

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Environmental aesthetics

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Environmental aesthetics

Theory, research, and applications

Edited by

JACK L. NASAR

The Ohio State University



**CAMBRIDGE
UNIVERSITY PRESS**

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011-4211, USA
10 Stamford Road, Oakleigh, Victoria 3166, Australia

© Cambridge University Press 1988

First published 1988

First paperback edition 1992

Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Environmental aesthetics: theory, research, and applications / edited
by Jack L. Nasar.

p. cm.

Bibliography: p.

Includes index.

ISBN 0-521-34124-8

1. Environmental psychology. 2. City planning – Psychological
aspects. 3. Urban beautification – Psychological aspects. I. Nasar, Jack L.

BF713.E7 1988 87–18774

720'.1 – dc19 CIP

British Library Cataloguing in Publication Data

Environmental aesthetics: theory, research,
and applications.

1. Human Ecology 2. Aesthetics

I. Nasar, Jack L.

304.2 HM206

ISBN 0-521-34124-8 hardback

ISBN 0-521-42916-1 paperback

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

*To my parents
Frieda and Leon Nasar*

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Contents

List of figures	<i>page</i> xi
List of tables	xv
List of contributors and participants	xvii
Acknowledgments	xix
Preface	xxi
 Section I. Theory	
Editor's introduction	3
1 Behavioral and perceptual aspects of the aesthetics of urban environments <i>Tom F. Heath</i>	6
2 Symbolic aesthetics in architecture: toward a research agenda <i>Jon Lang</i>	11
3 Prospects and refuges revisited <i>Jay Appleton</i>	27
4 Perception and landscape: conceptions and misconceptions <i>Stephen Kaplan</i>	45
5 Where cognition and affect meet: a theoretical analysis of preference <i>Stephen Kaplan</i>	56
6 The landscape of social symbols <i>Barrie B. Greenbie</i>	64
7 Open space in cities: in search of a new aesthetic <i>Werner Nohl</i>	74
8 Aesthetic perception in environmental design <i>Arnold Berleant</i>	84
 Section II. Empirical studies	
Editor's introduction	101
A. Methodological comments	
Editor's introduction	107
9 The assessment of landscape quality: an integrative approach <i>D. Mark Fenton and Joseph P. Reser</i>	108
10 Affective appraisals of environments <i>James A. Russell</i>	120

viii	<i>Contents</i>
B. Architectural interiors	
Editor's introduction	133
11 The influence of a beautiful versus an ugly room on ratings of photographs of human faces: a replication of Maslow and Mintz <i>Richard M. Locasso</i>	134
12 The development of a usable lexicon of environmental descriptors <i>Joyce Vielhauer Kasmar</i>	144
13 Lighting-design decisions as interventions in human visual space <i>John E. Flynn</i>	156
C. Architectural exteriors	
Editor's introduction	173
14 A study of meaning and architecture <i>Robert G. Hershberger</i>	175
15 Predicting user responses to buildings <i>Robert G. Hershberger and Robert C. Cass</i>	195
16 Dimensions in the perception of architecture: identification and interpretation of dimensions of similarity <i>Anke Oostendorp and Daniel E. Berlyne</i>	212
17 Contextual compatibility in architecture: an issue of personal taste? <i>Linda N. Groat</i>	228
D. Urban scenes	
Editor's introduction	257
18 Visual preferences in urban street scenes: a cross-cultural comparison between Japan and the United States <i>Jack L. Nasar</i>	260
19 Perception and evaluation of residential street scenes <i>Jack L. Nasar</i>	275
20 Planning concerns relating to urban nature settings: the role of size and other physical features <i>Janet F. Talbot</i>	290
21 The effect of sign complexity and coherence on the perceived quality of retail scenes <i>Jack L. Nasar</i>	300
E. Natural and rural scenes	
Editor's introduction	323
22 Dimensions of meaning in the perception of natural settings and their relationship to aesthetic response <i>D. Mark Fenton</i>	327
23 A cognitive analysis of preference for field-and-forest environments <i>Thomas R. Herzog</i>	343
24 The emotional quality of scenes and observation points: a look	

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

<i>Contents</i>	ix
at prospect and refuge <i>Jack L. Nasar, David Julian, Sarah Buchman, David Humphreys, and Marianne Mrohaly</i>	357
25 Aesthetic preference for rural landscapes: some resident and visitor differences <i>Brian Orland</i>	364
26 Familiarity and preference: a cross-cultural analysis <i>Rachel Kaplan and Eugene J. Herbert</i>	379
Section III. Applications	
Editor's introduction	393
27 Visual needs in urban environments and physical planning <i>Eduardo E. Lozano</i>	395
28 A survey of aesthetic controls in English-speaking countries <i>Wolfgang F. E. Preiser and Kevin P. Rohane</i>	422
29 Scenic-beauty issues in public policy making <i>Mollie Ridout</i>	434
30 Coping with aesthetics and community design in rural communities <i>Fred A. Hurand</i>	449
31 Toward theory generation in landscape aesthetics <i>Fahriye Hazer Sancar</i>	459
32 Aesthetic regulation and the courts <i>Kenneth T. Pearlman</i>	476
References	493
Index of authors	519
Subject index	525

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Figures

2.1	The basic semiological triangle	<i>page</i> 13
2.2	Heider's balance theory	21
2.3	Two consonant positions on the symbolism of Levittown and Las Vegas	22
2.4	Gibson's model of symbolic meaning	25
3.1	Barradine–Narrabri Road, New South Wales, Australia	27
3.2	Brownsea Island, Dorset, England	31
3.3	Queens' College, Cambridge, England	32
3.4	Wind erosion at Watamolla, New South Wales, Australia	32
3.5	New Porter's Pass, South Island, New Zealand	34
3.6	Niagara Falls, Ontario, Canada, and New York State	34
3.7	Jasper National Park, Alberta, Canada	37
3.8	Near Fulda, West Germany	39
3.9	Versailles, France	42
3.10	Sheffield Park, Sussex, England	42
6.1	Vancouver, British Columbia	64
6.2	Temple of Poseidon, Greece	68
6.3	Mount Jouctas, home of the earth goddess, aligned with the palace at Knossos, Crete	68
6.4	An Indian totem pole, Vancouver, British Columbia	70
6.5	A church in Bergen, Norway	71
6.6	Manhattan, New York City	71
7.1	Munich, 1982	74
7.2–7.3	Playgrounds for children can be highly designed or unkempt and unstructured	76–7
7.4–7.5	Nature can be allowed to assert itself, or it can be tightly controlled	80
7.6	In a no man's land children and adults may leave their marks without guilt	83
8.1	A panoramic landscape	86

xii	<i>Figures</i>
8.2 A participatory landscape	86
8.3 Monumental space	95
10.1 A spatial representation of descriptors of the affective quality of environments	122
10.2 Forty categorical descriptors in the space of Figure 10.1	123
10.3 Four hypothetical places in affective space	125
10.4 Predicted and observed displacement in the appraisal of the Target stimulus induced by prior exposure to Anchor A	126
11.1 The beautiful and ugly rooms	138
11.2 Environmental profiles of the beautiful and ugly rooms	139
13.1 Indicated lighting-design decisions for affecting impressions of Perceptual Clarity	163
13.2 Indicated lighting-design decisions for affecting impressions of Spaciousness	163
13.3 Indicated lighting-design decisions for affecting impressions of Relaxation	164
13.4 Indicated lighting-design decisions for affecting impressions of Public versus Private Space	164
13.5 Indicated lighting-design decisions for affecting impressions of Pleasantness	165
13.6 Study of variations in intensity of horizontal illumination	166
13.7 Study of variation in distribution of illumination from low-intensity systems	167
13.8 Study of equal-wattage design alternatives	168
13.9 Patterns of response among settings in three rooms	169
13.10 Semantic differential replotted as “polar diagrams”	170
15.1 Experiment 1 Media Profile	202
15.2 Experiment 2 Media Profile	204
15.3 Sample building prediction profile	209
17.1 A partial order scalogram analysis (POSA) of the building set	241
17.2 The twenty-five infill scenes	243–51
17.3 The rank order of contextual relationships as superimposed on the partial order scalogram analysis (POSA)	252
18.1 The interaction of nationality and country viewed in relation to preference	268
19.1 Slide set 1	278–9
19.2 Slide set 2	280–1
21.1 The tested signscapes	305–7
21.2 Median pleasantness scores of the public for complexity and coherence	313

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

<i>Figures</i>	xiii
21.3 Median excitement scores of the public for complexity and coherence	313
21.4 Median calmness scores of the public for complexity and coherence	314
21.5 Signscape before this research	318
21.6 Signscape after this research	319
23.1 Scene from the Unconcealed Vantage Point category	348
23.2 Scene from the Concealed Vantage Point category	349
23.3 Scene from the Large Trees category	350
23.4 Pathway scene from the Unconcealed Vantage Point category	352
23.5 Pathway bordered by tall trees from the Large Trees category	353
24.1 Closed view and protected observation point	358
24.2 Closed view and unprotected observation point	358
24.3 Open view and protected observation point	359
24.4 Open view and unprotected observation point	359
24.5 Interactive effect of view \times refuge on evaluation	362
24.6 Interactive effect of refuge \times sex on safety	362
25.1–25.3 Predominantly natural landscapes around Young, Arizona	369
25.4–25.6 A range of human-influenced scenes from the valley	371
25.7–25.8 Typical grassland scenes that received relatively high scores when viewed among other natural scenes, and significantly lower scores when viewed as part of a set of human-influenced scenes	373
26.1 Scenes from the Residential grouping	383
26.2 Scenes from the Vegetation grouping	384
26.3 Scenes from the Pastoral grouping	385
26.4 Scenes from the Manicured Landscapes grouping	386
27.1 Plan of Tübingen	408
27.2 A view of dwellings at Tübingen	409
27.3 London, Park Crescent	410
27.4 New York town houses	411
27.5 Le Corbusier's Plan Voisin	412
27.6 Plan of Reston	414
27.7 Reston's first village	415
27.8 Sert's married student housing at Harvard University	416
27.9 Suburbia (Deltona, Florida)	417
27.10 New community proposed in New Jersey	419

Tables

4.1	Preference matrix	<i>page</i> 51
5.1	The cognitive and the affective in people's interaction with the environment	59
12.1	A lexicon of environmental descriptors	153
14.1	Varimax factor loadings over .40, by factors and respondent groups over all aspects	180
14.2	Percentage of common variance accounted for by each factor for each respondent group, over all aspect groups	182
14.3	Homogeneity of judgments	183
14.4	Meaningfulness of judgments	185
14.5	Significant differences among respondent groups over all buildings and factors	186–7
15.1	Semantic scales to measure the meaning of designed environments: Hershberger-Cass Base Set	199
15.2	Bipolar adjective scales	208
15.3	Architect prediction summary table	209
16.1	Stimulus information	215
16.2	Experiments 1, 2, and 3: INDSCAL coordinates and estimated factor scores	216
16.3	Experiment 2: collative and affective scales (factor loadings)	219
16.4	Experiments 1 and 2: significant product-moment and multiple correlations	221
16.5	Experiment 3: stylistic and technical rating scales	222
16.6	Experiment 3: stylistic and technical ratings (factor loadings)	223
16.7	Experiments 1 and 3: significant product-moment and multiple correlations	224
17.1	A conceptual framework for the analysis of contextual-design strategies	234–5
17.2	Ranking scores for contextual relationships: case-study respondents	238

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

xvi	<i>Tables</i>
17.3 Ranking scores for contextual relationships: review commissioners	239
II.1 Urban affect adjective list	258
18.1 Characteristics of the measures of environmental attributes	265
18.2 Correlations between scores on scales describing and evaluating the environment	270
20.1 Comparison between physical factors affecting size and preference ratings	295
21.1 Median scores and summary statistics for judged coherence	309
21.2 Treatment medians and summary statistics for evaluations by the public	312
21.3 Percentage of public selecting scenes as most liked to visit, shop, and spend time	315
21.4 Median rank scores and summary statistics for merchant preferences for their area	316
II.2 The landscape adjective checklist	324–5
22.1 Stress and R^2 values for two through six dimensions: ALSCAL	334
22.2 The percentage of variance accounted for by the first eight significant components	335
22.3 Intercorrelations among the ALSCAL dimensions and the PREFAN components	335
22.4 PREFMAP summary table: location of fifty-two subjects' liking ratings into the five-dimensional content space	336–7
23.1 Mean ratings for each variable and content domain	351
25.1 Experiment 1: ANOVA summaries	372
25.2 Experiment 2: ANOVA summaries/Tucson (University of Arizona) observers	374
25.3 Experiment 2: ANOVA summaries/Young (Library Board) observers	375
26.1 Preference means for the scene groupings based on American (UM) and Australian (UWA) data sets	382
28.1 Frequency of aesthetic-control issues	426
28.2 Aesthetic controls by topic and region	427
30.1 Representative decennial censuses	451
30.2 Regional shopping patterns	452

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Contributors and participants

Participants at 1982 College Park, Maryland, sessions

- Arnold Berleant** The American Society for Aesthetics, C. W. Post Center of Long Island University
- D. Mark Fenton** and **Joseph P. Reser** Department of Psychology, Western Australian Institute of Technology
- Barrie B. Greenbie** Department of Landscape Architecture and Regional Planning, University of Massachusetts
- Tom F. Heath** School of the Built Environment, Queensland Institute of Technology
- Thomas R. Herzog** Department of Psychology, Grand Valley State College
- Rachel Kaplan** Department of Psychology and School of Natural Resources, University of Michigan
- Stephen Kaplan** Department of Psychology and Department of Computer Sciences, University of Michigan
- Jon Lang** Urban Design Program, University of Pennsylvania
- Richard M. Locasso** Student Health Program, Southern Illinois University
- Jack L. Nasar** Department of City and Regional Planning, Ohio State University
- Brian Orland** Department of Landscape Architecture, University of Illinois
- Wolfgang F. E. Preiser** Institute for Environmental Education, University of New Mexico, and **Kevin F. Rohane** 3-D International
- Mollie Ridout** Department of Geography, Pennsylvania State University
- Janet F. Talbot** School of Natural Resources, University of Michigan

Participants in 1983 Lincoln, Nebraska, sessions

- Arnold Berleant** The American Society for Aesthetics, C. W. Post Center of Long Island University
- Linda N. Groat** Department of Architecture, University of Wisconsin, Milwaukee

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

xviii

*Contributors and participants***Fred A. Hurand** Department of Urban and Regional Planning, Eastern Washington State University**Jon Lang** Urban Design Program, University of Pennsylvania**Jack L. Nasar** Department of City and Regional Planning, Ohio State University**Jack L. Nasar, David Julian, Sarah Buchman, David Humphreys, and Marianne Mrohaly** Department of City and Regional Planning, Ohio State University**Werner Nohl** Landschafts-architektur, Technische Universität München**Fahriye Hazer Sancar** Department of Landscape Architecture, University of Wisconsin, Madison**Contributors****Jay Appleton** Department of Geography, University of Hull**John E. Flynn** (deceased) Department of Architectural Engineering, Pennsylvania State University**Robert G. Hershberger** and **Robert C. Cass** Department of Architecture, Arizona State University**Rachel Kaplan** Department of Psychology and School of Natural Resources, University of Michigan, and **Eugene J. Herbert** Siteplan, Queensland, Australia**Joyce Vielhauer Kasmar** Los Angeles**Eduardo E. Lozano** Lozano and White Associates**Anke Oostendorp** Surveys Analyst, Bell Canada, and **Daniel E. Berlyne** (deceased) University of Toronto**Kenneth T. Pearlman** Department of City and Regional Planning, Ohio State University**James A. Russell** Department of Psychology, University of British Columbia

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Acknowledgments

This collection would not have become a reality without the efforts of a number of individuals. I owe a general debt of gratitude to two educators, Oscar Newman and Joachim F. Wohlwill. Oscar brought me in touch with the area of environment-behavior studies and environmental meaning, and Jack continued my education in the area of environmental aesthetics with his valuable insight and guidance during and after my dissertation years. Of more direct relevance to this collection, I am, of course, grateful to the over thirty individuals whose papers are presented in this collection for their contributions, patience, and responsiveness to my requests. The organizers of EDRA 13 – Polly Bart, Alexander Chen, Guido Francescato – and of EDRA 1983 – Doug Amedeo, James B. Griffin and James J. Potter – provided the opportunity for the Symposia and Workshops from which this book evolved. Louise DeMaseo typed several chapters of this book when needed (usually yesterday). I am grateful to the staff at Cambridge University Press: Susan Milmo, who encouraged me to submit the book and who shepherded it through the early phases with Cambridge; J. Blake Bailey, her assistant; Jane Van Tassel, the production editor; and Irene Pavitt, the copy editor. Finally, my wife Judy and daughter Joanna were always there when needed. All of these people have earned my warmest thanks.

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Preface

Background

Environmental aesthetics represents the merging of two areas of inquiry: empirical aesthetics and environmental psychology. Both areas use scientific methodologies to help explain the relationship between physical stimuli and human response. Empirical aesthetics is concerned with the arts (painting, music, literature, and dance), and environmental psychology is an applied field concerned with improving the quality of the human habitat. By combining a concern with aesthetic value, a problem focus on human habitat, and a methodological emphasis on applicability, environmental aesthetics becomes a unique endeavor. One notable factor is the use of a broader definition of aesthetics (see Wohlwill, 1976) to include environmental influences on the whole range of human affect. Thus central concerns in environmental aesthetics include understanding environmental influences on affect and translating that understanding into environmental design that is judged favorably by the public.

Although aesthetics is only one among a host of considerations in environmental design, it is an important one. The aesthetic quality of the surroundings may affect immediate experience – sense of well-being – in those surroundings; it may influence subsequent reactions to both the setting and its inhabitants; and it may influence spatial behavior in that individuals are attracted to an appealing environment and are likely to avoid an unpleasant one. With knowledge of the relationship between properties of the visual environment and human affect, design professionals can better plan, design, and manage settings to fit the preferences and activities of the users. This, in turn, may contribute to enhancing the quality of life.

The concern for understanding principles of aesthetics is not a new one. It has a long history in philosophy, design, and research. The aesthetic principle of “unity in variety,” for example, was put forth by the early Romans (Bosanquet, 1892). In psychology, some of the earliest published experiments centered on aesthetics (Fechner, 1876). Mathematical approaches to aesthetics date back to

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

xxii

Preface

ancient times and the golden section. In the twentieth century, architects such as Le Corbusier, with his “modular man,” continued to consider mathematical solutions (Blake, 1960). Psychologists have also turned to mathematics for expression of aesthetic principles. Birkhoff (1933) gave mathematical expression to the role of order and variety in preference, and although he did not empirically test his theory, others (see Eysenck, 1941) did. In 1935, Koffka gave voice to the Gestalt school views on aesthetics. These views have subsequently been extended to the realm of environmental design (Arnheim, 1977; Hesselgren, 1975).

The past twenty-five years have seen a renewed interest in the empirical examination of aesthetics. Berlyne has published some of his seminal works on aesthetics (1960, 1971, 1974); Wohlwill (1968) has extended this work to large-scale environments; and design professionals such as Venturi (1966) and Rapoport (Rapoport and Hawkes, 1970; Rapoport and Kantor, 1967) have used principles from the empirical research to critique modern architecture and to advocate different kinds of solutions. Public policy has changed as well. Public-policy initiatives (Coastal Zone Management Act, 1972; National Environmental Policy Act, 1969) have recognized aesthetics as important and in need of quantification for environmental decision making.

Further evidence of the growth of interest in the area of environmental aesthetics can be seen in a review by Zube, Sell, and Taylor (1982). They refer to over 160 articles and 11 state-of-the-art reviews or bibliographies published in 20 journals between 1965 and 1980. Among the journals publishing work on environmental aesthetics are *Environment and Behavior*, *Journal of Environmental Psychology*, *Journal of the American Institute of Planners* (now *Journal of the American Planning Association*), *Landscape Planning*, *Landscape Research*, and *Environment and Planning A and B*. Professional magazines, such as *Planning*, *Landscape Architecture*, *Architecture*, and *Progressive Architecture*, have also highlighted empirical advances in environmental aesthetics. Additional state-of-the-art reviews in environmental aesthetics include those by Wohlwill (1976), Kaplan and Kaplan (1982), Porteous (1982), and Ulrich (1983).

That aesthetic quality of the environment is important to the public is evident. Homeowners become angry over a neighbor's aesthetic intrusion; citizens fight to protect an aesthetic resource or to remove an eyesore; cities try to control the visual quality of their frequently blighted commercial strips; and national policy attempts to reduce visual blight along highways. Empirical data substantiate such anecdotal evidence. A variety of studies examining subjective responses to environments (Canter, 1969; Harrison and Sarre, 1975; Hershberger and Cass, 1974; Lowenthal and Riel, 1972; Oostendorp and Berlyne, 1978a; Russell and Ward, 1981) indicate the importance of the evaluative or aesthetic dimension in response to the environment. Canter (1969), using factor analysis, found that for both architects and nonarchitects, the major factor in response to simulated

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)*Preface*

xxiii

environments was an aesthetic one – pleasantness; Lowenthal and Riel (1972), using the repertory grid technique, by which respondents generated their own descriptors, found aesthetic variables – beautiful–ugly and pleasant–unpleasant – accounting for most of the variance; Harrison and Sarre (1975), using personal constructs, found that for descriptions of both neighborhood and retail environments, descriptors relating to aesthetics – pleasant atmosphere and beauty – accounted for the largest portion of the variance; and Russell and Ward (1981), using a variety of techniques, found evaluation as one of two major dimensions in affective appraisals of the environment. In sum, individuals respond to their surroundings in highly evaluative ways. Visual quality is important.

Because of its importance, visual quality may well influence well-being and behavior. Empirical studies (Kasmar, Griffin, and Mauritzen, 1968; Maslow and Minz, 1956; Mintz, 1956; Moos, Harras, and Schonborn, 1969; Samuelson and Lindauer, 1976) demonstrate effects of variations in aesthetic conditions on well-being and behavior. Although some of these findings may be confounded by method artifact (Locasso, this collection), there is other evidence of aesthetic influences. Berlyne (1971), for example, documented physiological reactions to certain aesthetic variables, and Ulrich (1984) found that recovery time in a hospital was affected by the quality of the view from the room.

With regard to behavior, it is commonly held that the choice of a home depends, in part, on aesthetic factors. Thus, real-estate agents may recommend aesthetic improvements (painting, cleaning up, and planting) to help sell a house. Has empirical research documented any behavioral effects? Berlyne (1971) has demonstrated that the visual character of stimuli influences behaviors such as attention, looking time, or forced choice. More recently, researchers have found evidence of effects on spatial behavior. Newman (1972) cited aesthetics – image and milieu – in public housing as affecting sense of community and crime; Wener, Fraser, and Farbstein (1985) found that certain aesthetic variables influenced the success of correctional facilities; Downs (1970) found aesthetics to be one factor, admittedly a minor one, that influenced choice of a shopping center; and Ulrich (1973) found that shoppers drove out of their way to use a more visually pleasing route to shop.

At present, decisions about the visual quality of the environment are often made by design professionals. This is particularly true for large-scale facilities, such as offices, institutions, and commercial and recreational facilities. Because these facilities are experienced on a regular basis by large numbers of people, they may have a substantial influence on the evaluative image of a city. If professionals and the public share aesthetic values or if professionals could accurately gauge aesthetic needs of the public, then reliance on professional intuition might be acceptable. Unfortunately, the research indicates that professionals differ from the public in their environmental preferences (Canter, 1969;

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

xxiv

Preface

Groat, 1982; Hershberger and Cass, 1974). Furthermore, such differences are not trivial. They can result in widespread effects, as is demonstrated in the controversy surrounding the Richard Serra sculpture and in the monumental failure of Pruitt Igo. Serra won a National Endowment for the Arts competition for a public sculpture to be placed in front of the Federal Building in New York. The public regarded the sculpture as an ugly intrusion on their daily lives. Yet many artists lined up in support of Serra and against the public. This was not a museum piece that people could choose to see or to avoid. This was an object placed in a major public plaza. What is more important in such instances, the aesthetic values of the artist or those of the public who must live with the work on a daily basis? It is noteworthy that this controversy took place over ten years after Pruitt-Igoe. Recall that Newman (1972) argues that a difference in the aesthetic values of the designers and the occupants was a factor contributing to this monumental failure.

Although some designers disdain public values, many professionals want to produce user-sensitive design. For the latter group, the research on environmental aesthetics may help inform their design decisions. Theoreticians and researchers can gain from understanding the practical constraints within which decision makers operate. Inquiry into practical aspects of the application of research findings to design and planning can help transform theory and research into physical realities. It is through an understanding of theory, research, and public policy that decision makers can be most effective in improving the quality of the environment. Thus, for example, regulatory controls in sign ordinances may rely on theory and empirical evidence about legibility and its influence on safety. Through the accumulation of evidence, public policy will change. It is hoped that this collection of papers can contribute to such change.

Evolution of the book

For the 1982 Environmental Design Research Association Conference, in College Park, Maryland, with the intent of sponsoring a symposium on environmental aesthetics, I put out a call for papers on new work in theory, research, or applications in environmental aesthetics. I received over thirty abstracts and papers. To accommodate this unexpected supply, the conference organizers – Polly Bart, Alexander Chen, and Guido Francescato – allowed me to schedule four sessions: one symposium on theory and three workshops – one on theory, one on research, and one on design and planning applications. Many papers and abstracts were distributed in advance to enable presenters to respond to one another's papers during the sessions. At the conference, the large number of presentations in each session required adherence to a strict schedule that prohibited discussion beyond the formal presentations. Clearly, a second meeting was needed to explore the issues further.

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)*Preface*

xxv

Thus for the 1983 Environmental Design Research Association Conference, in Lincoln, Nebraska, I organized a second set of sessions on environmental aesthetics. With the cooperation of conference organizers – Doug Amedeo, James B. Griffin, and James J. Potter – two symposia and one workshop were scheduled. Independently, Linda Groat organized a session on contextual fit – an important concern in architectural aesthetics. Thus in 1982 and 1983, there were eight sessions defining the cutting edge in environmental aesthetics. Presenters included established leaders in the field and relative newcomers. Many papers were the first presentations of dissertation or thesis work, and one was selected by EDRA as a best student paper.

This collection evolved from those conference sessions. It attempts to organize the work to clarify issues, techniques, and directions for further inquiry in environmental aesthetics. The spirit of connecting theory, research, and application was maintained. Thus at the core of this book are some of the original ideas presented at the conferences. For this book, however, the contributors revised and improved their original conference presentations. The comments and discussions during and after the sessions influenced that process. Some papers in this collection represent revisions and updates of the session papers; others represent new work that grew from work presented at the sessions; and a third set (not from the conference sessions) are invited papers (some new and some previously published) that are important contributions to the work in the field.

Purpose and audience

The book is organized in three sections. The first section presents theoretical perspectives on environmental aesthetics. Included are papers on philosophy, psychology, and design. Each raises issues of relevance to basic and applied research, design education, and practice with regard to aesthetics.

The second section presents empirical studies. Examined are the nature of perception of physical environments, the nature of response to such environments, the linkage between environmental appraisal and features of the environment, and the effects of aesthetic surroundings on human inhabitants. The papers provide the researcher and designer with a basis for evaluating environmental quality or for conducting inquiries into the nature of environmental aesthetics. This section provides information on various kinds of environment, including interior, exterior, urban, and natural and rural. For each kind of environment, there are papers that examine the noticeable visual attributes and the relevant measures of emotional response. Readers can also glean directions for design, research, and theory through examining the relationships found between features of scenes and appraisals of those scenes.

The third section presents applied work. Readers are exposed to the mechanisms by which research findings and design guidelines can be converted into

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

xxvi

Preface

physical products. An understanding of these mechanisms can provide insight into new directions of applied inquiry.

The grouping of papers in any one category is, in fact, artificial, because much of the work contributes to theory, research, and application. Thus although the papers are classified as theory, research, or application, they may inform and enhance efforts in other categories. The papers share the goal of contributing to the enhancement of aesthetic quality of human surroundings. Thus they include theoretical work relevant to empirical testing and design, empirical work grounded in or affecting theory and design application, and application informed by and informing both theory and research. It is in the spirit of such interdisciplinary cooperation that this book is offered.

The field of environmental aesthetics is a rich and varied one. By drawing from conference presentations, this book aims to present some of the latest advances. Nevertheless, it is inevitable that omissions due to limitations in space and time would be made. Consider, for example, the discussion of sociobiology by Edward O. Wilson and by Richard C. Lewontin; the phenomenological positions of David Seamons and Yi Fu Tuan; the ecological perspective of James J. Gibson; the methodological and empirical advances made by researchers such as David Canter, Kenneth Craik, Terry Daniel, Elwood Shafer, Roger Ulrich, Joachim F. Wohlwill, and Erv Zube and by Swedish researchers Carl-Axel Acking, Tommy Gärling, G. J. Sorte, and Richard Küller; or the ideas of professionals such as Amos Rapoport.

Integral to the interdisciplinary nature of the content of this collection is the view that readers will come from a variety of disciplines. The main audience is expected to include individuals who are interested in the applications of research to understanding and creating physical settings that appeal to the aesthetic values of the inhabitants. Specifically, the audience is expected to include both social and behavioral scientists and environmental practitioners (architects, landscape architects, and planners). The papers present information relevant to each field separately, and to the interdisciplinary fields of empirical aesthetics, environment-behavior studies, and planning. Thus, for example, some of the empirical studies have implications for the field of psychology; some of the theoretical papers have implications for the field of philosophy; and some of the papers on application have implications for design and planning.

The book is also aimed at the student with an interest in the conduct and application of environment-behavior research. Because such an interest might emerge at an undergraduate or a graduate level, the book is intended for use in specialized (environment-behavior) courses at either level. It is expected that both novices and advanced students in the area can gain from this book. Because such students and courses may appear in the design fields, the social and behavioral sciences, or philosophy, the book was designed to be a useful text for any of

Cambridge University Press

978-0-521-42916-0 - Environmental Aesthetics: Theory, Research, and Applications

Edited by Jack L. Nasar

Frontmatter

[More information](#)

Preface

xxvii

these areas. Selections from the book have already been used with success in undergraduate courses in architecture; in graduate classes attended by industrial designers, architects, landscape architects, and planners; and for doctoral students doing dissertation work on environmental aesthetics. These students found a theoretical, empirical, and applied grounding and have developed new ideas for research and application from that experience. It is to be hoped that other readers will glean similar benefits.