab-configuration is understood as a structure, which is highly modifiable as well as somehow stabilized (Runehov and Angel 2014).

The bab-configuration is relevant to the four different functions that I have mentioned above.

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Author Biographies

HANS-FERDINAND ANGEL was Professor at the Technical University Dresden, Germany. Since 1997 he has been Professor of Catechetics and Religious Education at the Karl-Franzens University Graz, Austria. He was the organizer and leader of an international and interdisciplinary research project (2002-2006) "Understanding Religiosity". He is member of the advisory committee of the Initiative of Brain Research in Styria. He was section editor in the editorial board of the Encyclopedia of Sciences and Religions (2006-2013).

IVAN COLAGÈ took his PhD at the Pontifical Gregorian University of Rome, Faculty of Philosophy. He now teaches logic as well as topics in philosophy of science and anthropology at the Faculty of Philosophy of the Pontifical University Antonianum, Rome, Italy, where he also currently leads an interdisciplinary research project funded by the John Templeton Foundation. Currently, his research is mainly focused on the implications of recent neuro-scientific findings for the topic of human uniqueness, and in particular on the relationships between culture, brain and evolution.

PAOLO D'AMBROSIO carried out his doctoral studies at the Pontifical Gregorian University (Faculty of Philosophy). His dissertation concerned the philosophical implications of modern evolutionary biology as rooted in the Darwinian theoretical framework. Paolo is a team member of the research project The Human Specificity: Tools, Symbols and Culture among Neuroscience, Philosophical Anthropology and the Religious Attitude towards Creation supported by the John Templeton Foundation and hosted by the Pontifical University Antonianum.

ALLAN EMRÉN, PhD, studied mathematics, theoretical physics, chemistry, and physical chemistry at the University of Göteborg, Sweden. He was a

lecturer and research engineer in Physical Chemistry and Nuclear Chemistry at the University of Göteborg and Chalmers University of Technology. Research areas: Interaction between radiation and matter, renewable energy sources driven by entropy changes, theoretical groundwater chemistry, safety in nuclear power, medieval music, and physics and chemistry as tools in theology.

JAY R. FEIERMAN has a B.S. in Zoology, an M.D. degree, and three years of post-doctoral residency training in psychiatry. He has retired as Clinical Professor of Psychiatry at University of New Mexico. For 18 years he was a consultant to the Roman Catholic Church for psychosexual issues in priests. Since his retirement in 2007 he has focused his interests on the evolution of religion. He has organized a number of paper sessions at conferences on biological and evolutionary aspects of religion. He also edited and contributed to *The Biology of Religious Behavior: The Evolutionary Origins of Faith and Religion* (Praeger/ABC-CLIO, 2009).

SYBILLE FRITSCH-OPPERMANN studied Protestant Theology, Social Science and Musicology in Göttingen, Frankfurt/M and Munich. She undertook research in Japan and afterwards published a PhD on "Christian Existence in a Buddhist Context/Katsumi Takizawa and Seiichi Yagi". She works as an author, journalist and researcher and taught Ecumenical Theology and Philosophy of Religion at Hamburg University. She has delivered guest lectures in Germany, Switzerland, Austria, Czech Republic, Russia, Turkey, Malaysia, Japan and the US. From 1991-2001 she was director of studies and director of two Protestant Academies in Germany (Loccum, Rheinland). Her fields of research are: Philosophy of Religion, Hermeneutics, Science and Theology, and Buddhist-Christian Studies. She also works as parish priest in her home church in Germany.

PHILIPPE GAGNON teaches at the College of Adult & Professional Studies at Bethel University, Minnesota. He received a PhD in Philosophy of Science from Laval University, after receiving both PhD and D.Theol degrees in Fundamental and Philosophical Theology from Dominican University College, Ottawa (Canada). He has previously taught at the École Polytechnique

in Montreal, at Saint-Paul University, Université de Sherbrooke, University of St. Thomas, Gustavus Adolphus College, and St. Catherine University. He counts philosophy of biology, philosophy of physics, probability theory, philosophical theology, and science and theology as his areas of special interest. He contributed to the Blackwell Companion to Science and Christianity (2012) and to Encyclopedia of Sciences and Religions (2013).

ENN KASAK qualified from the University of Tartu in 1981 as theoretical physicist (specialization in astrophysics). In 1981-1995, he did research on the physics of galaxies and cosmology at Tartu Observatory. He acquired a Ph.D. in astrophysics in 1990. Kasak worked as the director of Võro Institute from 1995-1997, helping create the orthography and grammar for his native language – Võro. From 1998-2007 he was an associate professor in the University of Tallinn and the Institute of Law. Initially, he studied the early history of science and pseudo-science in Ancient Mesopotamia, later he devoted himself to the problems of logic and argumentation. Since 2007, he has been an associate professor of the methodology of science at the University of Tartu. In 2014 the University of Tartu Press published his book on logic (in Estonian). Lately, he has also worked on questions of reality, religiosity of science, and scientific stupidity.

LADISLAV KVASZ is currently Professor of mathematics education at the Pedagogical faculty of the Charles University in Prague, Czechia, and Jan Evangelista Purkyne Fellow at the Institute of Philosophy of the Academy of Sciences of the Czech Republic. His research interests include history of mathematics, philosophy of science, and the relation between mathematics, art, and theology. His book *Patterns of Change, Linguistic Innovations in the Development of Classical Mathematics*, Birkhäuser 2008, won the prestigious Fernando Gil International Prize 2010.

JAVIER LEACH studied Philosophy at the Facultad San Francisco de Borja (Barcelona) from 1961-65. From 1965-1970 he studied Mathematics at Universidad de Zaragoza. From 1970-1973 he studied Theology at the Philosophisch-theologische Hochschule Sankt Georgen in Frankfurt am Main (Germany). He took a Doctorate in Mathematics in 1977. From 1987 he was Professor

at the Universidad Complutense in the area of Computer Languages and Systems. Since 2012 he has been retired Professor and Honorary Collaborator in the area of Computer Languages and Systems. His research interests include: Automatic demonstration of Theorems through the Use of the Computer, Automatic Deduction Systems based on Tableaux, Declarative Programming with Constraints, Hereditary Harrop Formulas, and Science and Theology.

WIESŁAW M. MACEK is Ordinary Professor at Faculty of Mathematics and Natural Sciences, Cardinal Stefan Wyszyński University in Warsaw, Poland, and at the Space Research Centre, Polish Academy of Sciences. He also has a Ph. D. in theology. He was a member of the Plasma Wave Science team on the Voyager mission to Neptune in 1989. His recent research interests focus on nonlinear dynamics, deterministic chaos, and fractal structures in space plasmas, and include studies in theology in the context of contemporary science. He has published about 70 papers including in such journals as *Nature*, *Science*, *Physical Review Letters*, and *Astrophysical Journal Letters*. Recently, he has delivered a general university lecture on Science and Religion.

MARK PRETORIUS has been a senior academic at the South African Theological Seminary (SATS) for the last 4 years, having served before that as its senior assessor since his appointment in 2002. He holds a Ph.D from the University of Pretoria (UP) in the discipline of systematic theology and ethics. He is also an extraordinary lecturer at UP, and a lecturer in ethics at the University of South Africa (UNISA). He has approximately 13 years full-time teaching experience in the discipline of theology, specifically in systematic theology. He also has a strong interest in the discipline of science and theology, and oversees the SATS M.Th. in science and theology. So far, he has published 12 scientific and 4 popular articles. He has also published 4 books, and co-authored three.

BILL SHOEMAKER is a neuroscientist who received his Ph.D. from the Massachusetts Institute of Technology (MIT) and has held positions at the National Institute of Mental Health, the Salk Institute in La Jolla, CA, and cur-

rently at the University of Connecticut Health Center in Farmington, CT. He is in the Psychiatry faculty, where he teaches residents and medical students, and in the Neuroscience Graduate Program. He has authored more than 100 scientific research publications. Recently, he has been writing concerning the interface between neuroscience and religion.

JOHN A. TESKE is Professor of Psychology at Elizabethtown College, Elizabethtown, Pennsylvania, USA. He is a past President of the Institute on Religion in an Age of Science (IRAS), and has published regularly in *Zygon: Journal of Religion and Science*, including "From Embodied to Extended Cognition" (2013), and "Neuromythology" (2006). He is also on the Joint Publication Board. He was voted an Academic Fellow of IRAS in 2010, and a member of the Institute for the Study of Science and Religion (ISSR) in 2013. He was co-organizer for an IRAS Conference on "The Mythic Reality of the Autonomous Individual" in 2009, and will be again for "More Than We Can Know: Worldviews, Lifeways, and the Limits of Science" in 2016.

BERGE J. TRABOULSI is an Associate professor of History, Religion, and Intercultural Studies at Haigazian University, Lebanon. His current research interests are in the following areas: Religions, Human Rights, Citizenship, Applied Ethics, Leadership and Change Management, and Modern Church Challenges. He has participated in several local, regional and international conferences and presented papers on intercultural, interreligious, and social issues.

HANS VAN EYGHEN studied Theology and Religious Studies and Philosophy at the Catholic University of Louvain, Belgium, and is currently PHD-candidate at the Free University of Amsterdam, Netherlands.

KENNETH WILSON is an Honorary Senior Research Fellow in the Jubilee Centre for Character and Virtues, School of Education, College of Social Sciences, University of Birmingham, UK. Research interests: the public understanding of theology, ecclesiology; moral philosophy, especially virtue ethics; religion and science including the social sciences.

