

Design Nature And Revolution Toward A Critical Ecology

State structures, international forces, and class relations: Theda Skocpol shows how all three combine to explain the origins and accomplishments of social-revolutionary transformations. Social revolutions have been rare but undeniably of enormous importance in modern world history. *States and Social Revolutions* provides a new frame of reference for analyzing the causes, the conflicts, and the outcomes of such revolutions. It develops a rigorous, comparative historical analysis of three major cases: the French Revolution of 1787 through the early 1800s, the Russian Revolution of 1917 through the 1930s, and the Chinese Revolution of 1911 through the 1960s. Believing that existing theories of revolution, both Marxist and non-Marxist, are inadequate to explain the actual historical patterns of revolutions, Skocpol urges us to adopt fresh perspectives. Above all, she maintains that states conceived as administrative and coercive organizations potentially autonomous from class controls and interests must be made central to explanations of revolutions.

This timely collection brings together critical, analytic, historical, and practical studies to address what ethics means in the practice of design. Designers face the same challenges as everyone else in the complex conditions of contemporary cultural life—choices about consumption, waste, exploitation, ecological damage, and political problems built into the supply chains on which the global systems of inequity currently balance precariously. But designers face the additional dilemma that their paid work is often entangled with promoting the same systems such critical approaches seek to redress: how to reconcile this contradiction, among others, in seeking to chart an ethical course of action while still functioning effectively in the world. *Ethics in Design and Communication* acknowledges the complexity of this subject matter, while also demonstrating that in the ongoing struggle towards an equitable and sustainable world, the talents of design and critical thought are essential. Featured case studies include graphic design internships today, the dark web, and media coverage of the 2016 US presidential election. The fact that within this book such a wide array of practitioners, scholars, critics, and professionals commit to addressing current injustices is already a positive sign. Nonetheless, it is essential that we guard against confusing the coercive force of moral imperatives with ethical deliberation when conceiving a foundation for action.

Many business corporations are faced with the challenge of bringing together quite different types of knowledge in design processes: knowledge of different disciplines in the natural and engineering sciences, knowledge of markets and market trends, knowledge of political and juridical affairs. This also means a challenge for design methodology as the academic discipline that studies design processes and methods. The aim of the NATO ARW of which this book is the report was to bring together colleagues from different academic fields to discuss this increasing multidisciplinary in the relationship between design and sciences. This multidisciplinary made the conference a special event. At a certain moment one of the participants exclaimed: "This is not a traditional design methodology conference!" Throughout the conference it was evident that there was a need to develop a common language and understanding to enable the exchange of different perspectives on design and its relationship with science. The contributions that have been included in this book show these different perspectives: the philosophical, the historical, the engineering perspective and the practical designer's experience.

A critical overview of contemporary design and its place within the broader context of art history *A Companion to Contemporary Design since 1945* introduces readers to a collection of specially commissioned essays exploring the complex areas of design that emerged through the latter half of the twentieth century, design history, design methods, design studies and more recently, design thinking. The book delivers a thoughtful overview of all design disciplines and also strives to stimulate inter-disciplinary debate and examine unconsidered convergences among design applications in different fields. By offering a new perspective on design, the articles assembled here present a challenging account of the boundaries between design history and its cognate disciplines, especially art history. The volume comprises five sections—Time, Place, Space, Objects and Audiences—that discuss environments for design and how we interact with designed objects and spaces. Notable features include: 24 new essays reflecting the current state of design history and theory, and examining developments on a global basis Contributions by eminent scholars and practitioners from around the globe Enriched throughout with illustrations *A Companion to Contemporary Design since 1945* provides a new and thought-provoking revision of our conception and understanding of contemporary design that will be essential reading for students at both undergraduate and graduate levels as well as researchers and teachers working in design history, theory and practice, and in related fields.

In this book, leading scholars in architecture, design, history, and communications discuss the work of R. Buckminster Fuller in the context of the larger social and cultural patterns of the twentieth century.

The notion of ecology has become central to contemporary design discourse. This reflects contemporary concerns for our planet and a new understanding of the primary entanglement of the human species with the rest of the world. The use of the term 'ecology' with design tends to refer to how to integrate ecologies into design and cities and be understood in a biologically-scientific and technical sense. In practice, this scientific-technical knowledge tends to be only loosely employed. The notion of ecology is also often used metaphorically in relation to the social use of space and cities. This book argues that what it calls the 'biological' and 'social' senses of ecology are both important and require distinctly different types of knowledge and practice. It proposes that science needs to be taken much more seriously in 'biological ecologies', and that 'social ecologies' can now be understood non-metaphorically as assemblages.

Furthermore, this book argues that design practice itself can be understood much more rigorously, productively and relevantly if understood ecologically. The plural term 'ecologies design' refers to these three types of ecological design. This book is unique in bringing these three perspectives on ecological design together in one place. It is significant in proposing that a strong sense of ecologies design practice will only follow from the interconnection of these three types of

practice. Ecologies Design brings together leading international experts and relevant case studies in the form of edited research essays, case studies and project work. It provides an overarching critique of current ecologically-oriented approaches and offers evidence and exploration of emerging and effective methods, techniques and concepts. It will be of great interest to academics, professionals and students in the built environment disciplines.

You can use this book to design a house for yourself with your family; you can use it to work with your neighbors to improve your town and neighborhood; you can use it to design an office, or a workshop, or a public building. And you can use it to guide you in the actual process of construction. After a ten-year silence, Christopher Alexander and his colleagues at the Center for Environmental Structure are now publishing a major statement in the form of three books which will, in their words, "lay the basis for an entirely new approach to architecture, building and planning, which will we hope replace existing ideas and practices entirely." The three books are *The Timeless Way of Building*, *The Oregon Experiment*, and this book, *A Pattern Language*. At the core of these books is the idea that people should design for themselves their own houses, streets, and communities. This idea may be radical (it implies a radical transformation of the architectural profession) but it comes simply from the observation that most of the wonderful places of the world were not made by architects but by the people. At the core of the books, too, is the point that in designing their environments people always rely on certain "languages," which, like the languages we speak, allow them to articulate and communicate an infinite variety of designs within a forma system which gives them coherence. This book provides a language of this kind. It will enable a person to make a design for almost any kind of building, or any part of the built environment. "Patterns," the units of this language, are answers to design problems (How high should a window sill be? How many stories should a building have? How much space in a neighborhood should be devoted to grass and trees?). More than 250 of the patterns in this pattern language are given: each consists of a problem statement, a discussion of the problem with an illustration, and a solution. As the authors say in their introduction, many of the patterns are archetypal, so deeply rooted in the nature of things that it seems likely that they will be a part of human nature, and human action, as much in five hundred years as they are today.

Whatever 'ugliness' is, it remains a problematic category in architectural aesthetics - alternately vilified and appropriated, either to shock or to invert conventions of architecture. This book presents eighteen new essays which rethink ugliness in architecture - from brutalism to eclectic postmodern architectural productions - and together offer a diverse reappraisal of the history and theory of postmodern architecture and design. The essays address both broad theoretical questions on ugliness and postmodern aesthetics, as well as more specific analyses of significant architectural examples dating from the last decades of the twentieth century, addressing the relation between the aesthetic register of ugliness and aesthetic concepts such as brutalism, kitsch, the formless, ad hoc-ism, the monstrous, or the grotesque. The aim of this volume is not simply to document the history of a postmodern anti-aesthetic through case studies. Instead, it aims to shed light on an aesthetic problem that has been largely overlooked in the agenda of architectural theory, the question if and how ugliness can be of interest to architecture; or if and how architecture can make good use of ugliness.

Our built environments can affect us in many subtle ways. Simply sensing fresh air and natural light or seeing greenery and open space can uplift our mood and improve our wellbeing. But these healthy environments are increasingly difficult to achieve in practice. The vital collaboration between the many people involved in designing and producing buildings is often not achieved. Then there is the pressing need to reduce waste and pollution. Managing these demands is a challenge, especially in a traditional climate of short-term thinking. *Designing Buildings for People* explores how we can learn from buildings of the past, vernacular architecture and the natural world around us, while still harnessing the opportunities presented by technology, to think creatively, work collaboratively and exercise a transdisciplinary approach. The book features over 200 images, exhibiting the acclaimed work of internationally recognized and research-led designers from the fields of architecture, engineering and management. It is a prime reference work for professionals and students who want to build the sustainable buildings of the future.

Businesses and the HCI and Interaction Design communities have embraced design and design research. Design research as a field blends methodologies from several disciplines - sociology, engineering, software, philosophy, industrial design, HCI/interaction design -- so designers can learn from past successes and failure and don't have to reinvent the wheel for each new design (whether it's a digital product, a building, an airplane or furniture). They take into account form, function, and, ultimately, users. Many books exist in the research and academic realm for this field, but none create a usable bridge to design practice. Although business people are embracing design, they are not going to become designers. Design researchers need tools to apply their research in the real world. *Design Research through Practice* takes advanced design practice as its starting point, but enriches it to build a design process that can respond to both academic and practical problems. The aims of the book are to study three design research traditions that cover methodological directions in current leading research community. Taking you from the Lab, Field and to the Showroom, Ilpo Koskinen and his group of researchers show you successful traditions in design research that have been integrated into processes and products. Bridging the gap from design research to design practice, this is a must have for any designer.

- Gathers design research experts from traditional lab science, social science, art, industrial design, UX and HCI to lend tested practices and how they can be used in a variety of design projects
- Provides a multidisciplinary story of the whole design process, with proven and teachable techniques that can solve both academic and practical problems
- Presents key examples illustrating how research is applied and vignettes summarizing the key how-to details of specific projects

Does going green change the face of design or only its content? The first book to outline principles for the aesthetics of sustainable design, *The Shape of Green* argues that beauty is inherent to sustainability, for how things look and feel is as important as how they're made. In addition to examining what makes something attractive or emotionally pleasing, Hosey connects these questions with practical design challenges. Can the shape of a car make it more aerodynamic and more attractive at the same time? Could buildings be constructed of porous materials that simultaneously clean the air and soothe the skin? Can cities become verdant, productive landscapes instead of wastelands of concrete? Drawing from a wealth of scientific research, Hosey demonstrates that form and image can enhance conservation, comfort, and community at every scale of design, from products to buildings to cities. Fully embracing the principles of ecology could revolutionize every aspect of design, in substance

and in style. Aesthetic attraction isn't a superficial concern — it's an environmental imperative. Beauty could save the planet. How to design a world in which we rely less on stuff, and more on people. We're filling up the world with technology and devices, but we've lost sight of an important question: What is this stuff for? What value does it add to our lives? So asks author John Thackara in his new book, *In the Bubble: Designing for a Complex World*. These are tough questions for the pushers of technology to answer. Our economic system is centered on technology, so it would be no small matter if "tech" ceased to be an end-in-itself in our daily lives. Technology is not going to go away, but the time to discuss the end it will serve is before we deploy it, not after. We need to ask what purpose will be served by the broadband communications, smart materials, wearable computing, and connected appliances that we're unleashing upon the world. We need to ask what impact all this stuff will have on our daily lives. Who will look after it, and how? *In the Bubble* is about a world based less on stuff and more on people. Thackara describes a transformation that is taking place now—not in a remote science fiction future; it's not about, as he puts it, "the schlock of the new" but about radical innovation already emerging in daily life. We are regaining respect for what people can do that technology can't. *In the Bubble* describes services designed to help people carry out daily activities in new ways. Many of these services involve technology—ranging from body implants to wide-bodied jets. But objects and systems play a supporting role in a people-centered world. The design focus is on services, not things. And new principles—above all, lightness—inform the way these services are designed and used. At the heart of *In the Bubble* is a belief, informed by a wealth of real-world examples, that ethics and responsibility can inform design decisions without impeding social and technical innovation.

Constructive design research, is an exploratory endeavor building exemplars, arguments, and evidence. In this monograph, it is shown how acts of designing builds relevance and articulates knowledge in combination. Using design acts to build new knowledge, invite reframing of questions and new perceptions to build up. Respecting the emergence of new knowledge in the process invite change of cause and action. The authors' term for this change is drifting; designers drift; and they drift intentionally, knowing what they do. The book details how drifting is a methodic practice of its own and provides examples of how and where it happens. This volume explores how to do it effectively, and how it depends on the concept of knowledge. The authors identify four epistemic traditions in constructive design research. By introducing a Knowledge/Relevance model they clarify how design experiments create knowledge and what kinds of challenges and contributions designers face when drifting. Along the lines of experimental design work the authors identify five main ways in which constructive experiments drift. Only one of them borrows its practices from experimental science, others build on precedents including arts and craft practices. As the book reveals, constructive design research builds on a rich body of research that finds its origins in some of the most important intellectual movements of 20th century. This background further expands constructive design research from a scientific model towards a more welcoming understanding of research and knowledge. This monograph provides novel actionable models for steering and navigating processes of constructive design research. It helps skill the design researcher in participating in the general language games of research and helps the design researcher build research relations beyond the discipline.

How is it that American intellectuals, who had for 150 years worried about the deleterious effects of affluence, more recently began to emphasize pleasure, playfulness, and symbolic exchange as the essence of a vibrant consumer culture? The New York intellectuals of the 1930s rejected any serious or analytical discussion, let alone appreciation, of popular culture, which they viewed as morally questionable. Beginning in the 1950s, however, new perspectives emerged outside and within the United States that challenged this dominant thinking. *Consuming Pleasures* reveals how a group of writers shifted attention from condemnation to critical appreciation, critiqued cultural hierarchies and moralistic approaches, and explored the symbolic processes by which individuals and groups communicate. Historian Daniel Horowitz traces the emergence of these new perspectives through a series of intellectual biographies. With writers and readers from the United States at the center, the story begins in Western Europe in the early 1950s and ends in the early 1970s, when American intellectuals increasingly appreciated the rich inventiveness of popular culture. Drawing on sources both familiar and newly discovered, this transnational intellectual history plays familiar works off each other in fresh ways. Among those whose work is featured are Jürgen Habermas, Roland Barthes, Umberto Eco, Walter Benjamin, C. L. R. James, David Riesman and Marshall McLuhan, Richard Hoggart, members of London's Independent Group, Stuart Hall, Paddy Whannel, Tom Wolfe, Herbert Gans, Susan Sontag, Reyner Banham, and Robert Venturi and Denise Scott Brown.

An examination of the interplay between cultural context and artistic practice in the work of Robert Smithson. Robert Smithson (1938-1973) produced his best-known work during the 1960s and early 1970s, a period in which the boundaries of the art world and the objectives of art-making were questioned perhaps more consistently and thoroughly than any time before or since. In *Robert Smithson*, Ann Reynolds elucidates the complexity of Smithson's work and thought by placing them in their historical context, a context greatly enhanced by the vast archival materials that Smithson's widow, Nancy Holt, donated to the Archives of American Art in 1987. The archive provides Reynolds with the remnants of Smithson's working life—magazines, postcards from other artists, notebooks, and perhaps most important, his library—from which she reconstructs the physical and conceptual world that Smithson inhabited. Reynolds explores the relation of Smithson's art-making, thinking about art-making, writing, and interaction with other artists to the articulated ideology and discreet assumptions that determined the parameters of artistic practice of the time. A central focus of Reynolds's analysis is Smithson's fascination with the blind spots at the center of established ways of seeing and thinking about culture. For Smithson, New Jersey was such a blind spot, and he returned there again and again—alone and with fellow artists—to make art that, through its location alone, undermined assumptions about what and, more important, where, art should be. For those who guarded the integrity of the established art world, New Jersey was "elsewhere"; but for Smithson, "elsewheres" were the defining, if often forgotten, locations on the map of contemporary culture.

A collection of essays which offer glimpses of the city as it appears in films, novels, photographs, poems, architecture, essays, stagings and journals. The book moves from historical and concrete perspectives of New York, Paris, London and Chicago to the abstract city of the mind.

Written by a noted expert on and popular advocate of intelligent design, this book explores more than 60 of the toughest questions asked by experts and non-experts.

We are facing planet-sized challenges. Climate change and environmental crises can be pretty immobilizing, and we can fall into the temptation of thinking that we can't make a difference. But it's not just about what we can do on our own to make a difference. It's about what we can do when we mobilize together as a movement and combine for community action. Activist Ben Lowe calls the present generation to come together and care for the earth in a way that recent generations have not. Telling real-life stories of community organizing on college campuses across the nation, Lowe shows us that little things can make a big difference when we

all work together. We now have an opportunity to show the world what it looks like when Christians care for the planet God gave us, so that future generations can live sustainably. This is our moment. This is our issue. Come join the green revolution. With the coming flood of connected products, many UX and interaction designers are looking into hardware design, a discipline largely unfamiliar to them. If you're among those who want to blend digital and physical design concepts successfully, this practical book helps you explore seven long-standing principles of industrial design. Two present and former design directors at IDEO, the international design and innovation firm, use real-world examples to describe industrial designs that are sensorial, simple, enduring, playful, thoughtful, sustainable, and beautiful. You'll learn how to approach, frame, and evaluate your designs as they extend beyond the screen and into the physical world. Sensorial: create experiences that fully engage our human senses Simple: design simple products that provide overall clarity in relation to their purpose Enduring: build products that wear well and live on as classics Playful: use playful design to go beyond functionality and create emotional connections Thoughtful: observe people's struggles and anticipate their needs Sustainable: design products that reduce environmental impact Beautiful: elevate the experience of everyday products through beauty

Design, Nature, and Revolution Toward a Critical Ecology

Offering an overall insight into the French tradition of philosophy of technology, this volume is meant to make French-speaking contributions more accessible to the international philosophical community. The first section, "Negotiating a Cultural Heritage," presents a number of leading 20th century philosophical figures (from Bergson and Canguilhem to Simondon, Dagognet or Ellul) and intellectual movements (from Personalism to French Cybernetics and political ecology) that help shape philosophy of technology in the Francophone area, and feed into contemporary debates (ecology of technology, politics of technology, game studies). The second section, "Coining and Reconfiguring Technoscience," traces the genealogy of this controversial concept and discusses its meanings and relevance. A third section, "Revisiting Anthropological Categories," focuses on the relationships of technology with the natural and the human worlds from various perspectives that include anthropotechnology, Anthropocene, technological and vital norms and temporalities. The final section, "Innovating in Ethics, Design and Aesthetics," brings together contributions that draw on various French traditions to afford fresh insights on ethics of technology, philosophy of design, techno-aesthetics and digital studies. The contributions in this volume are vivid and rich in original approaches that can spur exchanges and debates with other philosophical traditions.

This smart, friendly, and well-designed volume makes the case for design as a tool to solve some of the world's biggest social problems. The book features more than 100 innovative, sustainable, need-based product designs that empower individuals, communities, and economies.

The history and controversial roots of the social design movement, explored through the life and work of its leading pioneer, Victor Papanek. In *Victor Papanek: Designer for the Real World*, Alison Clarke explores the social design movement through the life of its leading pioneer, the Austrian American designer, theorist, and activist Victor Papanek. Papanek's 1971 best seller, *Design for the Real World: Human Ecology and Social Change* has been translated into twenty-two languages and never fallen out of print. Its politics of social design, anti-corporatism, and environmental sustainability have found renewed pertinence in the twenty-first century and dominate the agendas of design schools today. Drawing extensively on previously unexplored archival sources, Clarke uncovers and contextualizes the movement's controversial origins and contradictions.

"Paul Betts first came to my attention through his pioneering article on the post-1945 Bauhaus myth as a joint German-American venture. This book is a landmark study of cultural continuities and ruptures, institutional realignments, and individual careers that introduces a breath of fresh air into a field of research long staled by received ideas. It demonstrates the rewards of approaching the years from 1933 to 1945 as a revealing window onto the subsequent history of West Germany."—Wolfgang Schivelbusch "The Authority of Everyday Objects is a small gem of the new cultural history. This is a work of striking originality and insight that fits the development of industrial design in postwar Germany into the country's broader social, cultural and political history, constructing an analytical narrative that carries from the Third Reich into the Cold War. It illuminates not merely cultural transformation but the wider social history of twentieth-century Germany."—Stanley G. Payne, author of *A History of Fascism, 1914-1945* "The Authority of Everyday Objects is a refreshing, innovative, and convincing approach to post-World War II Western consumer society. Design—as a weapon in Cold War competition and as a vehicle for German redemption by revitalizing Bauhaus traditions—is thoroughly researched and wonderfully presented in Paul Betts' book. This well-illustrated work convinces the reader that design was a part of *gluecklich Leben* ("lucky life") and *schoen wohnen* ("beautiful living"), and a factor in the politicization of material culture."—Ivan T. Berend, author of *Decades of Crisis: Central and Eastern Europe before World War II* and *History Derailed: Central and Eastern Europe in the Long Nineteenth Century*

A landmark text in design discourse for a world desperately in need of redesign--back in print What good is design? In a world facing social unrest, political tribalism, and impending ecological doom, Tomás Maldonado poses philosophical inquiries into the role design plays during a moment of crisis and analyzes what "design" might mean as an ever-enlarging compass beyond stylization of specific objects. He discusses how design is both influenced by and central to ecological crisis. Written as a kind of obituary to the Modern movement's wave of failed "concrete utopias," Maldonado combines philosophy, sociology, radical countercultural thought, and the ecological sciences into a polemic that recenters design in the human environment.

Repackaged with a new Afterword, this "valuable and entertaining" (New York Times Book Review) book explores how scientists are adapting nature's best ideas to solve tough 21st century problems Biomimicry is rapidly transforming life on earth. Biomimics study nature's most successful ideas over the past 3.5 million years, and adapt them for human use. The results are revolutionizing how materials are invented and how we compute, heal ourselves, repair the environment, and feed the world. Janine Benyus takes readers into the lab and in the field with maverick thinkers as they: discover miracle drugs by watching what chimps eat when they're sick; learn how to create by watching spiders weave fibers; harness energy by examining how a leaf converts sunlight into fuel in trillionths of a second; and many more examples. Composed of stories of vision and invention, personalities and pipe dreams, *Biomimicry* is must reading for anyone interested in the shape of our future.

The Culture of Nature in the History of Design confronts the dilemma caused by design's pertinent yet precarious position in environmental discourse through interdisciplinary conversations about the design of nature and the nature of design. Demonstrating that the deep entanglements of design and nature have a deeper and broader history than contemporary discourse on sustainable design and ecological design might imply, this book presents case studies ranging from the eighteenth to the twenty-first century and from Singapore to Mexico. It gathers scholarship on a broad range of fields/practices, from urban planning, landscape architecture, and architecture, to engineering design, industrial design, furniture design and graphic design. From adobe architecture to the atomic bomb, from the bonsai tree to Biosphere

2, from pesticides to photovoltaics, from rust to recycling – the culture of nature permeates the history of design. As an activity and a profession always operating in the borderlands between human and non-human environments, design has always been part of the environmental problem, whilst also being an indispensable part of the solution. The book ventures into domains as diverse as design theory, research, pedagogy, politics, activism, organizations, exhibitions, and fiction and trade literature to explore how design is constantly making and unmaking the environment and, conversely, how the environment is both making and unmaking design. This book will be of great interest to a range of scholarly fields, from design education and design history to environmental policy and environmental history.

First Published in 1991. Routledge is an imprint of Taylor & Francis, an informa company.

"In *The Responsive Environment*, Larry D. Busbea takes up this concept of environment as an object and method of design at the height of its aesthetic, technical, and discursive elaboration. Exploring novel models of environmental perception, patterning, and control as developed by Gregory Bateson, Edward T. Hall, Wolf Hilbertz, György Kepes, Marshall McLuhan, Nicholas Negroponte, Paolo Soleri, and others, he shows how living space was reimagined as a domain capable of modification through input from its newly sensitized inhabitants"--

Critical Design is becoming an increasingly influential discipline, affecting policy and practice in a range of fields. Matt Malpass's book is the first to introduce critical design as a field, providing a history of the discipline, outlining its key influences, theories and approaches, and explaining how critical design can work in practice through a range of contemporary examples. Critical Design moves away from traditional approaches that limit design's role to the production of profitable objects, focusing instead on a practice that is interrogative, discursive and experimental. Using a wide range of examples from contemporary practice, and drawing on interviews with key practitioners, Matt Malpass provides an introduction to critical design practice and a manifesto for how a radical and unorthodox practice might provide design answers in an age of austerity and ecological crisis.

How climate influenced the design strategies of modernist architects *Modern Architecture and Climate* explores how leading architects of the twentieth century incorporated climate-mediating strategies into their designs, and shows how regional approaches to climate adaptability were essential to the development of modern architecture. Focusing on the period surrounding World War II—before fossil-fuel powered air-conditioning became widely available—Daniel Barber brings to light a vibrant and dynamic architectural discussion involving design, materials, and shading systems as means of interior climate control. He looks at projects by well-known architects such as Richard Neutra, Le Corbusier, Lúcio Costa, Mies van der Rohe, and Skidmore, Owings, and Merrill, and the work of climate-focused architects such as MMM Roberto, Olgay and Olgay, and Cliff May. Drawing on the editorial projects of James Marston Fitch, Elizabeth Gordon, and others, he demonstrates how images and diagrams produced by architects helped conceptualize climate knowledge, alongside the work of meteorologists, physicists, engineers, and social scientists. Barber describes how this novel type of environmental media catalyzed new ways of thinking about climate and architectural design. Extensively illustrated with archival material, *Modern Architecture and Climate* provides global perspectives on modern architecture and its evolving relationship with a changing climate, showcasing designs from Latin America, Europe, the United States, the Middle East, and Africa. This timely and important book reconciles the cultural dynamism of architecture with the material realities of ever-increasing carbon emissions from the mechanical cooling systems of buildings, and offers a historical foundation for today's zero-carbon design.

Leading scholars historicize and theorize technology's role in architectural design Although the question of technics pervades the contemporary discipline of architecture, there are few critical analyses on the topic. *Design Technics* fills this gap, arguing that the technical dimension of design has often been flattened into the broader celebratory rhetoric of innovation. Bringing together leading scholars in architectural and design history, the volume's contributors situate these tools on a broader epistemological and chronological canvas. The essays here construct histories—some panoramic and others unfolding around a specific episode—of seven techniques regularly used by the designer in the architectural studio today: rendering, modeling, scanning, equipping, specifying, positioning, and repeating. Starting with observations about the epistemological changes that have unfolded in the discipline in recent decades but seeking to offer a more expansive meaning for technics, the volume casts new light on concepts such as form, experience, and image that have played central roles in historical architectural discourses. Among the questions addressed: How was the concept of form immanent in practices of scanning since the late nineteenth century? What was the historical relationship between rendering and experience in Enlightenment discourses? How did practices of specifying reconfigure the distinction between intellectual and manual labor? What kind of rationality is inherent in the designer's constant clicking of the mouse in front of her screen? In addressing these and other questions, this engaging and timely collection thereby proposes technics as a site for historical and philosophical reflection not only for those engaged in architectural design but also for any scholar working in the humanities today. Contributors: Lucia Allais, Edward Eigen, Orit Halpern, John Harwood, Matthew C. Hunter, and Michael Osman.

A manifesto for a radically different philosophy and practice of manufacture and environmentalism "Reduce, reuse, recycle" urge environmentalists; in other words, do more with less in order to minimize damage. But as this provocative, visionary book argues, this approach perpetuates a one-way, "cradle to grave" manufacturing model that dates to the Industrial Revolution and casts off as much as 90 percent of the materials it uses as waste, much of it toxic. Why not challenge the notion that human industry must inevitably damage the natural world? In fact, why not take nature itself as our model? A tree produces thousands of blossoms in order to create another tree, yet we do not consider its abundance wasteful but safe, beautiful, and highly effective; hence, "waste equals food" is the first principle the book sets forth. Products might be designed so that, after their useful life, they provide nourishment for something new—either as "biological nutrients" that safely re-enter the environment or as "technical nutrients" that circulate within closed-loop industrial cycles, without being "downcycled" into low-grade uses (as most "recyclables" now are). Elaborating their principles from experience (re)designing everything from carpeting to corporate campuses, William McDonough and Michael Braungart make an exciting and viable case for change.

This book stems from the seminal work of Robert Venturi and aims at re-projecting it in the current cultural debate by extending it to the scale of landscape and placing it in connection with representative issues. It brings out the transdisciplinary synthesis of a necessarily interdisciplinary approach to the theme, aimed at creating new models which are able to represent the complexity of a contradictory reality and to redefine the centrality of human dimension. As such, the volume gathers multiple experiences developed in different geographical areas, which come into connection with the role of representation. Composed of 43 chapters written by 81 authors from around the world, with an introduction by Jim Venturi and Cezar Nicolescu, the volume is divided into two parts, the first one more theoretical and the other one which showcases real-world applications, although there is never a total split between criticism and operational experimentation of research.

How new conceptions of human–environment interaction became central to design theories and practices in the 1970s At the end of the 1960s, new models of responsiveness between humans and their environments had a profound impact on theories and practices in architecture, design, art, technology, media, and the sciences. The resulting initiatives—design philosophies, art installations, architectural projects, exhibitions, publications, and symposia—sought to bring together insights from biology, systems theory, psychology, and anthropology with modernist legacies of total design. In *The Responsive Environment*, Larry D. Busbea takes up this concept of environment as an object and method of design at the height of its aesthetic, technical, and discursive elaboration. Exploring emerging paradigms of environmental perception, patterning, and control as developed by Gregory Bateson, Edward T. Hall, Wolf Hilbertz, György Kepes, Marshall McLuhan, Nicholas Negroponte, Paolo Soleri, and others, he shows how living space itself was reimagined as a domain capable of modification through input from its newly sensitized inhabitants. *The Responsive Environment* intercuts the development of new ideas about environmental awareness with case studies of specific architecture and design projects for responsive environments. Throughout, Busbea

