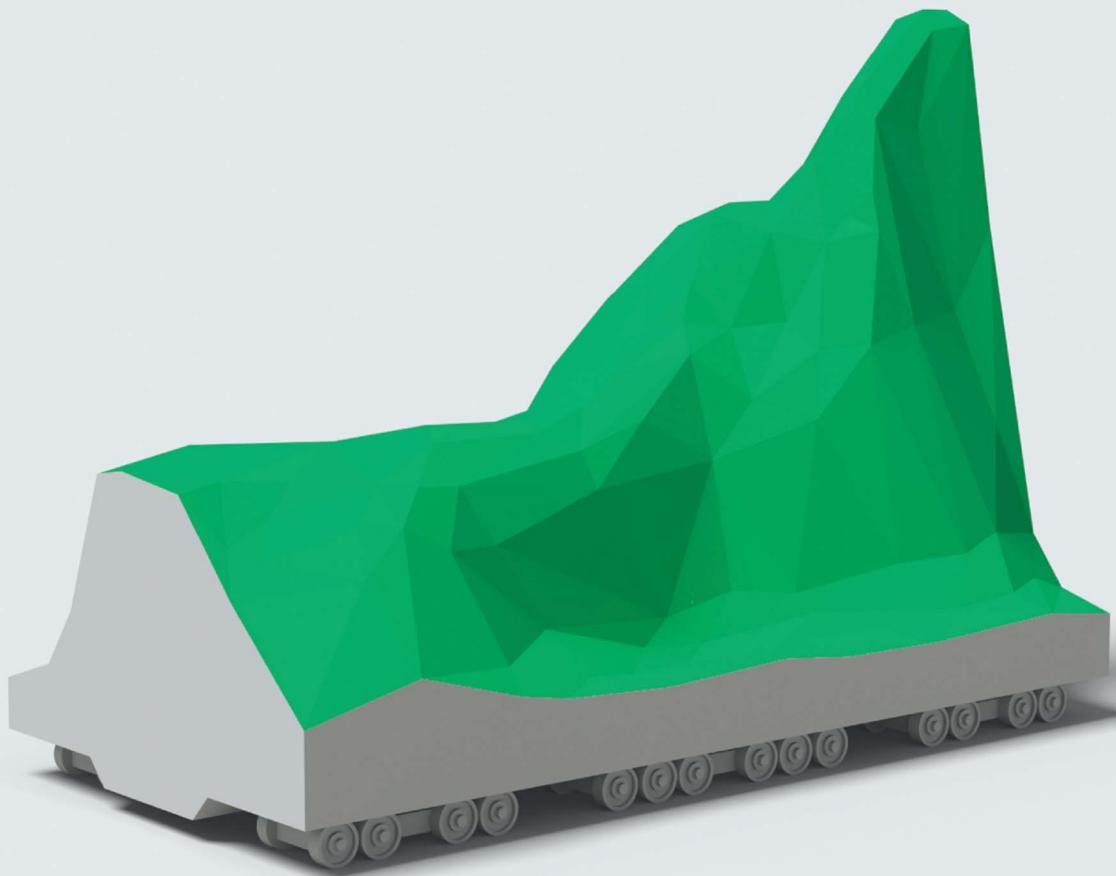


SPECULATIVE EVERYTHING

DESIGN, FICTION, AND SOCIAL DREAMING



ANTHONY DUNNE & FIONA RABY

SPECULATIVE EVERYTHING

SPECULATIVE EVERYTHING

DESIGN, FICTION,
AND SOCIAL DREAMING

ANTHONY DUNNE & FIONA RABY

THE MIT PRESS
CAMBRIDGE, MASSACHUSETTS
LONDON, ENGLAND

© 2013 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

MIT Press books may be purchased at special quantity discounts for business or sales promotional use. For information, please email special_sales@mitpress.mit.edu.

This book was set in Letter Text and Chlotz by the MIT Press. Art direction and typeface by Kellenberger-White. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Dunne, Anthony.

Speculative everything : design, fiction, and social dreaming /
by Anthony Dunne and Fiona Raby.

pages cm

Includes bibliographical references and index.

ISBN 978-0-262-01984-2 (hardcover : alk. paper)

1. Design—Philosophy. I. Raby, Fiona. II. Title.

NK1505.D865 2013

745.4—dc23

2013009801

10 9 8 7 6 5 4 3 2 1

CONTENTS

Preface	vi
Acknowledgments	viii
1 Beyond Radical Design?	1
2 A Map of Unreality	11
3 Design as Critique	33
4 Consuming Monsters: Big, Perfect, Infectious	47
5 A Methodological Playground: Fictional Worlds and Thought Experiments	69
6 Physical Fictions: Invitations to Make-Believe	89
7 Aesthetics of Unreality	101
8 Between Reality and the Impossible	139
9 Speculative Everything	159
Notes	190
Bibliography	204
Index	217

PREFACE

Speculative Everything began as a list we created a few years ago called *A/B*, a sort of manifesto. In it, we juxtaposed design as it is usually understood with the kind of design we found ourselves doing. *B* was not intended to replace *A* but to simply add another dimension, something to compare it to and facilitate discussion. Ideally, *C*, *D*, *E*, and many others would follow.

This book unpacks the *B* bit of the list, making connections between usually disparate ideas, locating them within an expanded notion of contemporary design practice, and establishing some historical links. It is not a straightforward survey, anthology of essays, or monograph but offers a very specific view of design based on several years of experimentation, teaching, and reflection. We use examples from our own practice, student and graduate work from the Royal College of Art, and other projects from fine art, design, architecture, cinema, and photography. In researching this book we also surveyed literature from futurology, cinematic and literary fiction, political theory, and the philosophy of technology.

The ideas in this book move from a general setting out of what conceptual design is, through its use as a critical medium for exploring the implications of new developments in science and technology, to the aesthetics of crafting speculative designs. It ends by zooming out to explore the idea of “speculative everything” and design as a catalyst for social dreaming.

Speculative Everything is an intentionally eclectic and idiosyncratic journey through an emerging cultural landscape of ideas, ideals, and approaches. We hope designers interested in doing more than making technology easy to use, sexy, and consumable will find this book enjoyable, stimulating and inspiring.

A

Affirmative
Problem solving
Provides answers
Design for production
Design as solution
In the service of industry
Fictional functions
For how the world is
Change the world to suit us
Science fiction
Futures
The “real” real
Narratives of production
Applications
Fun
Innovation
Concept design
Consumer
Makes us buy
Ergonomics
User-friendliness
Process

B

Critical
Problem finding
Asks questions
Design for debate
Design as medium
In the service of society
Functional fictions
For how the world could be
Change us to suit the world
Social fiction
Parallel worlds
The “unreal” real
Narratives of consumption
Implications
Humor
Provocation
Conceptual design
Citizen
Makes us think
Rhetoric
Ethics
Authorship

A/B, Dunne & Raby.

ACKNOWLEDGMENTS

The ideas in this book have taken shape over many years through conversations and exchanges with many people. We would like to thank the following in particular for their support and help throughout the development of this project.

Our teaching activities at the Royal College of Art (RCA) in London are a constant source of inspiration; we are privileged to work with supremely talented students whose projects never cease to challenge and push our own thinking. In Design Products, we would like to thank Platform 3, Durrell Bishop, Onkar Kular, Ron Arad, and Hilary French; in Architecture, ADS4, Gerrard O'Carroll and Nicola Koller; and more recently, the amazingly talented staff and students of the Design Interactions program, particularly James Auger, Noam Toran, Nina Pope, Tom Hulbert, David Muth, Tobie Kerridge, Elio Caccavale, David Benqué and Sascha Pohflepp; as well as a very long list of guests who have dropped by and generously shared their ideas and thoughts in lectures and critiques. We are extremely grateful to the RCA for being the sort of place where it is not only possible to develop work and ideas like this but it is also actively encouraged and supported.

We have always believed in the importance of discussing and developing ideas in a broader context than academia alone, and thank in particular Wendy March at Intel and Alex Taylor at Microsoft Research Cambridge for bringing an industry perspective to our research; Paul Freemont and Kirsten Jensen at Imperial College, London, for their support and encouragement in our explorations into synthetic biology and other areas of science; and the many people who have provided opportunities to share our thinking through talks, workshops, and conferences and to benefit from the challenges, questions, and discussions they have sparked. We are also thankful for the generosity and enthusiasm of the people and organizations who have commissioned and exhibited our work making it possible to engage with a wider public audience. In particular, Michael John Gorman at The Science Gallery; Jan Boelen at Z33; Constance Rubin and the Saint-Etienne International Design Biennial; James Peto and Ken Arnold at The Wellcome Trust; Deyan Sudjic, Nina Due, and Alex Newson at the Design Museum in London; and especially Paola Antonelli at the Museum of Modern Art in New York for her inspiring and passionate commitment to making more room in the world for design like this.

Over the last few years we have enjoyed a rich and ongoing exchange of ideas around interactions between design, fiction, science, technology, and

futures with a number of people we would like to thank: Bruce Sterling, Oron Catts, Jamer Hunt, David Crowley, Stuart Candy, and Alexandra Midal.

And of course, we are very grateful to Doug Sery, our editor at MIT Press, for taking on this project and his enthusiastic support and encouragement throughout its development. For the smooth and enjoyable process of putting everything together we'd like to thank the brilliant team at the MIT Press for being so patient and accommodating, especially Katie Helke Doshina for steering us through the production process, designer Erin Hasley, and Deborah Cantor-Adams for editing.

We're very grateful to everyone who provided images for the book, and to Elizabeth Glickfeld for her dedicated detective work and picture research as well as Marcia Caines and Akira Suzuki for local picture sourcing. Finally, we'd like to thank Kellenberger-White for their graphic design advice and designing a special typeface for this book.

I.

BEYOND RADICAL DESIGN?

Dreams are powerful. They are repositories of our desire. They animate the entertainment industry and drive consumption. They can blind people to reality and provide cover for political horror. But they can also inspire us to imagine that things could be radically different than they are today, and then believe we can progress toward that imaginary world.¹

It is hard to say what today's dreams are; it seems they have been downgraded to hopes—hope that we will not allow ourselves to become extinct, hope that we can feed the starving, hope that there will be room for us all on this tiny planet. There are no more visions. We don't know how to fix the planet and ensure our survival. We are just hopeful.

As Fredric Jameson famously remarked, it is now easier for us to imagine the end of the world than an alternative to capitalism. Yet alternatives are exactly what we need. We need to dream new dreams for the twenty-first century as those of the twentieth century rapidly fade. But what role can design play?

When people think of design, most believe it is about problem solving. Even the more expressive forms of design are about solving aesthetic problems. Faced with huge challenges such as overpopulation, water shortages, and climate change, designers feel an overpowering urge to work together to fix them, as though they can be broken down, quantified, and solved. Design's inherent optimism leaves no alternative but it is becoming clear that many of the challenges we face today are unfixable and that the only way to overcome them is by changing our values, beliefs, attitudes, and behavior. Although essential most of the time, design's inbuilt optimism can greatly complicate things, first, as a form of denial that the problems we face are more serious than they appear, and second, by channeling energy and resources into fiddling with the world out there rather than the ideas and attitudes inside our heads that shape the world out there.

Rather than giving up altogether, though, there are other possibilities for design: one is to use design as a means of speculating how things could be—speculative design. This form of design thrives on imagination and aims to open up new perspectives on what are sometimes called *wicked problems*, to create spaces for discussion and debate about alternative ways of being, and to inspire and encourage people's imaginations to flow freely. Design speculations can act as a catalyst for collectively redefining our relationship to reality.

PROBABLE/PLAUSIBLE/POSSIBLE/PREFERABLE

Being involved with science and technology and working with many technology companies, we regularly encounter thinking about futures, especially about "The Future." Usually it is concerned with predicting or forecasting the future, sometimes it is about new trends and identifying weak signals that can be extrapolated into the near future, but it is always about trying to pin the future down. This is something we are absolutely not interested in; when it comes to technology, future predictions have been proven wrong again and again. In our view, it is a pointless activity. What we are interested in, though, is the idea of possible futures and using them as tools to better understand the present and to discuss the kind of future people want, and,

of course, ones people do not want. They usually take the form of scenarios, often starting with a what-if question, and are intended to open up spaces of debate and discussion; therefore, they are by necessity provocative, intentionally simplified, and fictional. Their fictional nature requires viewers to suspend their disbelief and allow their imaginations to wander, to momentarily forget how things are now, and wonder about how things could be. We rarely develop scenarios that suggest how things *should* be because it becomes too didactic and even moralistic. For us futures are not a destination or something to be strived for but a medium to aid imaginative thought—to speculate with. Not just about the future but about today as well, and this is where they become critique, especially when they highlight limitations that can be removed and loosen, even just a bit, reality's grip on our imagination.

As all design to some extent is future oriented, we are very interested in positioning design speculation in relation to futurology, speculative culture including literature and cinema, fine art, and radical social science concerned with changing reality rather than simply describing it or maintaining it.² This space lies somewhere between reality and the impossible and to operate in it effectively, as a designer, requires new design roles, contexts, and methods. It relates to ideas about progress—change for the better but, of course, *better* means different things to different people.

To find inspiration for speculating through design we need to look beyond design to the methodological playgrounds of cinema, literature, science, ethics, politics, and art; to explore, hybridize, borrow, and embrace the many tools available for crafting not only things but also ideas—fictional worlds, cautionary tales, what-if scenarios, thought experiments, counterfactuals, *reductio ad absurdum* experiments, prefigurative futures, and so on.

In 2009, the futurologist Stuart Candy visited the Design Interactions program at the Royal College of Art and used a fascinating diagram in his presentation to illustrate different kinds of potential futures.³ It consisted of a number of cones fanning out from the present into the future. Each cone represented different levels of likelihood. We were very taken by this imperfect but helpful diagram and adapted it for our own purposes.

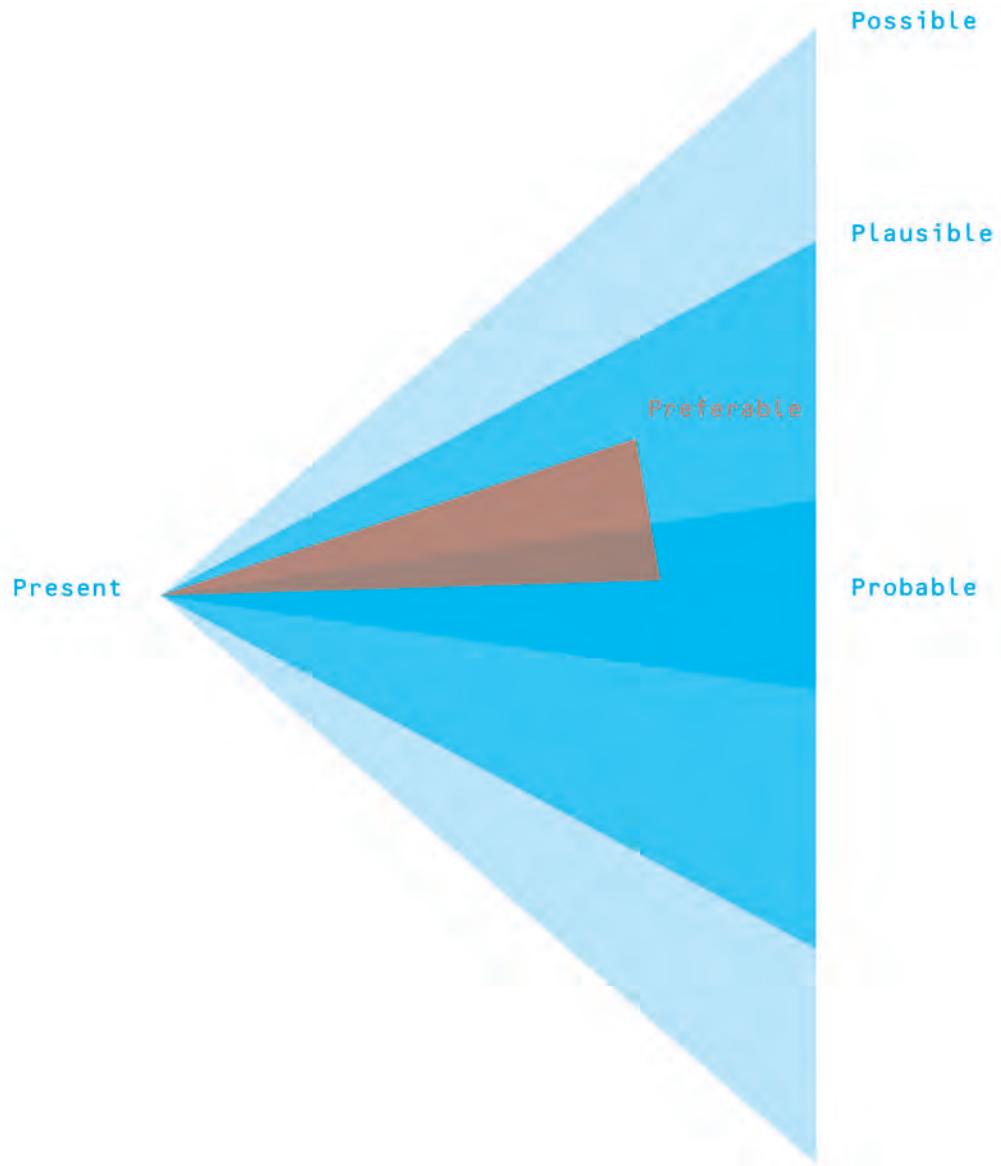
The first cone was the probable. This is where most designers operate. It describes what is likely to happen unless there is some extreme upheaval such as a financial crash, eco disaster, or war. Most design methods, processes, tools, acknowledged good practice, and even design education are oriented toward this space. How designs are evaluated is also closely linked to a thorough understanding of probable futures, although it is rarely expressed in those terms.

The next cone describes plausible futures. This is the space of scenario planning and foresight, the space of what could happen. In the 1970s companies such as Royal Dutch Shell developed techniques for modeling alternative near-future global situations to ensure that they would survive through a number of large-scale, global, economic, or political shifts. The space of plausible futures is not about prediction but exploring alternative economic and political futures to ensure an organization will be prepared for and thrive in a number of different futures.

The next cone is the possible. The skill here is making links between today's world and the suggested one. Michio Kaku's book *Physics of the Impossible*⁴ sets out three classes of impossibility, and even in the third, the most extreme—things that are not possible according to our current understanding of science—there are only two, perpetual motion and precognition, which, based on our current understanding of science, are impossible. All other changes—political, social, economic, and cultural—are not impossible but it can be difficult to imagine how we would get from here to there. In the scenarios we develop we believe, first, they should be scientifically possible, and second, there should be a path from where we are today to where we are in the scenario. A believable series of events that led to the new situation is necessary, even if entirely fictional. This allows viewers to relate the scenario to their own world and to use it as an aid for critical reflection. This is the space of speculative culture—writing, cinema, science fiction, social fiction, and so on. Although speculative, experts are often consulted when building these scenarios, as David Kirby points out in a fascinating chapter about distinctions between what he calls speculative scenarios and fantastic science in his book *Lab Coats in Hollywood*; the role of the expert is often, not to prevent the impossible but to make it acceptable.⁵

Beyond this lies the zone of fantasy, an area we have little interest in. Fantasy exists in its own world, with very few if any links to the world we live in. It is of course valuable, especially as a form of entertainment, but for us, it is too removed from how the world is. This is the space of fairy tales, goblins, superheroes, and space opera.

A final cone intersects the probable and plausible. This is the cone of preferable futures. Of course the idea of preferable is not so straightforward; what does *preferable* mean, for whom, and who decides? Currently, it is determined by government and industry, and although we play a role as consumers and voters, it is a limited one. In *Imaginary Futures*, Richard Barbrook explores futures as tools designed for organizing and



PPPP. Illustration by Dunne & Raby.

justifying the present in the interests of a powerful minority.⁶ But, assuming it is possible to create more socially constructive imaginary futures, could design help people participate more actively as citizen-consumers? And if so, how?

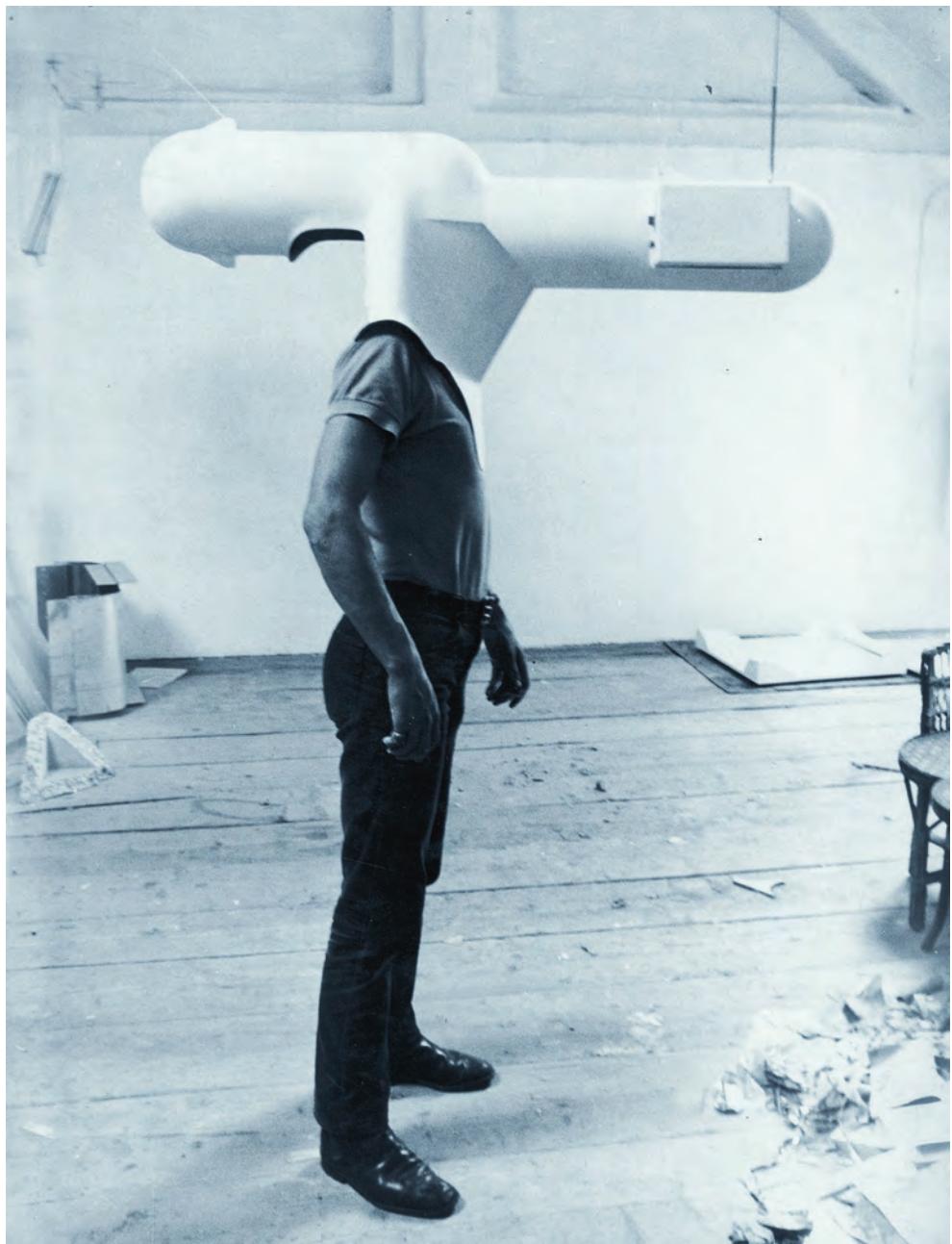
This is the bit we are interested in. Not in trying to predict the future but in using design to open up all sorts of possibilities that can be discussed, debated, and used to collectively define a preferable future for a given group of people: from companies, to cities, to societies. Designers should not define futures for everyone else but working with experts, including ethicists, political scientists, economists, and so on, generate futures that act as catalysts for public debate and discussion about the kinds of futures people really want. Design can give experts permission to let their imaginations flow freely, give material expression to the insights generated, ground these imaginings in everyday situations, and provide platforms for further collaborative speculation.

We believe that by speculating more, at all levels of society, and exploring alternative scenarios, reality will become more malleable and, although the future cannot be predicted, we can help set in place today factors that will increase the probability of more desirable futures happening. And equally, factors that may lead to undesirable futures can be spotted early on and addressed or at least limited.

BEYOND RADICAL DESIGN?

We have long been inspired by radical architecture and fine art that use speculation for critical and provocative purposes, particularly projects from the 1960s and 1970s by studios such as Archigram, Archizoom, Superstudio, Ant Farm, Haus-Rucker-Co, and Walter Pichler.⁷ But why is this so rare in design? During the Cold War Modern exhibition at the Victoria and Albert Museum in 2008 we were delighted to finally see so many projects from this period for real. The exuberant energy and visionary imagination of the projects in the final room of the exhibition were incredibly inspiring for us. We were left wondering how this spirit could be reintroduced to contemporary design and how design's boundaries could be extended beyond the strictly commercial to embrace the extreme, the imaginative, and the inspiring.

We believe several key changes have happened since the high point of radical design in the 1970s that make imaginative, social, and political speculation today more difficult and less likely. First, during the 1980s design became hyper-commercialized to such an extent that alternative roles for



Walter Pichler, *TV Helmet (Portable Living Room)*, 1967. Photograph by Georg Mladek. Photograph courtesy of Galerie Elisabeth and Klaus Thoman/Walter Pichler.

design were lost. Socially oriented designers such as Victor Papanek who were celebrated in the 1970s were no longer regarded as interesting; they were seen as out of sync with design's potential to generate wealth and to provide a layer of designer gloss to every aspect of our daily lives. There was some good in this—design was embraced by big business and entered the mainstream but usually only in the most superficial way. Design became fully integrated into the neoliberal model of capitalism that emerged during the 1980s, and all other possibilities for design were soon viewed as economically unviable and therefore irrelevant.

Second, with the fall of the Berlin Wall in 1989 and the end of the Cold War the possibility of other ways of being and alternative models for society collapsed as well. Market-led capitalism had won and reality instantly shrank, becoming one dimensional. There were no longer other social or political possibilities beyond capitalism for design to align itself with. Anything that did not fit was dismissed as fantasy, as unreal. At that moment, the “real” expanded and swallowed up whole continents of social imagination marginalizing as fantasy whatever was left. As Margaret Thatcher famously said, “There is no alternative.”

Third, society has become more atomized. As Zygmunt Bauman writes in *Liquid Modernity*,⁸ we have become a society of individuals. People work where work is available, travel to study, move about more, and live away from their families. There has been a gradual shift in the United Kingdom from government that looks after the most vulnerable in society to a small government that places more responsibility on individuals to manage their own lives. On the one hand this undoubtedly creates freedom and liberation for those who wish to create new enterprises and projects but it also minimizes the safety net and encourages everyone to look out for him- or herself. At the same time, the advent of the Internet has allowed people to connect with similar-minded people all over the world. As we channel energy into making new friends around the world we no longer need to care about our immediate neighbors. On a more positive note, with this reduction in top-down governing, there has been a corresponding shift away from the top-down mega-utopias dreamt up by an elite; today, we can strive for one million tiny utopias each dreamt up by a single person.

Fourth, the downgrading of dreams to hopes once it became clear that the dreams of the twentieth century were unsustainable, as the world's population has more than doubled in the last forty-five years to seven billion. The great modernist social dreams of the post-war era probably reached a peak in the 1970s when it started to become clear that the planet had limited

resources and we were using them up fast. As populations continued to grow at an exponential rate we would have to reconsider the consumer world set in motion during the 1950s. This feeling has become even more acute with the financial crash and the emergence since the new millennium of scientific data suggesting that the climate is warming up due to human activity. Now, a younger generation doesn't dream, it hopes; it hopes that we will survive, that there will be water for all, that we will be able to feed everyone, that we will not destroy ourselves.

But we are optimistic. Triggered by the financial crash of 2008, there has been a new wave of interest in thinking about alternatives to the current system. And although no new forms of capitalism have emerged yet, there is a growing desire for other ways of managing our economic lives and the relationship among state, market, citizen, and consumer. This dissatisfaction with existing models coupled with new forms of bottom-up democracy enhanced by social media make this a perfect time to revisit our social dreams and ideals and design's role in facilitating alternative visions rather than defining them. Of being a catalyst rather than a source of visions. It is impossible to continue with the methodology employed by the visionary designers of the 1960s and 1970s. We live in a very different world now but we can reconnect with that spirit and develop new methods appropriate for today's world and once again begin to dream.

But to do this, we need more pluralism in design, not of style but of ideology and values.