Computational Music Science

Series Editors

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Musical Creativity

Strategies and Tools in Composition and Improvisation

Springer

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Every
act of creation
is
first of all
an
act of destruction.

(Pablo Picasso)

Yes,
but always
with
a
constructive intention.

(Guerino Mazzola, Joomi Park, Florian Thalmann)

Preface

Writing this book was a special challenge because we knew that creativity is a core but quite mysterious topic in music. We had many ideas about creativity in theory, and we had also been working creatively as composers, improvisers, and music software programmers. But there was one very special and demanding part of the book that we wanted to write, namely the practical tutorial.

We planned to complement theoretical and other high-end perspectives with a really concrete, practical, and teachable contribution. The result of this effort is the hundred-page tutorial, Part II. It significantly precedes the theoretical Part III because we wanted to offer a presentation that works for undergraduate students or for any reader who wants to see how the theory works when you apply it, without having to go through long and annoying theoretical discourses, also called "general nonsense"[1].

Writing the tutorial was in no way a replication of known material. In each unit of the tutorial, we had to break through the standards of that theme and develop creative extensions of the *status quo*. We are by no means claiming that our solutions are unique or even optimal ones, but we hope that they demonstrate the validity of our general method for working creatively in music theory, technology, and performance. All tutorial chapters have been written as an exchange of ideas between Joomi Park (as a composer and pianist) and Guerino Mazzola (as a scientist). Joomi's practical and musical contributions have strongly enhanced the value of the tutorial chapters as a model for a future course syllabus, as well as the case studies and the theoretical chapters of this book.

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[1] "General nonsense" is a well-known qualification of utterly abstract and general mathematical theories, in particular category theory. It was a style developed in the 1970s following Alexander Grothendieck's success in algebraic geometry, which was achieved in this style, but then used by not-so-creative mathematicians. Around 1980, this style was strongly criticized, also relating to teaching abstract set theory in elementary school.

This book's approach to creativity is a bit different from others since it follows less a psychological method than a semiotically shaped procedure. Of course, psychology is extremely important in individual and collective creative dynamics. But we wanted to present a method that can be taken as a backbone for any given challenge in musical creativity and that is operational, i.e. one can start working without first having to go through psychotherapeutic warm-ups. And although this approach is applied to musical creativity in this book, we believe that its generic character enables you to apply it in many creative environments and problem fields.

Because our approach is so specific, we felt obliged to include a short review of what has been done in creativity research in the past and present times. Florian Thalmann has been charged with this delicate subject, and we are very grateful for his diligent presentation.

We hope that our present contribution may help demystify the mysterious perspective in the popular creativity discourse, moving to a relaxed understanding of the term and following Albert Einstein's statement, "Creativity is knowing how to hide your sources."

As in the previous book of this Springer series on performance theory, Emily King has been an invaluable help in transforming our text to a valid English prose; thank you so much for your patience with non-native English. We are pleased to acknowledge the strong support for writing such a demanding treatise by Springer's science editor Ronan Nugent.

Minneapolis, August 2011   Guerino Mazzola, Joomi Park, Florian Thalmann

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