

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

## DESIGN BY COMPETITION

What meanings do buildings and places convey to the people who use and visit them? Too often, design competitions and signature architecture result in costly eyesores that do not work. How can sponsors and clients get more meaningful results? In answer to these questions, Dr. Nasar, supported by riveting studies of competitions and Peter Eisenman's competition-winning design for the Wexner Center at the Ohio State University, suggests the use of prejury evaluation (PJE). Dr. Nasar demonstrates the potential value of this approach, as well as for visual quality programming for many different kinds of environmental design.

These studies, from those specific to the Wexner Center to those of historic significance, point towards a new method for shaping the visual form of buildings, places, and cities. Architects, urban designers and planners, social scientists, clients, government officials, and residents will want to read this thought-provoking book. It will give them a new perspective on the designed environment.

Jack L. Nasar is Professor of City and Regional Planning at the Ohio State University. He has published widely on architectural criticism, environmental aesthetics, and urban design. Dr. Nasar has served as chair of the Environmental Design Research Association, as the Ethel Chattel Visiting Scholar at the University of Sydney, and as Fellow in the American Psychological Association. He has also been a research associate at the Westinghouse National Issues Center and a Lilly Endowment Postdoctoral Fellow.

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

## ENVIRONMENT AND BEHAVIOR SERIES

### Series Editors

Irwin Altman *The University of Utah*

Daniel Stokols *University of California, Irvine*

### Other Books in the Series

Edward Krupat *People in Cities: The Urban Environment and Its Effects*

Irwin Altman and Martin M. Chemers *Culture and Environment*

Ervin H. Zube *Environmental Evaluation: Perception and Public Policy*

John D. Cone and Steven C. Hayes *Environmental Problems/Behavior Solutions*

John Zeisel *Inquiry by Design: Tools for Environment-Behavior Research*

Ralph B. Taylor *Human Territorial Functioning: An Empirical, Evolutionary  
Perspective on Individual and Small Group Territorial Cognitive Behavior*

Stephen Carr, Mark Francis, Leanne G. Rivlin, and Andrew M. Stone *Public  
Space*

Paul D. Cheralnik *Applications of Environment-Behavior Research: Case Studies  
and Analysis*

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

# DESIGN BY COMPETITION

MAKING DESIGN COMPETITION WORK

*Jack L. Nasar*



Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE  
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK <http://www.cup.cam.ac.uk>40 West 20th Street, New York, NY 10011-4211, USA <http://www.cup.org>

10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1999

This book is in copyright. Subject to statutory exception  
and to the provisions of relevant collective licensing agreements,  
no reproduction of any part may take place without  
the written permission of Cambridge University Press.

First published 1999

Printed in the United States of America

*Typeface* ITC New Baskerville 10/12 pt. *System* QuarkXpress™ [HT]*A catalog record for this book is available from the British Library**Library of Congress Cataloging-in-Publication Data*

Nasar, Jack L.

Design by competition : making design competition work / Jack L. /  
Nasar.

p. cm. — (Environment and behavior series)

Includes bibliographical references and index.

ISBN 0 521 44449-7 (hb)

1. Wexner Center for the Visual Arts. 2. Architecture.

Modern—20th century—Ohio—Columbus. 3. Eisenman/Trott Architects.

4. Columbus (Ohio)—Buildings, structures, etc. 5. Architecture—

Competitions—United States. 6. Communication in architectural

design—United States. I. Title. II. Series.

NA6813.U8CS58 1999

720'.79—dc21

98-44685

CIP

ISBN 0 521 44449-7 hardback

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

*To my daughter Joanna Lynn Nasar*

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

There was a most ingenious architect who had contrived a new method for building houses, by beginning at the roof and working downwards to the foundation, which he justified to me by the like practice of those two prudent insects the bee and the spider (p. 126).  
– Gulliver’s Travels<sup>273</sup>

Has there ever been another place on earth where so many people of wealth and power have paid for and put up with so much architecture they detested as within they blessed borders today? (p. 3) – Tom Wolfe<sup>311</sup>

## SERIES FOREWORD

In recent decades the relationship between human behavior and the physical environment has attracted researchers from the social sciences – psychology, sociology, geography, and anthropology – and from the environmental-design disciplines – architecture, urban and regional planning, and interior design. What is in many respects a new and exciting field of study has developed rapidly. Its multidisciplinary character has led to stimulation and cross-fertilization, on the one hand, and to confusion and difficulty in communication, on the other. Those involved have diverse intellectual style and goals. Some are concerned with basic and theoretical issues; some, with applied real-world problems of environmental design.

This series offers a common meeting ground. It consists of short books on different topics of interest to all those who analyze environment-behavior links. We hope that the series will provide a useful introduction to the field for students, researchers, and practitioners alike, and will facilitate its evolutionary growth as well.

Our goals are as follows: (1) to represent problems the study of which is relatively well established, with a reasonably substantial body of research and knowledge generated; (2) to recruit authors from a variety of disciplines with a variety of perspectives; (3) to ensure that they not only summarize work on their topic but also set forth a “point of view,” if not a theoretical orientation – we want the books not only to serve as texts but also to advance the field intellectually – and (4) to produce books useful to a broad range of students and other readers from different disciplines and with different levels of formal professional training. Course instructors will be able to select different combinations of books to meet their particular curricular needs.

*Irwin Altman  
Daniel Stokols*

## ACKNOWLEDGMENTS

Though I cannot trace all sources of my ideas, two individuals stand out as important influences. Oscar Newman awakened me to the significance of building milieu to people, the differences in the taste of architects and laypersons, and the idea of evaluating architecture for users after occupancy. Jack Wohlwill brought my attention to principals of aesthetic response and scientific methods of measurement. The book also draws on ideas from Henry Sanoff on the scientific methods applied to architecture and visual quality; Wolfgang Preiser on postoccupancy evaluation; and from several researchers on visual quality, including Daniel Berlyne, Stephen and Rachel Kaplan, and Amos Rapoport.

Some material in this book has appeared elsewhere in different form.<sup>173 182</sup> I thank the many graduate students who worked with me and assisted with the research: Junmo Kang helped with the Post Jury Evaluation; Jahnee Prince helped with the crime and fear studies; Maral Cheterian, Timothy Imeokparia, and Ray Nix helped assemble the data for one of the historiometric inquiries; and Peg Grannis interviewed local architects and gathered data about people's evaluations of competition winners and losers through time. Students in my class on programming and building evaluation helped gather data on the evaluation of the Wexner Center. They included Kari Cassell, Elizabeth Cultice, Mohammad Farhan, Peg Grannis, Michael Giuliani, Junmo Kang, Arif Shahzad Khan, Frank Kretchmar, Dirk Longbrake, Dan Ogle, Jahnee Prince, Cia Rodeman, Larry Rosenthal, Mohamed Tarikel, and Richard Wooten. Kari Cassell did additional work on wayfinding on the Wexner Center site.

Thanks also to Lucy Caswell, William B. Cook, Tom Heretta, Frank Ludden, Al L. Matthews, Patrick Maughan, Jill Morelli, Robert Stearnes, and Susan Wyngaard who provided information about Wexner Center and various buildings on The Ohio State University campus.

Exchange of ideas with my colleagues Bonnie Fisher, Kenneth Pearlman, Burkhard von Rabeneau, Philip Viton, and Gerrald Voss helped shape this work. I am also grateful to City and Regional Planning and the Knowlton School of Architecture at The Ohio State University for giving me the time to work on this book.



Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

---

xii     *Acknowledgments*

I thank the Cambridge University Press editor, Julia Hough, for shepherding me through the publishing process. I am grateful to Kimberly Devlin, Stephan Kaplan, Brenda Lightner, Gary Moore, and Robert Marans for their comments on early material of this book. I am also grateful to Kathryn Anthony, Paul Hekkert, Nick Ingoglia, Sandra Gross, Wolfgang F. E. Preiser, John Simpson, and Paul Young for their comments on early drafts of the whole book. Special thanks go to Irwin Atman and Dan Stokols whose insightful editorial comments helped me shape this book into its present form.

## TABLE OF CONTENTS

List of Illustrations and Tables	<i>page</i> xv
<i>Introduction</i>	1
PART ONE: BACKGROUND	
<i>1 The Wexner Center Competition</i>	5
<i>2 What Do We Know About Architectural Competitions?</i>	20
<i>3 Meaning Matters</i>	61
PART TWO: EVALUATIONS	
<i>4 Managing Meaning Through Visual Quality Programming</i>	75
<i>5 Popular Evaluations of the Wexner Center Entries</i>	90
<i>6 Popular Evaluations of the Completed Building</i>	98
<i>7 Working in a Work of Art: A Postoccupancy Evaluation of the Wexner Center</i>	112
PART THREE: PRESCRIPTIONS	
<i>8 Model for Running Design Competitions</i>	145
<i>9 Toward a New Democratic Architecture</i>	163
APPENDICES	
<i>A The Use of Prejury Evaluation</i>	171
<i>B Comments on Design Competitions by Participants in the Wexner Center Competition</i>	179
<i>C Selected Tables of Results</i>	199
References	214
Index	231

## ILLUSTRATIONS AND TABLES

*Figures*

1.1	Visual Arts Center entry by Peter Eisenman.	8
1.2	Visual Arts Center entry by Arthur Erickson.	9
1.3	Visual Arts Center entry by Michael Graves.	10
1.4	Visual Arts Center entry by Kallmann, McKinnell, and Wood.	11
1.5	Visual Arts Center entry by Cesar Pelli.	12
1.6	View from the entrance lobby to the gallery space: The design as an agent of instability.	16
1.7	Fragments of the armory peeled and relocated as a gesture against literal historicism.	17
1.8	White scaffolding symbolizing “construction in progress.”	18
2.1	Washington Square Arch, 1889–1892, McKim, Mead and White.	30
2.2	The New York Public Library (1897) by Carrere and Hastings, still a popular gathering place.	31
2.3	The Gateway Arch (1946–1966), St. Louis, Missouri, by Eero Saarinen and Associates.	33
2.4	The White House (1792), Washington, D.C., by James Hoban.	33
2.5	Eiffel Tower (1886–88), Paris, France, by Gustave Eiffel, Emile Nougier, and Maurice Koechlin.	34
2.6	Vietnam Veteran’s Memorial (1980–81), Washington, D.C., by Maya Ying Lin.	37
2.7	Copley Square (1960), Boston, Massachusetts, by Sasaki–Walker & Associates.	41
2.8	Florida A & M School of Architecture (1985) by Clements/Rumpel Associates.	43
2.9	Examples of competition winning designs paired with a losing entry.	50
2.10	Percentage of choices of winning or losing entries as more liked or the better design.	53
2.11	Architect and nonarchitect preferences.	54

Cambridge University Press

978-0-521-44449-1 - Design by Competition: Making Design Competition Work

Jack L. Nasar

Frontmatter

[More information](#)

xvi	<i>Illustrations and Tables</i>	
2.12	Architect and nonarchitect judgments of <i>better design</i> .	55
2.13	Popular evaluations of Transamerica Tower in San Francisco showed stability over time and contradicted the early negative appraisals of the design by experts.	59
3.1	Sydney Opera House (1956–73), Sydney, Australia by Jörn Utzon.	69
4.1	Predicted effect of diversity on interest and preference.	78
4.2	A popular style preferred by many Americans.	83
4.3	A scene satisfying criteria for pleasantness.	86
4.4	A scene satisfying criteria for relaxation.	
5.1	Composite public evaluations of the five Wexner entries on the eleven-item scale.	92
5.2	Composite public evaluations of the five entries on the fifteen-item scale.	92
5.3	Mean rank scores on each factor.	94
6.1	Celeste Chemistry Laboratory.	105
6.2	James Cancer Center.	106
6.3	Enarson Hall.	107
6.4	Main Library.	108
6.5	Math Tower.	109
6.6	Newman and Wolfrom Chemistry Laboratory Addition.	110
7.1	Wexner Center spots that evoke fear and attract vandalism.	119
7.2	The main entrances look like service entrances.	120
7.3	Concealed library entrance (past signs and on the right).	121
7.4	One of several paper signs directing visitors to the libraries.	122
7.5	Annotated floorplan showing some Wexner Center design flaws.	125
7.6	Security barriers close the gallery spaces and coatrooms.	126
7.7	Glass roof and walls require temporary gallery enclosures for each exhibit.	128
7.8	Crowded designer-desks in administrative area showing signs of wear.	130
7.9	Hallways used for storage.	131
7.10	A sign added to direct wheelchair users to library elevator.	134
7.11	Library alcove at left could conceal an attacker.	135
7.12	Repair work on roof leaks on underground library.	136
C.1	For each group and time, the proportion of entries selected as <i>liked</i> that were competition losers.	212
C.2	For each group and time, the proportion of entries judged as <i>better designs</i> that were competition losers.	213

*Illustrations and Tables*

xvii

**Tables**

2.1	Number of competitions posted in <i>Progressive Architecture</i> per year.	21
2.2	Rankings of building fame by frequency of citation.	47
4.1	Criteria for pleasantness.	85
4.2	Criteria for excitement.	85
4.3	Criteria for relaxation.	85
4.4	Preferred features scored for each of the five Wexner entries.	87
4.5	Possible research choices for a visual quality program.	88
8.1	Model for more successful and democratic competitions.	147
8.2	Composite programming model: A listing of the procedural steps used by seven programmers.	148
8.3	Performance criteria for an architectural program.	150
9.1	Differences between the formalistic and democratic design approaches.	165
9.2	Steps toward a more democratic architecture.	169
C.1	The 25 pairs of winning and losing entries.	199
C.2	Characteristics of the architects and nonarchitects interviewed.	200
C.3	Frequency chosen as more liked or as better design.	200
C.4	Frequency chosen as more liked or better design over five time periods.	201
C.5	Frequency chosen as most liked or better design by each group over time.	201
C.6	Houses chosen as more liked and better designed over five time periods.	202
C.7	Ranks by groups on composite score (from all fifteen items).	202
C.8	Public evaluations of the entries on each item.	203
C.9	Characteristics of mail survey respondents.	205
C.10	Comparison between PJE and mail survey scores.	206
C.11	Mean designer and nondesigner responses to mail survey.	206
C.12	Comparisons of mail survey scores by different groups.	207
C.13	Comparison between mail and on-site surveys.	207
C.14	Characteristics of on-site samples.	208
C.15	On-site responses to Wexner and other buildings.	209
C.16	Analysis of variance results for on-site responses to Wexner and four other buildings separately.	210
C.17	Ratings of Wexner compared to ratings of Math Tower and Chemistry Addition.	211