

# Contents

<b>Introduction</b> . . . . .	1
Till Bovermann, Alberto de Campo, Hauke Egermann, Sarah Hardjowirogo and Stefan Weinzierl	
<b>Part I Think Know Reflect</b>	
<b>Instrumentality. On the Construction of Instrumental Identity</b> . . . . .	9
Sarah-Indriyati Hardjowirogo	
<b>From Musical Instruments as Ontological Entities to Instrumental Quality: A Linguistic Exploration of Musical Instrumentality in the Digital Era</b> . . . . .	25
Caroline Cance	
<b>From Idiophone to Touchpad. The Technological Development to the Virtual Musical Instrument</b> . . . . .	45
Bernd Enders	
<b>Musical Instruments as Assemblage</b> . . . . .	59
Paul Théberge	
<b>Instrumentality as Distributed, Interpersonal, and Self-Agential: Aesthetic Implications of an Instrumental Assemblage and Its Fortuitous Voice</b> . . . . .	67
Deniz Peters	
<b>Interactivity of Digital Musical Instruments: Implications of Classifying Musical Instruments on Basic Music Research</b> . . . . .	79
Jin Hyun Kim and Uwe Seifert	

## Part II Design Make Create

<b>Movement Meets Material—An Improvisational Approach to Design</b> . . . . .	97
Johanna Schindler and Amelie Hinrichsen	
<b>Instrumentality, Time and Perseverance</b> . . . . .	127
Giuseppe Torre and Kristina Andersen	
<b>Machine Learning as Meta-Instrument: Human-Machine Partnerships Shaping Expressive Instrumental Creation</b> . . . . .	137
Rebecca Fiebrink	
<b>Interfacing Sound: Visual Representation of Sound in Musical Software Instruments</b> . . . . .	153
Thor Magnusson	
<b>Digital Media and Electronic Music in the Classroom—The Loop Ensemble</b> . . . . .	167
Marten Seedorf and Christof Martin Schultz	
<b>The Birl: Adventures in the Development of an Electronic Wind Instrument</b> . . . . .	181
Jeff Snyder	
<b>Case Study: The Endangered Guitar</b> . . . . .	207
Hans Tammen	

## Part III Compose Play Perform

<b>Interplay Between Composition, Instrument Design and Performance</b> . . . . .	225
M.A.J. Baalman	
<b>Instrumentality in Sonic Wild(er)ness</b> . . . . .	243
Antye Greie-Ripatti and Till Bovermann	
<b>Instrumental Modality. On Wanting to Play Something</b> . . . . .	263
Bjørnar Habbestad and Jeff Carey	
<b>Instruments for Spatial Sound Control in Real Time Music Performances. A Review</b> . . . . .	273
Andreas Pysiewicz and Stefan Weinzierl	
<b>Lucille Meets GuitarBot: Instrumentality, Agency, and Technology in Musical Performance</b> . . . . .	297
Philip Auslander	
<b>No Flute Is an Island, Entire of Itself. Transgressing Performers, Instruments and Instrumentality in Contemporary Music</b> . . . . .	315
Bjørnar Habbestad	

**LiveCodeNet Ensemble: A Network for Improvising Music with Code** . . . . . 327  
 Hernani Villaseñor Ramírez

**Three Flavors of Post-Instrumentalities: The Musical Practices of, and a Many-Festo by Trio Brachiale** . . . . . 335  
 Dominik Hildebrand Marques Lopes, Hannes Hoelzl  
 and Alberto de Campo

**Part IV Listen Perceive Feel**

**Mapping, Causality and the Perception of Instrumentality: Theoretical and Empirical Approaches to the Audience’s Experience of Digital Musical Instruments** . . . . . 363  
 Gina Emerson and Hauke Egermann

**Western Orchestral Instruments in the Foreground: What Features Make an Instrument More Attractive for a Solo Role in Concertos?** . . . . . 371  
 Song Hui Chon

**Instruments Unheard of: On the Role of Familiarity and Sound Source Categories in Timbre Perception** . . . . . 385  
 Kai Siedenburg

**What If Your Instrument Is Invisible?** . . . . . 397  
 Dafna Naphtali



<http://www.springer.com/978-981-10-2950-9>

Musical Instruments in the 21st Century

Identities, Configurations, Practices

Bovermann, T.; de Campo, A.; Egermann, H.;

Hardjowirogo, S.-I.; Weinzierl, S. (Eds.)

2017, VII, 412 p. 95 illus., 50 illus. in color., Hardcover

ISBN: 978-981-10-2950-9