

# TABLE OF CONTENTS

## Introduction

---

### ***Building Sustainable Communities***

*Editor: Janice M. Bissell* ..... 2

## Invited Papers

---

- The Symbiosis of Communication Technology and Place  
*Gary Gumpert (Urban Communication Foundation) and Susan J. Drucker (Hofstra University)* ..... 5
- Building Sustainable Bridges for Environmental Design Research, Education, and Practice  
*Kathryn H. Anthony (University of Illinois, Urbana-Champaign)* ..... 10
- Private Bedrooms in Nursing Homes: Benefits, Disadvantages, and Costs  
*Margaret P. Calkins (IDEAS Institute, Kirtland OH)* ..... 18

## Student Paper Award

---

- Mobile Community Center: A Solution for FEMA Trailer Parks in the Southern Gulfcoast Region  
*Kelly Williamson (Florida State University)* ..... 23

## Full Refereed Papers

---

### ***Environment - Gerontology***

- Perceptions of Quality of Life, Sense of Community, and Life Satisfaction Among Elderly Residents in Schuyler and Crete, Nebraska  
*Rodrigo Cantarero, James J. Potter and Christina K. Leach (University of Nebraska)* ..... 35
- Retiring Gracefully? The Interface Between Older People and Retirement Village Environments  
*Zena O'Connor (EBS Research Group, The University of Sydney)* ..... 41

### ***Environmental Meaning***

- Mirror, Mirror on the Wall: Ambiguous Place Attachment and the Vietnam Veterans Memorial  
*Nicholas Watkins (Cannon Design)* ..... 46

### ***Healthcare Environments***

- The Impact of Design Elements on Wellness in the Built Environment  
*Randall R. Russ, (Oklahoma State University) and Kathy Ford Montgomery (Rocky Mountain College of Art and Design)* ..... 51
- Toward A New Model Of Enhanced Restoration  
*Nadia Lala, (University of Sydney, Australia)* ..... 56

### ***Professional Practice***

- From Green to Platinum: LEED in Professional Practice  
*Suzanne M Zukowski (University of Wisconsin - Milwaukee)* ..... 60

### ***Research Methods***

- Dwelling Well: Measuring the Wholeness of Homes that Incorporate Renewable Natural Resources  
*Cherie Lynette Peacock* ..... 68

### ***Residential Environments***

- Housing With Dignity: A Post-Occupancy Evaluation of Single Resident Occupancy Units  
*Mark L. Gillem and Stacey Croll with Katherine Brown, Paula Gilmour, Todd Kimball, Claire Maulhardt, Susan Mershon, Katelyn Ruben, Daniel Schaible, and Renuka Vasepalli (University of Oregon)* ..... 73
- Vandalism in College Residence Halls: The Picture from Archival Data  
*Ann Sloan Devlin (Connecticut College)* ..... 79

### ***Urban Environments***

- Enclosure and Walkability: An Italian Street Study  
*David D. Spooner, (The University of Georgia)* ..... 85
- Historical Polychromy and Chromatic Identity of Urban Settings  
*Natalia Naoumova and Maria Cristina Dias Lay, (Federal University of Rio Grande do Sul, Brazil)* ..... 90
- The Rise of Modernism and the Decline of Place: The Case of Surrey City Centre, Canada  
*Don Alexander, (Malaspina University-College, Canada) and Shawn M. Natrasony, (University of British Columbia, Canada)* ..... 96
- Streets versus Parks: Skateboarding as a Spatial Practice in New York City  
*Chihsin Chiu, (City University of New York)* ..... 101

# TABLE OF CONTENTS

## Pre-Conference Intensives

---

### **Children & Youth Environments**

- School Grounds In Dialogue with their Larger Community: Making Connections for a More Sustainable Future**  
*Organizer: Julie M. Johnson, (University of Washington)* .....109
- Sustaining the Schoolyard Garden**  
*Organizers: Illéne Pevec and Tracy Penner (University of Colorado)* ..... 109
- Youth Images in Sacramento**  
*Organizer: Patsy Eubanks Owens (University of California, Davis)* .....110

### **Environment - Gerontology**

- Aging in Place Research Update: The Role of Perceived and Objective Housing in Later Life**  
*Organizers: Frank Oswald and Hans-Werner Wahl (University of Heidelberg)* .....111
- Identities and Selves in Conflict: Meaning Systems and Home in Old Age**  
*Kate de Medeiros* .....111
- Personalization at Home: The Individual Boundary Process and Territoriality**  
**“That’s My Home”: Home as a Pathway to Rediscover the Self in Dementia**  
*Habib Chaudhury*.....112
- Community Participation in Very Old Age**  
*Dörte Naumann, Ines Himmelsbach, and Frank Oswald* .....112
- Literature Review on Home Environment and Disability**  
*Hans-Werner Wahl, Agneta Fänge, Frank Oswald, Laura Gitlin, and Susanne Iwarsson* .....112
- Housing-related Control Beliefs and Behavioral Independence in Very Old Age**  
*Frank Oswald, Hans-Werner Wahl, and Oliver Schilling* .....112
- Gerotechnology and Aging in Place: A Conceptual Model and Preliminary Findings from Pilot Projects**  
*Atiya Mahmood, Carmen Steggell, Toshiko Yamamoto, and Megan Lee*.....113
- Residential Sites and Seniors’ Walking**  
*Zhe Wang and Susan Rodiek*.....113
- With Dementia: Three Design Approaches**  
*Benyamin Schwarz*.....113
- Designing Generative Space: A Sustainable Means to Enhance Health in Healthcare**  
*Organizer: Wayne Ruga (The CARITAS Project, Philadelphia, Pennsylvania)*.....114
- Evidence-Based Design: The State of the Nursing Floor: Where Do We Go from Here?**  
*Organizer: Michelle Ossmann (Georgia Institute of Technology)*.....114

### **Healthcare Environments**

- The Role of the Physical and Social Environment in Promoting Health, Safety, and Effectiveness in the Healthcare Workplace**  
*Anjali Joseph and Amy Keller* .....115
- Steelcase WorkSpace Futures Explorations**  
*Joyce Bromberg, Ritu Bajaj, Caroline Kelly, Melanie Redman* .....115

### **Office Environments**

- Workplace Design and Organizational Culture**  
*Organizer: Sally Augustin (PlaceCoach Inc., Michigan), Sheila Gobes-Ryan (Jacobs Engineering, Florida), Mahbub Rashid (University of Kansas), and Lubomir Popov (Bowling Green State University, Ohio)*.....116

### **POE/Programming**

- Design Games Techniques**  
*Organizers: Thierry Rosenheck (United States Department of State, VA), Henry Sanoff (North Carolina State University), and Lubomir Popov (Bowling Green State University, Ohio)* .....117
- Sustainability Solutions Navigator**  
*Organizers: Thierry Rosenheck (US Department of State), Clay Nesler (Johnson Controls, Inc.), Debajyoti Pati (HKS, Inc.) and Lubomir Popov (Bowling Green State University, Ohio)* .....117
- International Building Performance Evaluation**  
*Organizer: Shauna Mallory-Hill (University of Manitoba, Canada)*.....118

## TABLE OF CONTENTS

From Theory to Practice: How Germans Apply BPE <i>Ulrich Schramm</i> .....	118
Green Laboratory & Research Building Design <i>Monika Schill-Fendl</i> .....	119
Innovative Characteristics of Hospitals from the Perspective of Architectural Psychology <i>Rotraut Walden</i> .....	119
Physical and Functional Vulnerability Assessment of Historical Urban Fabrics <i>Carlotta Fontana, Alessandra Cattanei, and Maria Fianchini</i> .....	119
Assessing Building Performance for Local Government Offices in Japan <i>Akikazu Kato, Gen Taniguchi, and Kazuhisa Tsunekawa</i> .....	120
How to make Informed, Transparent and Defendable Repair and Alteration Project Choices <i>Françoise Szigeti and Gerald Davis</i> .....	120
Data Driven Design: A UK Government Example <i>J. Eley, Alexi F. Marmot, and Felicity Swaffer</i> .....	120
Evaluating New Office Concepts within Established Office Landscapes <i>Martin Hodulak</i> .....	121
Measuring and Managing Environmental Stress <i>Jacqueline C. Vischer</i> .....	121
Does Building Evaluation Pay? <i>Wolfgang F. E. Preiser</i> .....	121
<b>Sustainable Urban Planning &amp; Development Strategies</b> <i>Organizer: Janice M. Bissell (Stafford King Wiese Architects, CA)</i> .....	122
Trees: A Regional Solution to Community Improvements and Air Quality <i>Connie Gallippi and Rob Kerth</i> .....	122
Design for a Sustainable City: Seattle's Envisioned Green Future <i>Nancy Rottle</i> .....	122
<b>Urban Planning</b> Less and More: Design Strategies for a Shrinking City <i>Theresa Schwarz</i> .....	123

## Thematic Abstracts

---

### *Active Living by Design*

A New Audit Tool for Assessing the Walkability of Corporate Campuses .....	125
Campus Landscape Designs that Reduce Health Disparities: A Study Comparing Student Bicycle Culture and Campus Bike-Ability .....	125
The Effect of Space on Walking Speed .....	126
Lean-Green in Motown: The Relationship Between Visibility Along Neighborhood Streets and Observed Use Patterns in Three Detroit Neighborhoods .....	126
Physical Environments for Healthy Living: Environmental Links to Physical Activity, Food Consumption, and Body Mass Indices .....	127

### *Children & Youth Environments*

Design Features of Child Care Centers .....	130
Poverty and Cumulative Risk: Mexico City and Rural New England, USA .....	130
CYE: School Grounds & Gardens A Post-Occupancy Evaluation of School Greening Projects in Canada .....	131
Assessment of Outdoor School Environments for Physical Activity: Exploratory Case Study in Ankara City .....	132
Borah Public Elementary School Play Garden: Design and Construction Process Emphasizing Child Participation .....	133
Nurture by design: The Connection Between Healthy Development and Play in the Design of Outdoor Play Environments for Young Children .....	133
Preschool Playground Design: Are Safety Regulations Impediments to Sustainable Communities? .....	134
Teaching Sustainable Design to Children Building Sustainable Outdoor Environments for Children .....	134
Teaching Sustainable (Green) Design for the Built Environment Through Pre-K-12 Art Education .....	135
Environments & Youths The Child and Youth Friendly City Initiative of Denver .....	136

## TABLE OF CONTENTS

CYE: Project Database: Developing a Database of Good Practice Projects Informed by Young People.....	137
Fighting Teenagers' Sedentary in Exurbia: The Challenge of Dependent Mobility.....	138
GUIC+10: Learning from Ten Years of Growing Up in Cities.....	138
Hanging Out: Place Preferences and Implications for Social Capital in Young Adults.....	140
How Universal is Young People's Experience of Public Space? A Comparison Between the UK and USA.....	141
Negotiating Public Spaces of Danger: Independent Mobility and Affordances for Socializing the Lives of Urban Youth.....	141
Participatory Video with Youths in Brazil: A Voice to the World.....	142
<b>Community &amp; Neighborhood Planning</b>	
A Comparison of Residential Subdivision Site Designs for Environmental Impacts.....	143
Conservation Subdivisions: Themes and Variations.....	143
Sustainable Communities: Investigations from the Heartland.....	144
Urban Overflow: The Gentrification of a Prominent Denver Neighborhood.....	144
Main Street 9 Miles, 4 Students, 1 Town.....	145
Sources of Community An Essay on the Necessity of Sustaining Institutional Housing Traditions.....	146
Forced Community: The Lasting Effects of Internment Camp Design.....	147
Neighborhood: Quality of Life Exploring Relationships Between Cognitive Emphases in Conceptualizations of Neighborhood and Activity-Experience Scenarios of Conventional Social Groups.....	148
Neighborhoods and Quality of Life: A Model.....	148
Neighborhood: Sense of Community Codified Norms in Urban Design: The Neighborhood Unit in the Community Builders Handbook 1947-1975.....	149
Indicators of Sense of Community: A Comparative Study.....	149
Neighborhood Design and Social Capital: The Effects of Sidewalks, Cul-de-Sacs, and Housing Setbacks on Neighborhood Involvement, Familiarity, and Satisfaction.....	150
Perceived Neighborhood Environment and Neighborhood Satisfaction as Determinants of Housing Value.....	151
<b>Crime &amp; Environment</b>	
Balancing Openness and Security in Federal Courthouses: Reassessing Openness in a Heightened Security Scenario.....	152
Considering Surveillance: Sustainability, Security Cameras and the Design Fields.....	152
Fear of Crime in a Large Railway Terminal.....	153
Measuring Relationships Between Spatial, Visual and Sociodemographic Properties of Crime Locations and the Occurrence of Certain Types of Crimes.....	153
<b>Design Education</b>	
After the Storm: A Design Charette for the Mississippi Gulf Coast.....	155
Building A Sustainable Future: Virtual Studios.....	155
Collaboration Studio Under Scrutiny: A Combination of the Meyers Briggs Type Indicator and Students' Design Skills.....	156
Creative Decision-Making In Design: A Creativity Model to Enhance the Design Studio Process.....	157
Doors/Enter Here: The Interface of Architecture and Art Therapy in Interpreting Form and Enhancing Wellbeing.....	158
Effect of Visual Displays on Design Problem Solving.....	158
Evaluating the Effectiveness of Videos in Teaching Design.....	159
Green Timeline: A Virtual View of the People, Publications, Projects and Milestones that Shaped the Sustainability Movement in the U.S.....	159
Institutional Environmental Project of the Language Center in Cordoba, Veracruz.....	160
Palimpsest, Place Making and Processing.....	160
Student and Faculty Attitudes: Psychological and Social Concerns in Architecture Programs.....	161
Sustaining Design Process Amidst Shifts in Graphics.....	162
Taking up the "2030 °Challenge": Toward a Carbon Neutral Regeneration of the McCall Field Campus.....	163

## TABLE OF CONTENTS

Teaching Social and Cultural Approaches to Sustainable Architecture in China: A Report from Southeastern University, Nanjing, May 2007 .....	164
Understanding the Millennial Generation: Pedagogy for Tomorrow's Leaders .....	165
Women in Academia: A Special Case for Departments of City Planning in California Universities .....	165
<i>Educational Environments</i>	
Learning Environments Children's Preferences and Attachment to Place in Learning Environments .....	167
In Search of Supportive School Environments: An Exploratory Study of the Physical and Emotional Environment of High School Students .....	167
Nurturing Children's Place Attachment: The Language of Learning Environments .....	168
Schools of Architecture A Case Study: Campus Building Sustainability .....	168
The Architecture of Schools of Architecture .....	169
Teaching Environments Ambient Conditions in Early Childhood Setting and Teacher Performance: A Case Study ..	170
Building Sustainable Teacher Community in the High School: The Importance of the Teacher Workroom in Teachers' Professional Practice .....	170
Physical Design and Learning Behaviors and Outcomes in University Classrooms .....	171
<i>Environmental Design Research Theory &amp; Methods</i>	
Research Methods .....	172
Environmental Design Theory .....	172
Fluid vs. Static Context Research .....	173
Inferring Building Floor Plans from Cultural Data, Geometric Reasoning and Space Syntax Analysis .....	174
Phenomenological Experience and Interpretation of Water Space in Contemporary Museum of Art .....	175
Responsive Design in the Built Environment .....	176
The Role of Time in Environmental Research .....	177
<i>Environmental Gerontology</i>	
Applying Person-Centered Care Principles to the Refurbishment of a Dementia Care Unit: Outcomes .....	178
Benefits of using the Professional Environmental Assessment Protocol (PEAP) with the Therapeutic Environmental Screening Survey (TESS-2+) .....	178
An Environmental Improvement in a Group Home for Elderly with Dementia Based on PEAP (Japan Ver.3) .....	180
A Field Study of Silver Town Retirement Communities in Seoul, Korea .....	181
Light and Daylight: Reducing Falls, Hip Fractures and Sleep Disorders While Reducing Energy Consumption .....	182
Mobility and Social Representations of Aging: Experiences and Meanings of "Home" for Elderly Suburbanites Growing Old at Home .....	182
Physical Environmental Influences on the Physical Activity Behavior of Older Adults in Continuing Care Retirement Communities .....	183
Post-Occupancy Evaluations of Elderly Learning Spaces in Long-term Care Facilities: Using the Balanced Scorecard Framework .....	184
The Study of Home Environment Modifications Corresponding to Elderly People with Dementia: Analysis Based on Research of Nursing Care Managers .....	186
A Study on the Needs for Future Digital Lifestyles of the Elderly Through Scenarios in a Multipurpose Restaurant ..	187
A Study on Patterns of the Daily Life Behavior and Activity Territory for the Elderly in Nursing Homes: A Case Study of a Hospital-Based Nursing Home in Southern Taiwan .....	188
Sustainable Environments: Optimizing Natural Light in Senior Living .....	188
Sustaining Independence for Community Dwelling Elders: Adult Day Services as an Emerging Place Type .....	188
Tools and Processes for Culture Change in Long-term Care .....	189
<i>Environmental Meaning</i>	
Managing Memory, Managing Meaning .....	191
Sustaining Place: Memory, Memorial and Identity .....	192
<i>Environmental Psychology</i>	
Reactive Building Envelopes: Optimizing Indoor Comfort Through Adaptable Architecture .....	194

# TABLE OF CONTENTS

## *Healthcare Environments*

Evaluating Hospital Waiting Rooms: The Effects of Interiors on Users' Impressions .....	195
Users' Priorities: Activities and Environmental Factors in the Hospital Outpatient Waiting Room. ....	195
Alternative Healthcare Environments Branding of Northeastern Oklahoma Community Health Centers. ....	196
Realizing the Concept of the Healthcare Mall: An Example from Taiwan .....	197
The Road Ahead: The Need to Clarify and Re-Conceptualize Healing Environments .....	197
Nurses' Workplace Environments .....	198
The Impact of the Physical Environment on Patient and Staff Outcomes in Health Care Settings .....	199
Influence of View in Inpatient Care Units on Nurse Stress and Wellbeing .....	199
Specialized Healthcare Settings .....	199
Analysis of Healing Environments of Women's Hospitals in Korea .....	200
Defining the Design Characteristics of a Successful Adaptable Inpatient Care Unit .....	200
Environmental Correlates of Falls in Healthcare Settings .....	201
Environmental Design And Post-Operative Recovery: A Comparative Study Of Two Cardiovascular And Cardiothoracic Wards .....	202
Evidence-Based Design for the Neuro Intensive Care Unit at the Emory University Hospital .....	202

## *Office Environments*

Beyond Daylight: The Relationship Between Views Preference and Daylighting Quality in Offices. ....	204
Contextual and General Experiences Among Employees in Different Office-Types .....	204
Employees' Satisfaction: Sustainable vs. Conventional Work Environment .....	204
Enhancing Workspace Performance: Predicting the Influence of Spatial and Psychosocial Factors on Job Satisfaction .....	205
The Impact of Design Elements on Wellness in the Built Environment .....	206
Perceived Quality of Collaborative Environment at Workplace: Impact from Physical Openness and Amount of "Common" Space .....	206
Physical Work Space and Media Richness: The Impact on Organizational Knowledge .....	207
A Post Occupancy Survey of Postal Facilities: Analysis of Pre-coded and Post-Coded Data .....	207
Quantitative Assessment of Individual and Group Privacy Needs .....	208
Seven Essential Teamwork Competencies and How to Design for Them .....	209
Workers' Perception of Workplace Environment and Culture: A Comparative Study of Six County Offices .....	209

## *Outdoor Environments*

Theory .....	210
Community Gardens: Strengthening Neighborhoods from the Ground Up .....	210
The Composition Methods and Approach Sequence by Analysis of Water Space in Tadao Ando's Works. ....	211
Evaluation of the Redesign of a Modernist Icon .....	212
Leisure Place Advocacy: Understanding Place Related Behavior at a Destination Ski Resort .....	213
Literary Landscape: The Ideological Connections Between James Russell Lowell and Frederick Law Olmsted .....	213
Preserving Cultural Landscapes in the Neoliberal City: The Case of Community Gardens in New York City .....	214
Health & Healing Environments .....	215
Evidence-Based Landscape Design Principles for Hospital-Park Systems: The Royal Children's Hospital Redevelopment in Royal Park, Melbourne, Australia. ....	215
Restorative Experience in Natural Settings: A Literature Review .....	216
Therapeutic Gardens at Teletón Rehabilitation Center in Santiago, Chile: Designing for Children, Family, and Staff	216
What Attributes Do Older People Prefer in Accessing Their Local Open Space? Mapping the Role of the Environment by the Use of Choice-Based Conjoint Analysis .....	217

## *Place Attachment*

Place: Connecting People and their Environment. ....	218
Stories and Story Tellers: Sustaining Place and Reconstructing Identity. ....	218
Sustaining Community Memory: Ruin Treatment Case Studies .....	219

## TABLE OF CONTENTS

Visual Rhetoric of the Everyday .....	219
Walking Voices: First Generation Migrants' Experiential Attachments to Urban Neighborhoods .....	220
<b>Professional Practice</b>	
Architectural Programming Beyond Maslow's Hierarchy of Needs: An Exploratory Homeless Shelter Architectural Programming Grid. ....	221
A Theoretically-Based Model for Organizational Research & Design: A Case Study .....	221
The Politics of Facility Programming .....	222
Programming in a Flat World. ....	223
Programming With Pattern Language .....	223
Connecting Research & Practice .....	224
Green Practices .....	225
Building Sustainable Communities through Campus/Community Partnerships .....	225
Creating Habitat: Soil Properties and the Swiss Ecoroof Biodiversity Movement .....	226
Innerscapes: Interior Vertical Vegetation Growth. ....	226
Rising from the Ruins: Artists' Perceptions of Creation in an Adaptive Use Facility. ....	227
Participatory Design 7th Ward Building Arts Gallery: A New Model for Community Design/Build Projects. ....	227
Assessing Challenges, Finding Rewards: Lessons from Community Design Centers .....	228
Building and Sustaining a Community of Participatory Researchers .....	228
Designing and Democratizing the Public Realm - A Place-Based Practice Story: Trumansburg's Main Street Project	229
Development of a Conceptual Plan for a Small Community: A Participatory Process in Traver, California. ....	229
Exploring the Ethical Dimensions of Participatory Design Research .....	230
Is Participation Sustainable? .....	231
Participatory Programming of an Elementary School .....	231
The Role Online Environments in Our Planning Processes: A Case Study in Queens, New York. ....	232
Post-Occupancy Evaluation .....	232
<b>Residential Environments</b>	
Alternative Housing Types Maximizing .....	234
Residence Hall Architecture and Sense of Community: Everything Old is New Again. ....	234
Cultural Contexts A Philosophical House, A Practical Home. ....	235
Culture and Sustainability: Ojibwe Housing Needs and Aspirations .....	235
Defining and Measuring Home in Japan. ....	236
Housing Adaptation Pattern of Cross-Cultural Sojourner: A Case of Korean Sojourners in the United States .....	236
Implications of Commuting Satisfaction on Residential Movement .....	237
The Improvement of Residential Environments and the Design Model of Multi-Family Housing in Korean Traditional Contexts .....	237
The Quest for Sustainable Housing Patterns on the Island of Cyprus .....	237
Requirements and Examples of Healthy Housing .....	238
Restorative Residents for Mothers with Young Children in Japan .....	238
Transformation of the Built Environment as Cross Cultural Design .....	239
Trends of recent Korean brand apartments by content analysis .....	240
Green Design. ....	240
Ecology House: A Post-Occupancy Evaluation .....	241
Green/Healthy/Affordable Housing: Complexity or Contradiction? .....	242
Renovating Houses to Meet the Demands of the 21st Century .....	242
Residential Property Remodeling for Enhancing Sustainability .....	243
Housing Strategies in Developing Countries .....	243
Building Sustainable Communities in Post-tsunami Sri Lanka: Retrospect & Prospect. ....	244
Flexibility and Participation Potentials of A Core Housing Strategy .....	246
Impact of Home Based Economic Activities on Housing and Microenvironments in Aligarh .....	247

## TABLE OF CONTENTS

Symbiotic Life of Different Income Groups Residential Areas of Istanbul .....	248
Live-Work Housing .....	248
Residential Outdoor Spaces .....	249
A Comparison of Residents' Satisfaction Level of Outdoor Space by Housing Structure Type .....	249
Micro-Social Ambiences of Housing Surroundings: Sensory/Sensitive and Social Properties of Row-Housing Gardens in a High Density Grouped Housing Context .....	250
Resident's Evaluation of Community Facilities in High-Rise Mixed-Use Apartments .....	251
<b><i>Spatial Cognition &amp; Wayfinding</i></b>	
Cognitive Processing of Urban Environment Through the Characteristic of Learning by Wayfinding Behaviors in a Grid Network of Streets .....	252
A Comparative Study of Quantitative Methodology of Spatial Cognition .....	252
Effect of Sign Color, Brightness and Letter Weight Factor on Legibility Depending on the User's Age Group .....	253
Environmental Graphic Design: Clear Goals and Expectations .....	254
Evaluating Wayfinding in Shopping Complexes Using a Virtual Environment .....	254
Neurosciences and Design Research: Toward a Neuro-Environmental Psychology .....	255
Regional Wall Coloring in Subway Transfer Stations .....	255
The Role of Virtual Environments in Wayfinding Design: A Case Study .....	256
Spatial Cognition and Wayfinding: Research in Humans and Animals .....	256
Spatial Differentiation in Seoul Subway Transfer Stations .....	257
A Study on the Relationship between Visitors' Satisfaction Level and Environmental Factors in Design Fair .....	257
A Study of Visual Perception Depending on Visual Factors in a Tourist Information Map .....	258
Values and Responses to Design .....	259
<b><i>Virtual Environments</i></b>	
Web Interface -- a Designer's Perspective .....	260
The Visual Environmental Effects of the Virtual Space Formed by Game Engines .....	260
<b><i>Universal Design</i></b>	
Accessibility and Self-Identity: Defining Sense of Place for Users with Mobility Disabilities .....	262
An Experiment on the Effectiveness of Assembly Devices for the Orientation and Mobility of the Visually Impaired .....	262
Bathroom Design for the Disabled .....	263
Recreational Spaces for the Visually Handicapped Part 2: Evaluation of Gift Shops on a Guided Bus Tour .....	263
Re-Defining Disability: Developing a New P-E Model for Designers and Policy Makers .....	263
A Study of Universal Design Principles in Outdoor Community Facilities in Apartment Complexes .....	264
A Study of Environmental Supports Through Structured Teaching for People with Autism and Other Developmental Disorders .....	265
<b><i>Urban Development</i></b>	
Sustaining Life-Worlds: Historical Memory, Enduring Practices, and Persistent Resistances .....	266
Contemporary Urbanisms Challenging Contemporary Urbanisms: Multi-sector Social Construction Model .....	267
Historic Preservation .....	268
The Importance of Urban Regeneration Towards a Sustainable City in the Old Railroad Station Neighborhood in Cordoba, Veracruz .....	268
Measuring the Sustainability Level of the Walled City of Famagusta in Northern Cyprus .....	269
Railways in Disuse and its Sustenance: The Case of the Mexican Railroad .....	270
Landmarks .....	270
Urban Character and Viewscape Assessment Study: Community Visioning Prototype as the Basis for Urban Land Use Regulation .....	271
Sustainable Strategies in Developing Countries .....	271
How to know: The Potentiality of a Conurban Zone in Creating Design Strategies for Micro Regional Sustainable Development .....	272
Global ICT Development: Image, Sustainability and the Transformation of Corporate Space in Bangalore, India .....	273



## TABLE OF CONTENTS

Helping to Build Sustainable Communities with the UN Project: Territorial and Habitat Development Through the Strategic Management and Planning in Veracruz, Mexico .....	274
A Proposal for the Gwang-ju Swan City Landscape Plan Using an Artificial Environment Color Scheme Based on Natural Environmental Colors .....	275
Rescuing Prehispanic Patterns to Implement in Urban Design Projects for Utopian Sustainable Cities .....	275
String Playing in Sustainable Edge Communities .....	276
Urban Open Spaces .....	277
Post-Occupancy Evaluation of Urban Open Spaces in Turkey .....	277
The Re-Creation of Front de Seine: Integrating the Real and Programmed Uses of Urban Space .....	278
Shifting Paradigms in the Urban Landscape .....	278
Urban Infill .....	279
How Bad is Bad? Understanding 'Weakness' in the Fabric of an Older Industrial Neighborhood in Newark, Ohio ..	279
Mixed-Use Development: From Ideal to Reality .....	280
Walkable Cities .....	281

## Index

---

Index by Author, Organizer, Presenter & Contributor .....	283
Index of Keywords .....	286