

Editorial

While computational creativity is a young field of research with an age spanning over few decades, it can be observed in the context of the broader domain of (human) creativity, which has been attracting the best scholars to debate about it for hundreds of years.

Similar to many other heatedly debated domains, creativity and its “younger brother”, computational creativity, lack a single unifying definition that guarantees a clear consensus among active researchers. Having acknowledged the aforementioned argument, there are well-established and sometimes complementary frameworks defining these notoriously thorny concepts.

In this Special Issue Journal titled *Computational Creativity, Measurement and Evaluation*, several of the leading researchers present their ideas and argue for their significance. While some introduce well-defined “provocative” concepts to the field, others extend already existing arguments and thus add to their richness. Authors of this volume hail from various disciplines of computer science, cognitive science, psychology, philosophy, (digital) arts, engineering and robotics, all bringing their knowledge together and enriching the field further.

In this volume, contributors have focused mainly on the measurement and the evaluation of computational creativity in various contexts and have discussed computational creativity from various perspectives, including: lexical invention and linguistic creativity, where perceptual grounding of language is inevitable; perspectives on computational creativity and ways for more comprehensively useful computational investigations of creativity; poetic forms and the associated constraints which are tasked to limit the output to certain topics while paving the way for a less strict mechanism for constraining form; the importance of skills in the appreciation of computer art and arguing for the knowledge of coding and its role in the appreciation; analysis and quantitative evaluation of complexity and aesthetics in cellular automata generated patterns; finally, the provocative concept of evil in computational creativity, where dark creativity is contextualised and investigated in the domain of *weak* computational creativity as opposed to *strong* computational creativity.

It is known to the researchers of this relatively new field that computational creativity has been dealing with the sometimes “hostile” view that machines can never be creative, which rekindles an older battle in the field of artificial intelligence about whether machines can ever be intelligent (i.e. an extension of the notions of weak and strong artificial intelligence).

Although some of the contributions of this volume do not aim to resolve the aforementioned claim, they do attempt to offer a perspective that, while not completely ruling out the possibility of a machine being creative one day, elaborate and introduce their arguments for and against this claim.

This volume celebrates the recent partnership between the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB) and Taylor & Francis, which intends to be mutually beneficial and has the ultimate dual goal of promoting and advancing the work done by the Society whilst at the same time further developing Connection Science journal, working alongside AISB. As such, this special issue emerges from the results of the 2nd AISB symposium on Computational Creativity in 2015 where authors of the selected papers were invited to contribute with their novel findings.

In my capacity, as the guest editor of this volume, I would like to thank all the committee members of the Society (specially the past and present chairs, Mark Bishop and Berndt Müller) for supporting the previous, current and hopefully future symposia on this interesting topic.

Special thanks go out to the authors of this volume as well as the reviewers, whose meticulous contributions did not leave a stone unturned and assisted in presenting a strong collection of work on the state-of-the-art developments and philosophical debates on computational creativity.

I would also express my gratitude to the editor-in-chief of the journal, Tony Prescott, for all his support to get this work ready way ahead of the schedule.

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Guest Editor
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