The background is a complex abstract composition. It features a large, textured orange and red area at the top, with a green circular line and a blue curved line overlaid. Below this, there's a dark, textured area with a blue ribbon-like shape. At the bottom, there's a blue and white patterned area. The overall style is painterly and expressive.

# Architecture from the Inside Out

Karen A. Franck and R. Bianca Lepori

# Architecture

# from the **Inside Out**

From the Body, the Senses, the Site, and the Community

**Second Edition**

Karen A. Franck and R. Bianca Lepori



WILEY-ACADEMY

*We dedicate this book to students of architecture and design, past and present*

Published in Great Britain in 2007 by Wiley-Academy, a division of John Wiley & Sons Ltd  
Second edition copyright © 2007

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England  
Telephone (+44) 1243 779777

Email (for orders and customer service enquiries): [cs-books@wiley.co.uk](mailto:cs-books@wiley.co.uk)

Visit our Home Page on [www.wiley.com](http://www.wiley.com)

Anniversary Logo Design: Richard Pacifico

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1T 4LP, UK, without the permission in writing of the Publisher. Requests to the Publisher should be addressed to the Permissions Department, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England, or emailed to [permreq@wiley.co.uk](mailto:permreq@wiley.co.uk), or faxed to (+44) 1243 770620.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The Publisher is not associated with any product or vendor mentioned in this book.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the Publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Other Wiley Editorial Offices

John Wiley & Sons Inc., 111 River Street, Hoboken, NJ 07030, USA

Jossey-Bass, 989 Market Street, San Francisco, CA 94103-1741, USA

Wiley-VCH Verlag GmbH, Boschstr. 12, D-69469 Weinheim, Germany

John Wiley & Sons Australia Ltd, 42 McDougall Street, Milton, Queensland 4064, Australia

John Wiley & Sons (Asia) Pte Ltd, 2 Clementi Loop #02-01, Jin Xing Distripark, Singapore 129809

John Wiley & Sons Canada Ltd, 5353 Dundas Street West, Suite 400, Etobicoke, Ontario M9B 6H8

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Executive Commissioning Editor: Helen Castle

Content Editor: Louise Porter

Publishing Assistant: Calver Lezama

ISBN 978 0 470 05783 4 (HB)

ISBN 978 0 470 05785 8 (PB)

Cover design: "Spiral Ribbon" (oil on wood panel, Ellen Wiener)

Page design and layouts by Artmedia Press Ltd, UK

Printed and bound by Grafos SA, Spain

## CONTENTS

<b>Preface</b>	<b>4</b>
<b>Preface to the First Edition</b>	<b>11</b>
Chapter 1 <b>Inside, Outside, and Inside Out</b> Karen A. Franck	<b>18</b>
Chapter 2 <b>From the Body</b> Karen A. Franck	<b>46</b>
Chapter 3 <b>The Animism of Architecture</b> R. Bianca Lepori	<b>74</b>
Chapter 4 <b>Space Therapy</b> R. Bianca Lepori	<b>100</b>
Chapter 5 <b>Product and Process</b> R. Bianca Lepori and Karen A. Franck	<b>126</b>
Chapter 6 <b>Balancing Opposites</b> Karen A. Franck	<b>154</b>
<b>Postscript</b>	<b>180</b>
<b>Credits</b>	<b>194</b>
<b>Acknowledgements</b>	<b>195</b>
<b>Authors Biographies</b>	<b>195</b>
<b>Praise for the First Edition</b>	<b>196</b>
<b>Index</b>	<b>197</b>

# Architecture from the **Inside Out**

From the Body, the Senses, the Site, and the Community

**Second Edition**

Karen A. Franck and R. Bianca Lepori



 **WILEY-ACADEMY**



*We dedicate this book to students of architecture and design, past and present*

Published in Great Britain in 2007 by Wiley-Academy, a division of John Wiley & Sons Ltd  
Second edition copyright © 2007

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England  
Telephone (+44) 1243 779777

Email (for orders and customer service enquiries): [cs-books@wiley.co.uk](mailto:cs-books@wiley.co.uk)

Visit our Home Page on [www.wiley.com](http://www.wiley.com)

Anniversary Logo Design: Richard Pacifico

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1T 4LP, UK, without the permission in writing of the Publisher. Requests to the Publisher should be addressed to the Permissions Department, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England, or emailed to [permreq@wiley.co.uk](mailto:permreq@wiley.co.uk), or faxed to (+44) 1243 770620.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The Publisher is not associated with any product or vendor mentioned in this book.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the Publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Other Wiley Editorial Offices

John Wiley & Sons Inc., 111 River Street, Hoboken, NJ 07030, USA

Jossey-Bass, 989 Market Street, San Francisco, CA 94103-1741, USA

Wiley-VCH Verlag GmbH, Boschstr. 12, D-69469 Weinheim, Germany

John Wiley & Sons Australia Ltd, 42 McDougall Street, Milton, Queensland 4064, Australia

John Wiley & Sons (Asia) Pte Ltd, 2 Clementi Loop #02-01, Jin Xing Distripark, Singapore 129809

John Wiley & Sons Canada Ltd, 5353 Dundas Street West, Suite 400, Etobicoke, Ontario M9B 6H8

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Executive Commissioning Editor: Helen Castle

Content Editor: Louise Porter

Publishing Assistant: Calver Lezama

ISBN 978 0 470 05783 4 (HB)

ISBN 978 0 470 05785 8 (PB)

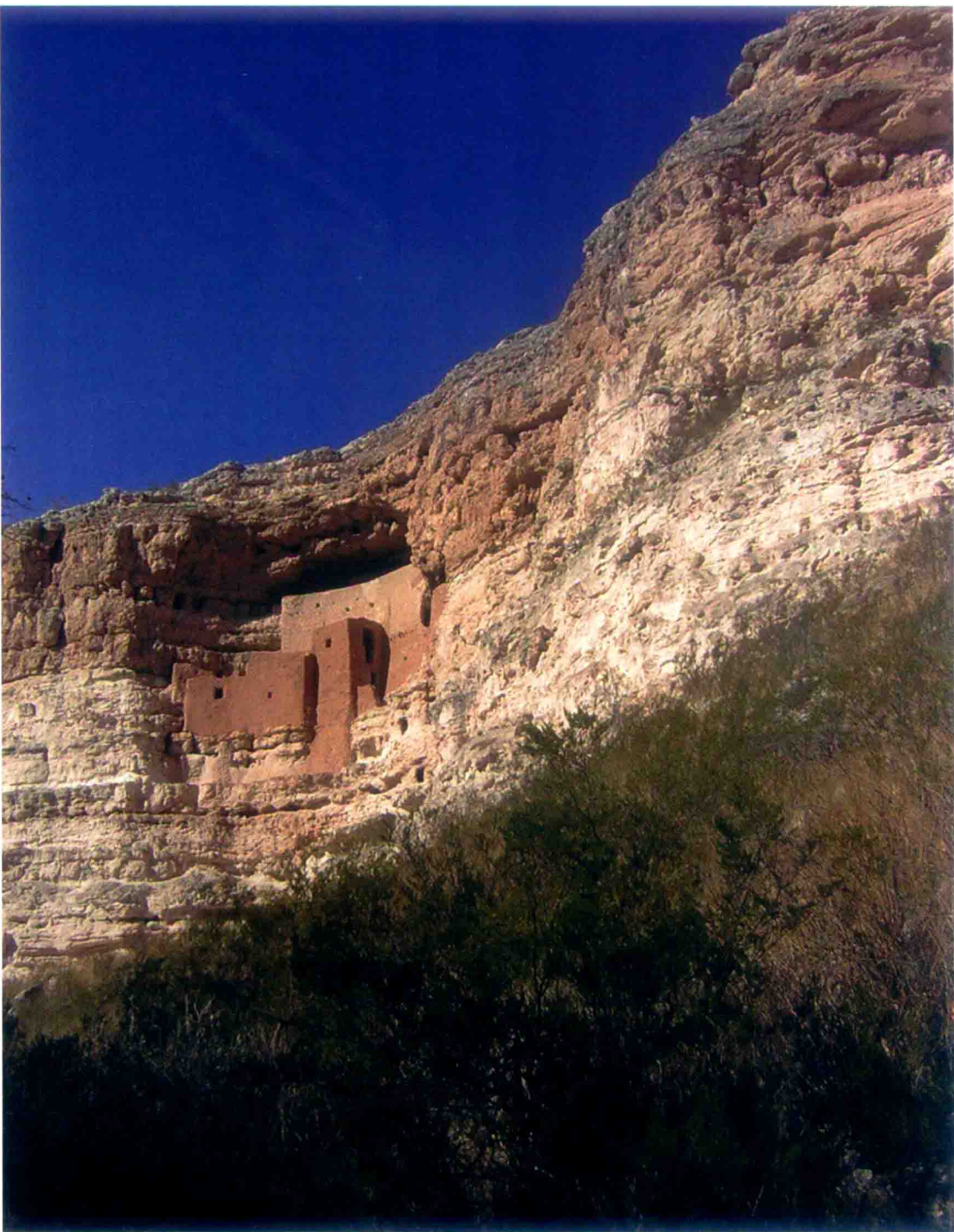
Cover design: "Spiral Ribbon" (oil on wood panel, Ellen Wiener)

Page design and layouts by Artmedia Press Ltd, UK

Printed and bound by Grafos SA, Spain

## CONTENTS

<b>Preface</b>	<b>4</b>
<b>Preface to the First Edition</b>	<b>11</b>
Chapter 1 <b>Inside, Outside, and Inside Out</b> Karen A. Franck	<b>18</b>
Chapter 2 <b>From the Body</b> Karen A. Franck	<b>46</b>
Chapter 3 <b>The Animism of Architecture</b> R. Bianca Lepori	<b>74</b>
Chapter 4 <b>Space Therapy</b> R. Bianca Lepori	<b>100</b>
Chapter 5 <b>Product and Process</b> R. Bianca Lepori and Karen A. Franck	<b>126</b>
Chapter 6 <b>Balancing Opposites</b> Karen A. Franck	<b>154</b>
<b>Postscript</b>	<b>180</b>
<b>Credits</b>	<b>194</b>
<b>Acknowledgements</b>	<b>195</b>
<b>Authors Biographies</b>	<b>195</b>
<b>Praise for the First Edition</b>	<b>196</b>
<b>Index</b>	<b>197</b>





# Preface

Six years after the first edition, the world has changed, we have changed. In my practice I have come to terms with the relationship between economy and architecture. I have verified how those with the financial resources that allow design ideas to be built are primarily seeking a return on their investments, carelessly exploiting both human and environmental resources in the process. As a practicing architect with an “inside out” vocation, I have been facing the practical dilemma of how to pursue that vocation in a design and building market that seeks only to maximize profits. How can care, involvement, and respect for people and place become values as well as additional returns, both environmental and human? Working to answer this question has contributed to a better understanding and to a broadening and deepening of the concepts brought forward by the title and the text of our book.

Any movement from the inside out, I have realized, depends upon a previous intake from the outside: prior to any expression emerging from the inside, an interiorization of the outside is needed. The outside being so vast though, each of us, unable to absorb it all, selects from it a fraction that becomes the “template” upon which personal, existential choices as well as professional tasks are fulfilled and creations generated. Among all sorts of interpretations of the outside, which correspond to personal templates or visions of the world and lead to the most heterogeneous expressions, I have identified the fraction of the outside world we are concerned with in this book and I intend to act upon in practice.

The template, or assumption, here is that the built environment influences people both physically and emotionally. Thus, through the way we design and make decisions that influence the built environment we produce evidence of our values in relation to people as well. By revisiting, re-visioning, and rethinking space and place with people and environment in mind, architecture from the inside out aims to balance purpose, resources, the emotional and physical needs of users, and respect for place. It also suggests the implicit change of perspective required to introduce innovation into the conventional motives and rules that characterize the building world which, in theory, meet the needs of everyone but, in reality, meet the needs of no one, yet imposes behaviors upon everyone.

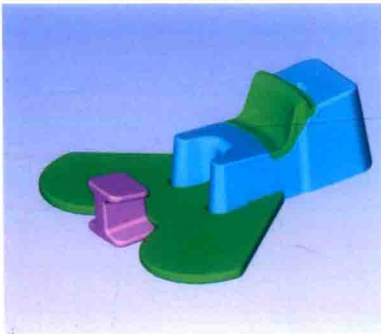
Cliff dwelling built by Sinagua Indians in  
1300s, Verde Valley, Arizona

Architecture from the inside out is a challenge to the status quo not as a necessarily invalid but rather an incomplete approach to design that is based on market values, abstract personal aesthetic criteria, technical standards, and the mechanical reproduction of repetitive types – an approach to design that lacks concern for human, physical, and emotional values as well as an awareness of the basic, universal principles that help harmony and beauty to be defined and sustained.

To bring this view into practice, I have figured out the following, very helpful synthesis which reflects our texts and case studies, and which I would like to share. Any architecture from the inside out is facilitated by at least two different templates. One involves the language of shapes and materials and is concerned with a revaluation of the senses as a means of relating to the world; the other is related to an idea of design as opportunity for socio-cultural as well as personal transformation.

The first template is based on the intention to fill a cultural gap and create a body/psyche/environment-conscious design, leading to a framework of basic qualities that create furniture, buildings, and environments technically generated from the inside out into poetic manifestations. This approach is expressed, for instance, by the restored Sinagua Indians' cliff dwelling, built in the 1300s in Verde Valley, Arizona. The fortified complex is built on, from, and within the limestone mountain it belongs to. It tells of the anonymous builder/inhabitants who carved out, in a recessed area they ingeniously adapted, a place that is both a handsome space within which to live and a natural defense. A contemporary example of a body/psyche/environment-conscious design is found in Symbio, the birthing kit I designed based on an idea by Beppe Battagliarin, an obstetrician in Milan. Cast around people's postures during birth, Symbio is composed of three pieces intended to support all actors involved in a natural delivery. The main stool is to be used by the woman and her partner. The smaller stool is for the midwife. The friendly carpet, a soft, skin-like polyurethane, matching the padded surface of all elements, is for the woman's feet, the midwife's knees and the body of the newborn baby.

The second template, which ideally but not necessarily includes the first one, is based on a desire, need, or intention to fill a social gap and create a community-conscious design. It leads to a framework of basic roles that are mindful of an ethical use of resources. Aligned with these intentions is, for example,



Symbio stool (Design by Bianca Lepori, distributed by Socrate Medical, Cesano Boscone, Milan)

Universitaria Arquitectura y Compromiso Social, a Spanish nongovernmental organization motivated by the need to respond to those students asking for a social orientation to their academic training and thus to their future profession. Concerned with reflection and action regarding the social compromise required by architects as designers and technicians, the association provides training for *“técnicos con inquietudes sociales”* (technicians with social disquietude) and engages primarily in the rehabilitation of dilapidated neighborhoods. If working with people and with the administration is crucial, selecting *“los problemas madres”* (the problems that generate problems) is essential for working out solutions from within contexts.

R. Bianca Lepori

Since the first edition was published, I have come to believe even more strongly in the value of discovering ideas for design within people's own desires, sensory experiences, and everyday actions, rather than imposing preconceived ideas or the latest fashion. My sister recently confessed she had always thought I was exaggerating the need for designers to pay more attention to people's everyday routines and the spatial and physical qualities to support them. However, she changed her mind when she tried to make design recommendations for her own house in a planned development that discourages suggestions from purchasers. Her repeated requests that the front porch be deep enough to accommodate a chaise longue and that the counter separating the breakfast area from the kitchen be wide enough to accommodate seating were initially rejected. But she was determined and knew, very clearly, how she wanted to live in her future house. All of us have opportunities to create and nurture places, but too often an emphasis on visual appearance and the opinions of others constrain us: too often we neglect our bodies and our senses.

I have found that architecture students are excited by opportunities to focus and reflect on their own and others' experiences of buildings and cities. Often they are eager to turn their attention to the “near environment”, the one we can touch and smell, the one that is practically an extension of our own bodies. They seem to seek a complement to courses where buildings are treated as a visual and technical matter, seen from afar, where a necessary level of abstraction depends upon a distancing from the sensory and the experiential. In lectures I



Field work by students from Arquitectura y Compromiso Social for urban planning of the historic Camino Viejo neighborhood, Tomares, Seville, Spain





Book cave, Shortwave Bookstore,  
Brooklyn (Freecell)



find that students and others enjoy a short exercise of closing their eyes and concentrating on other sensations: the feel of the chair, the sounds of air conditioning and city noises of traffic and construction, the small movements of air from the ventilating system, possibly the faint scents of perfume or cleaning detergents, and the rhythm of their own breathing. I ask them to take this multisensory awareness with them out into the city, and they tell me later how enjoyable this is. Fortunately, this longing for a more embodied experience, for more recognition of the importance of the sensory, is increasingly being met both in academic writings and in built projects (see Postscript).

In this second edition we have included more examples of designing that give priority to the body, movement, sensory experiences, everyday needs, and possibilities for the new to emerge. This way of approaching design requires that as designers we listen, watch, question, and let things happen rather than imposing our own solutions. Architecture from the inside out comes from what is inside and between people, from their everyday activities and needs, from their surroundings, and from the dialogue between architect and client. This approach depends on a degree of humility in working with clients, a degree of confidence in what starts as an open-ended process, and, as ever, creativity in shaping the process and the product.

In 2003, when I visited projects by the design-build firm Freecell in New York, I could see that the designers had treated what is functional and necessary with respect, even love. As the current partners, John Hartman and Lauren Crahan say, they “find form” in the quotidian tasks and needs of clients. For the office and studio of Verb Media, a video-graphics design firm, Freecell designed and built a counter/storage form, called the “super desk,” that winds through the office, creating a variety of work surfaces and providing a place, suitably sized and appropriately accessible, for almost every item in the office. The work side is open, providing easy access to each item; the public side is closed, with areas to display magazines and awards the firm has received. For the bookshop Shortwave, the architects realized they could combine the usual bookcase plus ladder into one structure: a bookcase that is also a ladder (and seating as well). A curved frame displays books for sale, provides storage space for overstock on the convex side, and offers seating that is intimate on the concave side. The frame, made of conduit tubing and designed to be dismantled and shipped to a new location when

necessary, is sturdy enough to climb on to reach the overstocked books, and open enough to allow light to enter the seating side. For an art installation called *Beneath*, Freecell designed and built a very large piece of furniture, raised above the floor, that invites walking, sitting, perching, and lying down. Rather than relying on published and standardized dimensions necessary for such activities, the designers measured their own bodies and determined dimensions and possible distances between people from their own observations. Exactly. From the body.

In Hong Kong, in 2004, I met an architect whose words and projects seem to step right out of the pages of *Architecture From the Inside Out*. Denise Ho carefully observes clients in their homes or workplaces and asks gentle questions. Her process is open – the solution emerges from the information she gathers from her observations and her conversations with clients. Receiving a program a client had written for the renovation of his apartment, Ho asked to visit him and his family in their current apartment. Her observations of the parents' frequent and affectionate interactions with their children led her to make design recommendations that would support this relationship. Of the several architects who received the program for review, Ho was the only one to visit the clients and their children.

With her brother as her client, Ho once caught herself imposing her own ideal of a modern house upon her father's village in China. She quickly realized her mistake and turned, instead, to observing the village and its houses and drawing ideas from the qualities of the site, local customs, and local materials and methods of building. The result integrates old and new. Made of brick, the three small houses create their own forecourt and are oriented to catch the summer breezes and winter sun. However, unlike traditional houses in the village, the facades facing the forecourt are completely glazed to offer views of the landscape. Large doors allow tables to be moved outdoors for family gatherings.

For the renovation of a series of apartment towers in Hong Kong, Ho designed a metal framework of louvers and platforms to be built on the facade that allows for the systematic and orderly placement of air-conditioning systems and facilitates their installation and maintenance. According to Ho: "Doing a renovation is not about putting up an external coat. It's not about going to a party. 'What do you fancy tonight?' It's about understanding the problem and the building." Exactly. It is architecture from the inside out.

*Karen A. Franck*



House for Ho family under construction, Ho Sai village, San Shui, China (Denise Ho Architects)

# Preface to the First Edition

**Karen:** Ever since we started talking about this book, we've thought of it as a kind of manifesto, a gentle manifesto. It is a declaration of our views and it's also a way to make "manifest" what seems to be hidden or neglected in architecture.

**R. Bianca:** The book is our attempt to explain the process of creation that lies behind built form. It's also an attempt to convey the multidisciplinary aspect of architecture because architecture deals not only with materials and form but also with people, with emotion, and with context and the relationships between them. We are entering an era in which everyone has to be involved in what is going on. There is an inner beauty related to individual involvement in making. This beauty comes as a natural consequence of working from your own needs and those of others, with care and participation.

**Karen:** We describe an attitude to architecture that recognizes the value of people and matter not only as inspirations for design but as the very reasons for architecture to exist at all. The word attitude is very important to me. The first meaning of attitude listed in the dictionary is "the arrangement of the parts of a body or figure; a posture" and the last meaning listed is "a state of readiness of a living organism to respond in a characteristic way to a stimulus (e.g. an object, concept, or situation)." The combination of the two meanings suggests both a bodily position and a readiness to respond in a particular, repeated way. I would say the position we describe is one of openness and the readiness to respond in a receptive way.

**R. Bianca:** We suggest this openness as a way of approaching design and we recommend it to people who are going to design in the future and to the people they will design for. It is for them that we wrote this book, to make them aware of the complexity as well as the simplicity of the topic. There is something that has been forgotten and that is people and the possibility of transformation. In the making of buildings and goods there lies a great opportunity to reinvent ourselves as well as to shelter and support our activities.

**Karen:** Writing the book gave me the chance to explore circumstances that have troubled me for a long time. As a social



scientist teaching in a school of architecture, I've been only too aware of how much architectural schools stress formal issues over human experience and activity. It is not only these aspects of life that are neglected but also materiality in the broadest sense, including furniture, lighting, materials. So much of the stuff of life, indeed the stuff of architecture, is given cursory attention while a more abstract approach to design is pursued and celebrated.

**R. Bianca:** Not only this. There is also something important about activity instead of passivity. I am not talking about the activity of producing but the activity of being in charge and acting upon circumstances that need to be faced and transformed. This book offers an opportunity for the kind of meditation that is needed before undertaking such action: it shows that it is possible to step out of assumptions and conventions and figure out what is breathing there, with you and around you. What we describe is a way of approaching design that gives importance to a process of discovery and growth as well as transformation. Maybe it is a feminine way, I don't know. It is a way of embracing circumstances and engaging with what is given, rather than simply projecting or just experimenting with new technologies.

**Karen:** In writing this book I found the opportunity to describe what I believe, what I consider to be important. I very rarely give lectures any more. I assign readings that I value, I pose questions and problems that I think are key, but I don't state the answer or the resolutions. I don't say directly what my own position is and yet I ask students in one way or another to state theirs. So now, to be fair, it is my turn. Students often ask me in some frustration, "What buildings do you like?" They're right. So often I've taken a purely critical stance, indicating in the readings or in the questions I pose what is missing, what is misguided. It was time to propose.

I come from a field – environmental design research – that is founded on the premise that architects, planners, interior designers, and policy-makers need more and better information to guide their decisions. I certainly agree that architects and designers need more information about people and their activities and experiences and how design may support and enhance them. However, even all the best information possible presented in ways architects can easily use will be useless unless architects want it. For that to happen, there needs to be a change in attitude.



**R. Bianca:** This I also believe. I didn't know I wanted to write this book until you asked me to. Then I felt a responsibility to point out the need for this change and also to say what is generally not said in architecture, to unveil its big myths and to confront its gods and fairies. I felt a sort of obligation to all those people who, like myself, do not feel at home in schools of architecture because there they have to follow somebody else's way which is not their own. This is an abstract way in which one feels incompetent and incomplete. Imagine what it's like when you have to design a museum, or a neighborhood for 750 families, as I had to in my thesis. How do you start out as a student, on your own? You go to the library and start to explore similar projects, trying to figure out what the building should look like. You design by tracking down similar designs. You don't have time to interview, to explore, to experiment with new behavioral patterns.

I know of many people who left architecture school because they found it too abstract and sort of old fashioned at the same time, because they couldn't find the engagement they wanted with reality. They often switch to social or artistic work but then they feel frustrated because in those fields they cannot fulfill their need to create and to transform at the same time.

I also wanted to leave architecture school many times because I couldn't grasp the reason for most of what I was studying. I remember a professor during a review who picked up the drawing of a building elevation and started criticizing it. When the student was able to get a word in, he said, "But you are holding it upside down." The professor said that it didn't matter if the design was good. So what was good design?

Once I started to work as an architect, there was the big shock of seeing how most architects were designing repetitive buildings for others and choosing something very special to live in themselves, often built one or more centuries earlier in the case of Italy. What was good design then?

I was still projecting into the future, playing with new materials and technologies, when I visited Ercolano, the ancient Roman city near Naples. There I felt that everything had been done already, that there wasn't anything to invent anymore in architecture. One could only relearn how to convey an atmosphere, how to play with spatial relationships. Caught by a sort of mutism I went into archaeology, to learn from the past, to grasp what makes the