

Sascha Roesler/Madlen Kobi (eds.)

The Urban Microclimate as Artifact

Towards an Architectural Theory of Thermal Diversity

Birkhäuser
Basel

12

Sascha Roesler and Madlen Kobi

Microclimates and the City

Towards an Architectural Theory of Thermal Diversity

-
- 12 The Architecture of the City—and its Microclimates
 - 14 Epistemological Premises
 - 16 Urban Microclimates as Artifacts

26

Lisa Heschong, in Conversation with Sascha Roesler

Between Laboratory and Sea Ranch

Architecture and the Notion of Microclimate (USA)

-
- 26 Thermal Imprints
 - 28 Between Laboratory and Sea Ranch
 - 35 The Agency of the Body
 - 40 Thermal Comfort versus Thermal Delight
 - 42 From Thermal Places to Urban Microclimates

44

Roberto Leggero

Citizens and Climate

Microclimatic Patterns in Medieval Cities (Northern Italy)

-
- 48 Entering a Medieval Italian City
 - 50 Microclimates within the Medieval City
 - 54 Fighting the Heat
 - 56 Fighting the Cold
 - 59 Conclusion: Microclimates and Political Power in Medieval Cities

64

Marlyne Sahakian

Indoor Urbanism

Air-Conditioned Microclimates in Metro Manila (The Philippines)

-
- 65 Air-Conditioning as a Form of Consumption
 - 68 Social Norms around Hygiene and Clothing
 - 72 Social Norms around Building Design and Construction
 - 78 Conclusion: Cool Air as Normality

Public Microclimates

Thermal Outdoor Expectations in Post-Earthquake Christchurch (New Zealand)

-
- 82 The Symbolic Dimension of Public Open Spaces
 - 83 Methodology of the Study
 - 88 Urban Microclimate Experience and Natural Landscapes
 - 92 Microclimate Data and Adaptive Practices
 - 97 Recommendations for Outdoor Microclimate Design

102

*Philippe Rahm, in Conversation with Sascha Roesler***Thermal Sensations**

The Case of the Jade Eco Park in Taichung (Taiwan)

-
- 102 Re-Interpreting Materiality
 - 105 Representing and Exhibiting Microclimates
 - 112 Simulating Urban Microclimates
 - 118 New Thermal Sensations

120

*Francis Kéré, in Conversation with Madlen Kobi***Thermal Layers**The Case of the *Lycée Schorge* in Koudougou (Burkina Faso)

-
- 120 Gravitating Towards Shaded Spaces
 - 122 Creating Microclimates Through Buffer Zones
 - 124 The Luxury of Passive Climate Control
 - 132 Transfer of Microclimate Knowledge

134

*Ignacio Requena-Ruiz***Building a Brazilian Climate**

The Case of the House of Brazil in Paris (France)

-
- 135 A New Architecture for Brazil
 - 136 Building a Brazilian Climate in Paris
 - 139 Negotiating the Climate of Paris
 - 140 Methods of Climate Control
 - 147 Conclusion: Contrasting Climate Imaginaries in Architecture

152

Matthias Brunner

Heating and Cooling the Desert

The Case of the Kaufmann Desert House in Palm Springs (USA)

- 152 Palm Springs: A Favorable Microclimate for Settling, Health and Leisure
- 155 The Kaufmann Desert House
- 159 Pure Fresh Air and Thermal Comfort without Mechanical Ventilation
- 162 Heating with Open Windows
- 163 Conclusion: Radiant Cooling and Outdoor Conditioning

174

References

184

Contributors

187

Acknowledgments

188

Illustration Credits

191

Subject Index

195

Place Index

196

Name Index