

Introduction

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Tom Froese is one of these modern philosophers, who sees a great potential in interdisciplinary approaches to mind, life, and to being in general. His academic and philosophical work is an example of a naturalistic phenomenology with a strong cognitive science affiliation. He appreciates the significance of personal experiences of the lived mind in order to understand the autopoietic organization of living beings, and he sees an advantage in elucidating the social context of these lived experiences.

However, before Tom Froese turned to this phenomenological, naturalistic (neurobiological) and social contexts, he was exploring cybernetics and the classical cognitive science methods of AI and computationalism¹. He was especially attracted to the problem of the origin of animal communication, which he explored in a synthetic manner by bringing together evolutionary algorithms, artificial neural networks, and models of multi-agent systems. Nevertheless, his search for an adequate theoretical framework for the complexities of life and mind turned his later research direction toward the new 'enactive' approach to cognitive science. During his doctoral studies he began to make use of phenomenology as a complement to the dynamical systems approach in order to highlight how the actual and potential presence of others can affect our basic experiential relations to the world, including perception (Froese & Di Paolo 2009). The motto of that work would be: "in social interaction we radically transform ourselves, others and the world".²

¹ Tom Froese wrote his B.Sc. Thesis in computer science and cybernetics, titled: *Investigation into the Evolution of Communication in a Multi-Agent System* (2003), at the Department of Cybernetics and Computer Science, University of Reading, UK. He developed his interests in machine learning in his M. Eng. Thesis: *Classification of ECG signals using Discrete Wavelet Transforms* (2004), also at the Department of Cybernetics and Computer Science, University of Reading, UK.

² In his D.Phil. Thesis: *Sociality and the Life-Mind Continuity Thesis: A Study in Evolutionary Robotics* (2009), Department of Informatics, University of Sussex, UK, Froese writes about cognitive functions of our mind and its social affiliations in the context of evolutionary robotics and phe-

Turning to the phenomenological tradition of philosophical investigation was at the same time a revival of David Hume's works. In his article: *Hume and the Enactive Approach to Mind* (2009), Tom Froese shows the compatibility of Hume's work, especially the main ideas of his 'science of man', with modern research in cognitive science. Although it is still disputable whether Hume's science of human nature, which he imagined as a natural science based on experiment and practise, is plausible with the rest of his philosophical investigations, especially those from his *Theory of Ideas*, Tom Froese sees Hume as a father of modern cognitive science.

Froese's recent work on developing a new approach to cognitive science is still oriented around an investigation of our cognitive capacities in social interactions, which he believes should be the fundamental case of current research focuses.³ In his article: *Breathing new life into cognitive science*, he introduces his ideas of how to overcome the mind-body problem, he shows how to bridge the cognitive gap in theory and practice, and he proposes how the problem of other minds could be solved.

Considering all that has been said so far, as well as taking into consideration the articles mentioned above, it is clear that Tom Froese is a rather interesting modern philosopher. He not only combines some of the traditional, phenomenological ideas with the latest findings of cognitive science, but at the same time he introduces his original philosophical thoughts and creates new agent-based models in order to solve some of the most discussed theoretical problems in philosophy and cognitive science. His philosophical investigations toward finding a better understanding of cognitive processes, social interactions, sense-making, and our first-person experiences, as well as their practical application in our lived, embodied and socially embedded minds, can truly be seen as 'breathing new life into cognitive science'.

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Tom Froese's article *Hume and enactive approach to mind* (2008) is an intriguing interpretation of David Hume's philosophical ideas of 'science of man'. The author clearly shows an affiliation between Hume's idea and modern cognitive approaches to knowledge, as well as attempts to understand human nature (in the field of cognitive science). The text gradually presents different stands in cognitive science, and ultimately emphasising the role of the embodied, dynamic, situated, and, finally, enactive approach to mind and *being* itself. The whole article is supplemented with quotations from and references to Hume's works, as well as the body of knowledge and research of contemporary cognitive science.

nomenology.

³ Froese has continued this work as a Postdoctoral Fellow at the Neurodynamics and Consciousness Laboratory of Dr. Seth, Sackler Centre for Consciousness Science, University of Sussex, UK (Feb. 2010 – Nov. 2010), and as a JSPS Postdoctoral Fellow at the Ikegami Laboratory of Prof. Ikegami, Department of General Systems Studies, University of Tokyo, Japan (Nov. 2010 – Nov. 2012).

The article begins with an introduction to Hume's 'science of man', and its reception in modern philosophy of 17th century. Tom Froese compares the Cartesian tradition of philosophy of mind and its substantial dualism with the practical application of Hume's 'science of man' in order to showcase the possibility of overcoming the explanatory gap between *res cogitans* and *res extensa*.

In the later sections of the paper Tom Froese confronts Hume's philosophy of mind with computationalism, embodied dynamicism, and enactivism, in order to show convergences between these approaches and some parts of Hume's philosophical work, ultimately leading to a systematic perspective on the mind, which would provide a plausible and coherent explanation of cognitive processes and human nature itself.

In the last section, *The future of the cognitive sciences*, Tom Froese speculates about the place of the enactive approach in cognitive science. He says: *In summary, following Thompson (2007: 411), we can say that the enactive approach is beginning to promote the general claim that "the knowing and feeling subject is not the brain in the head, or even the brain plus the body, but the socially and culturally situated person, the enculturated human being". Hume could not have agreed more. The challenge for enactive cognitive science is to live up to this revolutionary ambition* (Froese 2009: 36).

Bibliography

Froese, T. 2011. Breathing New Life into Cognitive Science. *Avant. The Journal of the Philosophical-Interdisciplinary Vanguard*, vol. II, 1/2011.

Froese, T. 2009. Hume and the enactive approach to mind. *Phenomenology and the Cognitive Sciences*, 8(1): 95-133.

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