

Preface

The drive for creating this book originated from teaching and researching in this field. As education practitioners we felt the lack of consolidated knowledge, which made us improvise new paths year after year. As researchers we believe that novel technologies require in-depth discussion within diverse fields of human knowledge to consolidate definitions, approaches and methodologies. This led us to invite a group of colleagues to edit a book on Digital Creativity.

The work to arrive here took 3 years, from submitting our intention to Springer to delivery of the full manuscript. The topic was relevant, and we found many researchers interested in participating in the book, in bringing their expertise to make the subject more understandable. However during the first attempt to edit a preview of the book we found that half of the contributions were not concerned with the core topic. Even among scholars the topic was not clear, giving rise to very different ideas, mostly related to misconceptions around the idea of creativity. We then requested another set of contributions, on very specific topics within Digital Creativity. All this said and done, we must say that we are very pleased with what we have achieved with this process.

We unveil this part of the process because it delves into the main point of the domain of Digital Creativity (DC). We live in a time where creativity is a buzzword; it represents for many, the salvation from “darkest times”. Words like creativity, creative or creation pop up almost anywhere, not only in the business world, but also in academia. Having these experiences is good because it gives strength to the subject, but at the same time, it brings a lot of other things unrelated to the matter. So what happened with our first attempt to edit this book is what has happened during the last few years whenever people tried to put together projects related with creativity.

We want to trace from here a concrete line about what DC is not, because for what it is, you should read the book. Firstly, DC is not the same as “creativity support tools”, tools to make people more creative. Secondly, DC is not tools to serve only the media industries. And thirdly, DC is not the “saint saviour” of capitalist economies. Even if DC can address these topics, in the long run, none of these matters are central to them. DC is mainly concerned with matters of self-realisation and

self-discovery, the central concern are the human needs of expression. DC is concerned with opening new dimensions and help human beings to flourish.

As we have identified, addressing knowledge in depth on the domain of DC represented a significant enterprise with many challenges that had to be addressed consistently at many levels, starting with the multidisciplinary approach that needed interdisciplinary and transdisciplinary values. To achieve workable definitions we had to bring together researchers from many different knowledge areas, such as: computer science, design, communication, engineering, arts, philosophy, psychology, pedagogy, media, linguistics, literature, electronic, film, games, music and marketing. The scope of background knowledge for DC is large but the discussion is concerned with a very specific set of objectives.

To achieve the objectives the book is divided into four parts: Fundamentals of Digital Creativity; Expressive Processes; Co-creation and Collaboration; Makers and Players. The idea is to present different fronts of DC, starting with a first defining part, setting the general approach and main definitions. It is followed by a more generic part, which opens the scope of possibilities and domains for the expression through DC. The second half of the book is confined to strict dimensions of our definitions, thus discussing co-creation, collaboration and making aspects.

Part one begins with our chapter to define our vision of creative technologies, central to the domain of DC, talking about possible impacts and effects we expect they will have in the future. We have also requested the help of David Gauntlett, who has been working with the topic for the past decade, helping to connect cultural dots between industrial and information revolutions. Our colleagues from Auckland University, (responsible for one of the first bachelor's degree on Creative Technologies) Andy M. Connor, Stefan Marks and Charles Walker in their chapter give us a flavour of the difficulties behind creating a University degree that is multidisciplinary, to go beyond theorisation, and achieve production of material artefacts.

In the second part, Expressive Processes, our intention was to open up the areas for which DC can be relevant. It is easy to understand that with that in mind, we could arrive at a very large part, or even make an entire book on these ramifications; we decided therefore to have only three chapters. The first one by Stefano Gualeni is dedicated to expand DC through philosophy, using the expressivity of digital technologies to make complex ideas simple and cognitively easy to grasp. In the second chapter, Maria Soto-Sanfield works on the ways these technologies empower human narrativisation, which cognitively is the way through which we make meaning of our worlds. The third chapter, was reversed, because instead of going out, we brought in, approaching the field of ubiquitous music to bring its knowledge on the socially distributed nature of creative activity, into the modelling of DC.

In part three, Co-creation and Collaboration, we start with a more delimited discussion of very specific topics of DC. In the first chapter, our colleagues from Georgia Tech discuss the new opportunities made possible by having computers at our side, as colleagues for creation, and discuss a new realm of research, which will be very relevant for the future of DC. The collaboration with computers is followed by a presentation of the results of studies with children in collaborative communities,

which identifies a set of logics, models and approaches, which are highly relevant for the building of DC. The third chapter presents an analysis on the co-creative methods used by LEGO to maintain its relevance in the twenty-first century, which helps us to better understand how DC has already impacted real-world business, and its changing communication paradigms. To close this part, we bring an analysis of the crowdfunding platforms, its achievements but mainly its communicative traits, identifying relevant approaches for the DC communities.

In the last part, Makers and Players, we open the discussion around the maker movement, with Josh and Karen Tannenbaum speculating about the future of the movement grounded in scenarios from Sci-fi literature. This speculation gives place to empiria in the next chapter, where colleagues present different technologies built and validated within creative communities, discussing maker approaches and potential new paths for the DC implementation. The final chapter of this part closes the book with a discussion around one of the most defining topics of the appearance of DC, the vocational training and how it affects motivation, engagement and the passion of learners.

In closing, we as editors would like to thank and congratulate the entire group of researchers, educators and practitioners that made possible the building of this book. Also we would like to thank Springer for being open to publish a book on such a novel, and still undefined, area.

Portugal
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