

Contents

Part I Setting the Matter

Educating by Image. Teaching Styles vs Learning Styles	3
Luigi Cocchiarella	
Colloquium with Piero Angela	5
Luigi Cocchiarella	
How Internet Changes Universities.	13
Alfonso Fuggetta	

Part II Visual Language in Education: Between Theory and Experiences

Graphics Literacy Education at the University of Tokyo	23
Kenjiro Suzuki	
Visual Representations for Spatial Thinking	37
Cornelie Leopold	
Introducing 3D Modeling into Geometry Education at Technical Colleges	57
Sonja Gorjanc and Ema Jurkin	
The Role of the Image in Engineering and Technical Graphics Education: Through a Lens of Cultural-Historical Learning Theory	69
Ted Branoff	

The Role of Geometry in Reasoning and Teaching	77
Claudio Citrini	
 Part III Images in Education: Iconographies and Experiences from the Schools of the Politecnico di Milano	
 Graphics Education—Step 1: “Foundations”	95
Luigi Cocchiarella	
 Graphics Education—Step 2: “Complements”	101
Luigi Cocchiarella	
 Graphics Education—Step 3: “Upgrade”	105
Luigi Cocchiarella and Cornelia Leopold	
 Introduction to the School of Architectural Engineering	111
Barbara Carini	
 A Cartogram is Worth a Thousand Maps: The Multi-faced Image of Our Earth.	115
Renato Casagrandi	
 Iconography of Science Representations as Visual Concepts in the Digital Era. First Outline	119
Federico Alberto Brunetti	
 Surfing the Visible. Drawing Templates, Scientific Taxonomy, Web Interface. Visual Design of Digital Interfaces for the Photographic Archives of the Municipal Aquarium of Milan	125
Federico Alberto Brunetti and Danilo Da Re	
 Yon Effect.	131
Fabio Mosca (Gounemond)	
 Xenophonic: From Concept to Product.	135
Michele Pirovano	
 In Verbis Virtus	141
Mattia Ferrari	
 Friezes: From Images to Construction and Classification.	145
Elena Marchetti and Luisa Rossi Costa	

Rose Windows: From Images to Construction and Classification	149
Elena Marchetti and Luisa Rossi Costa	
Teaching to Teachers, Learning from Learners (Part 1)	155
Luigi Cocchiarella	
Teaching to Teachers, Learning from Learners (Part 2)	159
Luigi Cocchiarella	
Conclusion	163
Appendix: 4 Questions to the Students About the Visual Language	175

The Visual Language of Technique

Volume 3 - Heritage and Expectations in Education

Cocchiarella, L. (Ed.)

2015, XIII, 182 p. 90 illus., 62 illus. in color., Hardcover

ISBN: 978-3-319-05325-7