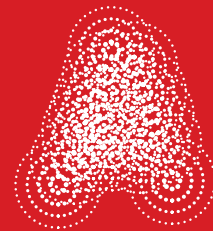
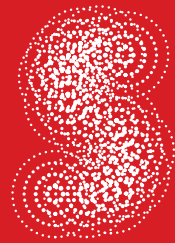
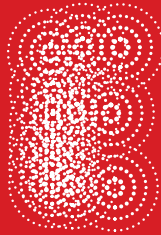
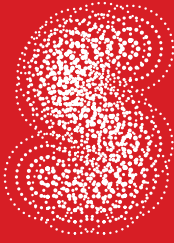


# SYNAESTHESIA: THEORETICAL, ARTISTIC AND SCIENTIFIC FOUNDATIONS

Maria José De Córdoba Serrano, Dina Riccò, Sean A. Day



*With contributions by*

Francisco Acuyo  
David Brang  
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Oscar Iborra Martínez  
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A. V. Sidoroff-Dorso  
Tonino Tornitore  
Jamie Ward



SYNAESTHESIA: THEORETICAL, ARTISTIC AND SCIENTIFIC FOUNDATIONS  
Maria José De Córdoba, Dina Riccò, Sean A. Day

**Synaesthesia: Theoretical, artistic and scientific foundations**

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*La perception synesthésique est la règle, et, si nous ne nous en apercevons pas, c'est parce que le savoir scientifique déplace l'expérience et que nous avons désappris de voir, d'entendre et, en général, de sentir, pour déduire de notre organisation corporelle et du monde tel que le conçoit le physicien ce que nous devons voir, entendre et sentir.*

Maurice Merleau-Ponty (1945)

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**PREFACES AND FOREWORDS**



## FOREWORD TO THE ENGLISH EDITION

This edition in English language appears two years after the first edition of *Sinestesia. Los fundamentos teóricos, artísticos y científicos* (2012) that was in Spanish. This volume compiles contributions regarding the study of synaesthesia in a wide and multidisciplinary sense, from science to arts, its target audience being synaesthesia researchers, university students and PhD students.

We already intended, with the release of the first edition, to provide a partially bilingual Spanish/English edition, since around half of the contributions were originally written in English, so that it could embrace all the contributions in the original language of the authors. Due to the high number of pages the volume finally would have had, the idea of a double edition appeared.

Compared with the first edition in Spanish, a chapter about the relationship between music and synaesthesia (López-Montes) has been integrated. This absence was already mentioned in our first preface.

During the time between the two editions, a great volume about synaesthesias has been published, *The Oxford Handbook of Synesthesia*, edited by Ed Hubbard and Julia Simner.

Indeed, both volumes have something in common; for example, the interdisciplinary approach, and some of the authors (Brang, Day, Hubbard, Jewansky, Marks, Ramachandran, Ward). Nevertheless, both volumes have a different purpose. Our precise intention is to provide documentations about the beginning and spreading of the contemporary debate on the subject of synaesthesia and its position between the two edges: science and art, which, from our perspective, was due to the clever intuition discerned in the opening of the I international and multidisciplinary conference on *Synaesthesia: Science and Arts*, held in Cuevas de Almanzora, in Spain, in 2005. We firmly believed the first international experience certainly contributed to the dissemination and enrichment of the discussion, publications and interest that currently exists about synaesthesia.

The purpose of this volume is to demonstrate this development with the actors that participated in this process.

We have pleasure in presenting this new edition also because next year, during the *V Conference of Synaesthesia: Science and Art* – organized by Artecittà

Foundation with the collaboration of Politecnico di Milano, the University of Jaén, the Cultural Department of Alcalá La Real Council and the American Synesthesia Association (ASA) – that will be held in Alcalá La Real (Jaén, Spain, 16 – 19 May 2015), we will celebrate our tenth anniversary, a very special occasion for us: that is why we would like to offer to all attendees a memento of our work.

Among the different chapters we have combined the usage of the term *synaesthesia* (“European English”) and *synesthesia* (American English) – always respecting the terms used by the authors. Since the edition is published in Europe, the “European” English spelling has been prioritised in the title and in the text in general.

To conclude, we would like to show our especial gratitude to all of the authors who have enthusiastically collaborated on the Project of this new edition, to our translators – especially to Julia, our “official” translator – and to Artecittà Foundation that have made possible this new edition.

*Maria José De Cordoba*  
University of Granada

*Dina Riccò*  
Politecnico di Milano

*Sean A. Day*  
Trident Technical College

## PREFACE TO THE SPANISH EDITION

*Plural ha sido la celeste  
historia de mi corazón...*  
[Plural has been the heavenly  
story of my heart ... ]

Rubén Darío

It is an honour for someone from the art world, as is my case, to write the foreword to a book on scientific and artistic research on synaesthesia. Especially for those of high prestige, globally recognised for what they themselves call lived synaesthesia.

When the singular composer and musicologist Joerg Jewanski creates his scores, Tonino Tornitore writes about the history of coloured hearing synaesthesia, referring to it as the appearance of a new disease in France, and Francisco Acuyo speaks of the chisel of thought, it is inevitable to identify synaesthesia with the more poetic yet tragic aspects of art, associated with disease and madness. A deep ancestral fear surely held by most human beings. In truth, no one considers it absurd that sounds have colour, clouds have a scent or that objects can be spoken to. I believe, therefore, with this book, we can learn in an organized manner, without fear, much more about the unconventional ways in which we approach the underlying reality and secrets behind our thinking.

Maria Catricalà, writing on metaphors from the point of view of synaesthesia, brings us closer to literature in a more recognisable form. When addressing the thorny issue of translating synaesthetic metaphors, it becomes clear how dull and lustreless literature would be without synesthesia.

Where Maria José de Córdoba’s research addresses the collaboration and interrelationships between the arts, making proposals for interdisciplinary projects from the visual arts, she shows the processes that have become pillars of creation in contemporary art.

The critical research of Vilayanur S. Ramachandran, a neurologist known for his work in the fields of behavioural neurology and psychophysics, alongside Edward M. Hubbard, clarify and focus the concepts, meanings and

# SYNAESTHESIA: THEORETICAL, ARTISTIC AND SCIENTIFIC FOUNDATIONS

Maria José De Córdoba Serrano, Dina Riccò, Sean A. Day



This book intends to provide an update of the knowledge acquired in the last two centuries of study of synaesthesia, from the beginning of the nineteenth century up to nowadays. It is targeted at researchers, university and music school students and to those from diverse disciplinary contexts who would like to discover the history of synaesthesia and the neuroscientific explanations or would like to experiment with the possible applications in language, arts and design.

The book is the result of the international collaboration of an important group of researchers who have been participants in at least one of the conferences on *Synaesthesia: Science and Art* (2005, 2007, 2009, 2012, 2015) organized by the International Foundation Artecittà, Politecnico of Milan, University of Granada and American Synesthesia Association (ASA).

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