Preface

This book arises from our perceived necessity to offer a broad view about the multidimensional world of creative thinking, which is a truly domain-general research topic, although full of domain-specific implications. Indeed, creativity and creative thinking cannot be imprisoned into a single scientific discipline, as they are central topics in a number of cultural areas, wherein their study takes on distinct scientific approaches and sometimes different terminologies. In a search for a unifying fil rouge, we are fascinated by the extraction of the common principles for idea generation which underpin all domains of application in a transversal manner. Giving an in-depth view about some of the most recent theoretical and methodological approaches used in different disciplines for the study and analysis of creative thinking, this book is intended as a contribution to the foundation of the science of creative thinking.

The book contains an introductory chapter, proposing a unifying theoretical framework for the science of creative thinking, and four parts: “Theoretical Aspects of Creativity,” “Social Aspects of Creativity,” “Creativity in Design and Engineering,” and “Creativity in the Arts.” Each part offers a vision about both state-of-the-art and future trends, in the diversified forms of theoretical chapters, research contributions, reflection chapters, and educational approaches written by eminent international specialists. As we make no claim for exhaustiveness, this edited book should not be taken as a handbook, but as a well-harmonized ensemble of scientific contributions showing the intrinsic multidisciplinarity that characterizes the science of creative thinking.

Multidisciplinarity is in fact a fundamental element in the spirit of the Marconi Institute for Creativity (MIC), founded in 2011 at the joint initiative of Fondazione Guglielmo Marconi and University of Bologna, with the specific aim of contributing to the establishment of the science of creative thinking and its divulgation in educational and research milieus. Working on this book with the support of the CREAM European Project, funded by the European Commission FP7 Programme, we selected the chapters to be the expanded forms of the best papers presented at the MIC Conference 2013. The conference was attended by eminent scientists in the field of creativity and by the Fellows of the Marconi Society, who in their
lives have produced inventions in the field of information and communication technologies, from the Internet to mobile telephony. In particular, the 2013 Marconi Award was presented to Martin Cooper, who is accredited to have led the team of engineers that produced the first cellular telephone in the world. The MIC Conference 2013 was therefore a unique event in which theory, practice, and entrepreneurial success have met together and dwelled upon the state-of-the-art and the future developments of a field which is destined to become central to the culture of our society.

The chapters in the book have all undergone rigorous review. The editors would like to thank the anonymous reviewers selected by Springer as well as the experts who helped us in the revision work: Felicity Anne Andreasen, Roger Beaty, Valentin Bucik, Mercedes Ferrando, Andrea Gaggioli, Martina Hartner-Tiefenthaler, Maciej Karwowski, Mariann Martsin, Ingunn Johanne Ness, Jelena Pavlovic, Roland Persson, Ugur Sak, Eric Shiu, Lisa Min Tang, Luca Tateo, Susana Tavares, and Taisir Subhi Yamin. In addition, our sincere appreciation goes to the editorial board of Springer, who believed in this project and worked with passion to turn it into reality. Finally, our warmest thanks go to our spouses and life companions, Susy and Titty, for their patience, support, affection, and love.

We hope you will truly enjoy this book, as we have enjoyed editing it.

Giovanni Emanuele Corazza
Sergio Agnoli