## UC San Diego UC San Diego Previously Published Works

**Title** Unfolding the political capacities of design

**Permalink** https://escholarship.org/uc/item/3g25790c

**ISBN** 9781472452252

**Authors** Domínguez Rubio, Fernando Fogué, Uriel

Publication Date

Peer reviewed

eScholarship.org

WHAT IS COSMOPOLITICAL DESIGN? DESIGN, NATURE AND THE BUILT ENVIRONMENT

# What Is Cosmopolitical Design? Design, Nature and the Built Environment

Edited by

Albena Yaneva University of Manchester, UK

and

Alejandro Zaera-Polo University of Princeton, USA



© Albena Yaneva and Alejandro Zaera-Polo 2015

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 or otherwise without the prior permission of the publisher.

Albena Yaneva and Alejandro Zaera-Polo have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as the editors of this work.

Published by Ashgate Publishing Limited Wey Court East Union Road Farnham Surrey, GU9 7PT England

Ashgate Publishing Company 110 Cherry Street Suite 3-1 Burlington, VT 05401-3818 USA

www.ashgate.com

## British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library.

#### Library of Congress Cataloging-in-Publication Data

What is cosmopolitical design? : design, nature and the built environment / [edited] by Albena Yaneva and Alejandro Zaera-Polo.

pages cm Includes bibliographical references and index. ISBN 978-1-4724-5225-2 (hbk) -- ISBN 978-1-4724-5226-9 (ebook) --ISBN 978-1-4724-5227-6 (epub) 1. Architecture--Human factors. 2. Human ecology. I. Yaneva, Albena, editor. II. Zaera, Alejandro, editor. NA2542.4.W49 2015 720.1'03--dc23

2015028324

ISBN: 9781472452252 (hbk) ISBN: 9781472452269 (ebk – PDF) ISBN: 9781472452276 (ebk – ePUB)



Printed in the United Kingdom by Henry Ling Limited, at the Dorset Press, Dorchester, DT1 1HD

## Contents

List of Illustrations		vii
About the Editors		xiii
About	the Contributors	xv
	uction: What is Cosmopolitical Design? a Yaneva	1
1	Waiting for Gaia: Composing the Common World through Arts and Politics Bruno Latour	21
2	Nonlinear Causality and Far From Equilibrium Dynamics <i>Manuel DeLanda</i>	33
3	Cosmopolitics: "To Become Within" – From Cosmos to Urban Life Dominique Boullier	39
4	An Interview with Andrés Jaque, Office for Political Innovation	57
5	Low Resolution for a High (Tech) Cosmogram: How to Handle the Large Hadron Collider <i>Sophie Houdart</i>	79
6	An Interview with Cristina Díaz Moreno and Efrén García Grinda, AMID.cero9	93
7	River Landscaping in Third Modernity: Remaking Cosmopolitics in the Anthropocene <i>Cordula Kropp</i>	113

#### vi WHAT IS COSMOPOLITICAL DESIGN?

8	An Interview with David Benjamin, The Living	131
9	Unfolding the Political Capacities of Design Fernando Domínguez Rubio and Uriel Fogué	143
10	An Interview with Eva Castro, Plasma Studio and Groundlab	161
11	Façades: Material Assemblages and Literal Embodiments Alejandro Zaera-Polo, Ignacio F. Solla and Jeffrey Anderson	175
12	An Interview with Philippe Rahm, Philippe Rahm architectes	213
13	Why Cosmopolitical Design is Performed? Seth Harrison and Ariane Lourie Harrison	223
Index		239

## **Unfolding the Political Capacities of Design**

Fernando Domínguez Rubio and Uriel Fogué

#### WHAT ARE THE POLITICAL CAPACITIES OF DESIGN?

The aim of this chapter is to explore some of the ways in which design can matter politically. More specifically, we want to explore the capacity of design to reorganize what counts as political in our everyday lives. The usual way to explore this question has been to focus on what we would like to call the "enfolding capacities" of design. That is, the capacity of design to inscribe, congeal, or hardwire different political programs and power relations into materials, spaces, and bodies. As a result of this focus, most discussions about the politics of design have typically oscillated between two extreme and seemingly irreconcilable groups: the apologists, who see design and its enfolding capacities as a powerful tool to engineer social, cultural, or economic change; and the critics, who see these enfolding capacities as an insidious "ruse of Power" through which different forms of coercion and domination are silently exerted.

In this chapter, we would like to explore an alternative way of thinking about how design can matter politically. To do so, we will focus on a different, and largely ignored, set of capacities, what we would like to call the "unfolding capacities" of design. By "unfolding," we refer here to the capacity of design to propose and generate new entities and relations. In shifting our attention to unfolding, we aim to open a new way of exploring the political valence of design, one that revolves around its ability, not to prescribe and hardwire politics into bodies, spaces, or material, but to broaden the range of bodies, spaces, and material that constitute the cosmos of the political. This shift, we argue, opens not only a new way of thinking about design but also, and much more importantly, a different way of practicing design as a form of cosmopolitics.

#### ENFOLDING THE POLITICAL

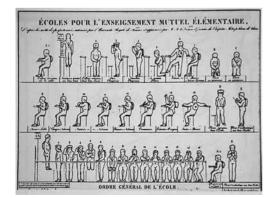
Design has always been an obscure object of political desire. Part of its attractiveness resides in its ability to transform the explicit into the implicit, the visible into the

invisible, the articulate into the inarticulate, or the external into the embodied. This enfolding capacity has been coveted by various political projects, which have employed design not simply as a rhetorical "tool" or a "means" for politics, but as a different way of doing politics, one in which power is not exerted *against* things, sites, or bodies, but can circulate *through* them. Design, thus conceived, emerges as a *sui generis* form of "material politics," that is, as a form of doing politics through things, which offers the possibility, or at least the promise, of rendering power tacit, invisible and therefore unchallengeable by controlling that vast "sub-political" world of physical and technological elements that silently shape our actions and thoughts, but which typically remain outside the sphere of formal politics and institutions (Domínguez Rubio and Fogué 2013, Marres and Lezaun 2011).

One of the best discussions on how the enfolding capacities of design can be used as a form of material politics is found in Michel Foucault's (1975) famous discussion of school chairs in seventeenth-century France. These chairs, Foucault argues, did not simply constitute the inert material background of the disciplinary institution; they were one of the critical micro-technologies through which it came into being. This was achieved, Foucault contends, by affording the possibility of *enfolding* a new logic of power into the body. Specifically, the chairs silently brought the body into the realm of power by setting the physical parameters of what the "right" position for it was, and by requiring a specific alignment between subjects and objects in a pre-defined behavioral space (Figure 9.1).

These chairs, Foucault argues, are just one instance of the various enfolding mechanisms that emerged at the end of seventeenth century to configure a new logic of power, one in which the body emerged for the first time not as something given, but as something that could be produced (*"se fabrique,"* 1975: 137) and transformed into a locus of power. Foucault maintains that the importance of these enfolding mechanisms resided not so much in what they did, nor even in what they aimed to do, but in *how* they did it. Unlike the gibbet, the chairs did not appear as obvious or self-evident instruments of power or disciplinary mechanisms. Instead, they operated at the level of the *"sub-political"* by silently creating the particular ergonomics through which a new form of power, disciplinary power, and a new *body politik* gradually came into being. Thanks to these enfolding mechanisms, power no longer needed its public representation to be effective; it could operate at the

9.1 School chairs as enfolding mechanisms of disciplinary power. Lithography of H. Lecomte, 1818.



© Ashgate Publishing Ltd

subterranean level of the sub-political, configuring a new microphysics of power, one in which power was able to reproduce itself beyond the checks and balances of formal politics. In so doing, Foucault concludes, these enfolding mechanisms slowly created a new political structure in which nobody could *see* the architecture of power, but in which everybody could be *subjected* to it.

Another great example of the political use of the enfolding capacities of design can be found in Bruno Latour's theory of "delegation." Unlike Foucault, however, Latour offers a largely celebratory discourse

of these capacities. Take, for instance, his famous discussion of speed bumps. According to Latour, speed-bumps emerge as a result of the impossibility of relying on drivers' individual will, or on the esoteric force of Durkheim's "collective consciousness," to control their speed when, for example, they approach a school. Speed bumps, argues Latour (1999: 186), solve this problem by enabling the "translation" of a collective moral demand, such as "slow down so as not to endanger students," into a self-interested demand, like "I should slow down and protect my car's suspension." Thus, like Foucault's school chairs, speed bumps operate as sub-political mechanisms that make it possible to silently enfold a specific version of "civility" and the "public good" into asphalt. Unlike Foucault, however, this enfolding process is seen in a largely positive light. It is thanks to the speed bumps, Latour claims, that civility can be enforced on the reckless individual. "The driver," he writes, "modifies his behavior through the mediation of the speed bump: he falls back from morality to force" (Latour 1999: 186). Latour therefore sees the enfolding capacities of design as constituting a critical and positive mechanism in the creation and reproduction of (civil) order, thanks to their ability to create "black boxes" in which various tasks and responsibilities can be delegated.

Although it is possible to find examples virtually anywhere of how the enfolding capacities of design have been used to articulate different political programs, it is perhaps in urban and architectural design that we can find the best examples. The development of the modern city, for instance, can be seen as a history of attempts to use design as way to enfold various political and moral projects into urban form. Such was the project of nineteenth-century reformers like Haussmann and Cerdà, who saw the design of a new urban form based on wide streets and sidewalks, leisure spaces, and parks, and a carefully concealed system of underground infrastructures, as a way of enfolding a new model of citizenship based on the liberal principles of security, morality and the free-circulation of persons and things (Joyce 2003). The same belief in the transformative power of these enfolding capacities has captivated urban planners and architects ever since. This it is evidenced in the Garden Cities movement in Britain and its attempt to develop a new type of urban form that could optimize relations between the individual and the community with Nature; in Le Corbusier's radical attempt to enfold the principles of rationality and productivity into every single scale of the city, as in his famous 1922 "Ville Contemporaine de 3 Millions d'Habitants;" or in the Soviet constructivist group OSA and its attempt to use architectural design to shape individual and collective behavior through the development of what they called "social condensers." And it is the same belief in the enfolding capacities of design that we find in the current obsession with "smart cities" – which, from one perspective seem to offer a version of Latour's blackboxed haven of delegation and distribution of agency, while from another they seem to embody Foucault's worst nightmare of a high-tech panoptican hell in which citizens are reduced to largely passive and infantile roles in a deproblematized cityscape (Sennett 2012).

These examples illustrate some of the ways in which the enfolding capacities of design have been conceptualized by theorists, and how practitioners have put

them to use. The arguments, as we have seen, can be divided into two camps. On the one hand we have the apologists à la Latour for whom these enfolding capacities offer an opportunity to enhance and extend our agential capacities by enabling us to delegate tasks and competencies in various networks. Design, in this view, emerges as a useful governance mechanism owing to its capacity to solve problems and reconcile opposing individual and collective interests by material means. On the other hand we have critics à la Foucault, for whom enfolding implies the risk of creating a massive sub-political world engineered by different forms of expert knowledge operating largely beyond the democratic control and accountability of citizens. Here design emerges as a potentially dangerous tool, due to its ability to produce and organize tacit and unchallengeable landscapes of power.

Our aim in this article is not to discuss the pros or cons of these positions, or to try to find a plausible justum medium between them. Instead, we would like to raise the question of whether both camps have not equally overestimated the enfolding capacities of design. Despite all their differences, it seems that both apologists and critics tend to take for granted the performativity of design by assuming, perhaps too readily, what design makes us do. In other words, both tend to create a "performative illusion" by focusing on the intentions and programs that organize design and by assuming their effects as some sort of automatic and inevitable result of the original design. This, needless to say, does not mean that the enfolding capacities of design are a mere illusion. We just need to look around us to find examples attesting to how design is capable of creating soft and tacit forms of power that influence many of our daily behaviors and decisions: from nudging us into buying certain products rather than others in the carefully designed aisles of the supermarket, to conditioning us to peeing into the urinal rather than on the floor, by placing target-flies on the former (Thaler and Sunstein 2008), and even to pushing us into becoming game addicts by silently playing with our unconscious behavioral inclinations (Schüll 2012).

These examples are powerful reminders of how important it is not to underestimate the enfolding capacities of design. And yet, we argue, it is equally important not to overestimate them. As Harvey Molotch (2003) reminds us, design objects are continually changing as people creatively re-appropriate them and as designers try to make sense of and adapt to these re-appropriations. Moreover, the line linking the programs enfolded in design objects and the kinds of results that these objects end up producing is rarely as straightforward as critics and apologists seem to imply. After all, Foucault himself probably sat in one of those chairs and was subjected to a myriad of carefully designed disciplinary mechanisms, and judging from his magnificent oeuvre, they did not achieve much in terms of successfully disciplining him. Drivers always seem to find ways to avoid and bypass speed bumps (and, with them, public morality). Likewise, not everybody ends up buying the same products in the supermarket, just us many men keep peeing outside the urinal in spite of the carefully placed flies; and only a few of us end up becoming addicts in the carefully designed spaces of the casino. Yet there is perhaps no better place to illustrate this performative illusion than urban and architectural planning. One need only think of the fate of those grandiloquent projects that sought to



clothes line in Le Corbusier's Chandigarh Capitol Complex. Photo taken c. 2010 by Vinayak Bharne © 2010 Artists Rights Society (ARS), New York/ADAGP, Paris/F.L.C. Below, abandoned headquarters of the Bulgarian communist party. Image courtesy of Thomas Jorion

use architecture to enfold different visions of a new society, like Le Corbusier's project to "modernize" Chandigarh - eventually turned into a domestic space and a flea-market - or the now derelict and abandoned buildings that constructivist architects built across the Soviet Union to bring forth a new type of person and a new society (Figure 9.2).

The tragic fate of these grandiloquent projects can be seen as an ironical commentary on the enfolding capacities of architectural design. Our intention, however, is not to use this irony to discredit the political capacities of design. Quite the opposite: we wish to take this irony seriously as the starting point of a different way of thinking and practicing design. The ironical fate of these projects, we argue, forces us to acknowledge *the limits* of the political capacities of design and to recognize the irreducible gap that separates the programs enfolded through design and the ways in which they are ultimately received, activated, transformed, or simply ignored. More specifically, we argue that accepting those limits, rather than trying to overcome them with new and "better" designs, opens up a different way of thinking about how design can matter politically, one not focused not on the capacity of design to *prescribe* codes of action and thought, but on its capacity to *propose* and open up the possibility of novel forms of action and thought. In order to explore such a possibility, let us now turn our attention to what we call the "unfolding" capacities of design.

#### UNFOLDING THE COSMOPOLITICAL

Before we can define what we mean by unfolding, it is perhaps useful to establish what we do not mean by it. First and foremost, we do not take unfolding to be the opposite of enfolding. In other words, by unfolding we do not simply mean the process of making visible or "unblackboxing" what was previously enfolded. Nor is unfolding a critique of enfolding. As defined here, unfolding is not to be understood as a "revelatory" or a "critical" process, but as a propositional one. Thus, one way of establishing the difference between enfolding and unfolding would be to say that while the former refers to the capacity of design to "inscribe" specific versions of the political in different bodies, entities, and sites, unfolding refers to the capacity of design to "propose" new kinds of bodies, entities, and sites as political. It is in this sense, we argue, that unfolding can be defined as a "cosmopolitical" activity in Isabelle Stengers's sense of the term (2005). In Stengers's use, cosmopolitics does not refer to that Kantian-Habermasian project of achieving a single and unified common world, but rather to the ongoing project of exploring and expanding the repertoire of possible common worlds. In other words, cosmopolitics is not about unifying the world, but about multiplying it. Design, we argue, can play a critical role in this process by unfolding and exploring hitherto unrealized possibilities to build the cosmos of the political. As we will now show, it can achieve this in at least three different ways: by "enlarging" what counts as political, by "speculating" about other possible forms of doing politics, and by "questioning" the political.

#### **Enlarging the Cosmos of the Political**

Let's start by exploring how the unfolding capacities of design can be employed to enlarge what counts as political. A good example can be found in the current development of domestic monitoring technologies, like smart energy meters. Broadly defined, the aim of these technologies is to render "energy" visible and © Ashgate Publishing Ltd



9.3 Device indicating domestic energy consumption and costs.

controllable. This is done through various visualization mechanisms, for example color-codes indicating the levels of consumption of individual domestic appliances, or software programs that make indicate real-time energy consumption and its associated economic costs (Figure 9.3).

One possible way of discussing the political valence of these devices would be to focus on their enfolding capacities, that is, on how (and if) these devices are capable of interacting with the unconscious levels of individual behavior to create a new sense of awareness about energy consumption practices that can eventually result in more sustainable consumption habits. Here, however, we would like to focus on a different set of capacities: specifically, the capacity of these devices to unfold domestic spaces and actions as possible sites of politics. They can do so in various ways. For example, these devices open up the possibility of blurring the distinction between public and private spaces or between political actions and everyday practices by showing how seemingly mundane and ineffectual quotidian actions can be integrated into other scales of action beyond the home. One of the ways in which they achieve this is by rendering an abstract force like energy into something visible, evident, and quantifiable, and thus susceptible of being acted upon (Gabrys 2014), Thanks to these devices, for example, it is possible to know how much energy is consumed in domestic activities, such as boiling water, cooking, or taking a shower, thus opening up the possibility of connecting these "private" activities with, larger political projects such as sustainable societies

or low-carbon economies. In so doing, these devices offer the possibility of seeing the house not as a self-contained and private space, but as a space that is embedded within a larger network of energy consumption and pollution. In other words, they open up the possibility of unfolding the hitherto private space of the home as a site where it is possible to make political decisions. We italicize possible because we do not wish to suggest that these technologies are capable per se of transforming domestic actions and spaces into political ones. In fact many, if not most, of these meters are not used to participate in any political project, but simply to improve monthly energy bills. However, and this is our point, they do make the former possible. In other words, they do unfold the possibility of turning the home into a genuine site for the articulation of different forms of political action and participation. This is precisely the possibility that has been explored by various environmental advocacy groups which have used these domestic energy meters to generate new forms of political association and action regarding sustainable energy consumption (Marres 2012) or to disrupt and challenge official discourses and statistics about pollution in urban environments (Calvillo 2014). What these examples show, therefore, is how seemingly mundane design devices like these domestic energy meters unfold the possibility of re-describing everyday actions and domestic spaces as political, and how in so doing they enlarge the cosmos of the political by extending the repertoire of possible sites of political action and forms of participation.

#### Speculating on the Cosmos of the Political

The second way in which design can unfold the cosmos of the political is through speculation. By speculation, we mean here the capacity of design to unfold an *otherwise* as a site of political action and imagination. One of the best examples of how speculation can unfold the cosmos of the political can be found in what has recently come to be known as "tactical urbanism" (Lydon and Bartman 2012). Broadly defined, tactical urbanism refers to those interventions that propose radical transfigurations of urban spaces through their temporal appropriation. Some examples of these tactics include "Open Streets" – an initiative to temporarily block off traffic in order to open streets for other uses – or "Park(ing) Day" – which proposes the temporary appropriation of parking spaces and their transformation into park-like spaces (Figure 9.4).

The political valence of these interventions resides in their capacity not to enfold a new permanent program in these streets, but to speculate with a given public space, like a street, and open it up to the possibility of an unsuspected otherwise. Another excellent example of the political capacities of these speculative tactics can be found in "El Campo de la Cebada" in Madrid. "El Campo" emerged in 2010 when an architectural collective, Zuloark, joined forces with other activists and neighbors to appropriate one of the many derelict spaces left behind when the Spanish construction bubble burst. Their aim was to transform this abandoned space into a political and cultural space for the neighborhood. However, rather than trying to inscribe a specific definition or program into the square, they chose to create an under-defined space that could be unfolded in



different ways. To make this possible, the square was furnished with a set of open-source, hand-made, and mobile urban furniture that enabled multiple possibilities and configurations. So far "El Campo" has been unfolded as an educational venue hosting free public seminars and workshops; as an open-air summer university; as a political site hosting neighborhood associations and assemblies; as a sports facility hosting basketball and football games; as an urban garden; as a cultural facility hosting music concerts, theatre, film festivals, and even a weekly "salsadrome;" and, of course, as a public square where neighbors can socialize or just laze about (Figure 9.5).

As in the case of tactical urbanism, the political valence of "El Campo" resides not in having transformed a hitherto derelict urban space into a new thing – a square, a theatre, or a basketball court – but in having created a perennially undefined and unstable space that can endlessly be explored and re-imaged. In other words, the political valence of "El Campo" lies in the fact that its identity is never fixed or stabilized; it remains forever "in beta" as a space of possibilities (Corsín Jiménez 2013). What "El Campo" is, or what it can become, is not something that can be defined beforehand. This is an open-ended question that is continually explored through each new unfolding. In this sense, "El Campo" emerges as a powerful urban machine, a city-making machine in which it is possible to explore, imagine, and experiment with other ways of being in the city, other forms of building urban communities, other forms of creating material and emotional attachments, and also other forms of political participation.

Another powerful example of the political capacities of these speculative tactics can be found in the "occupy" movements that have spread across the world since 2011. In spite of their different histories and trajectories, all of these movements have attempted to appropriate public squares that were enfolded, or were about to be enfolded (for example Taskim in Istanbul), in hegemonic political and economic projects. The occupations transformed these squares not only into "political sites," but also, and much more importantly, into sites of "political speculation," that is, sites on which it became possible to think, explore and test *other* possible forms of politics. Take, for example, the case of the "Acampada Sol" in Madrid in May 2012, which went on to win the European Public Design Competition in 2012.

During its short life the "Acampada Sol" grew from just a few tents to a massive object of architectural design made of disposable and makeshift materials like plastics, cardboards, beach chairs, and picnic tables. One of the most interesting

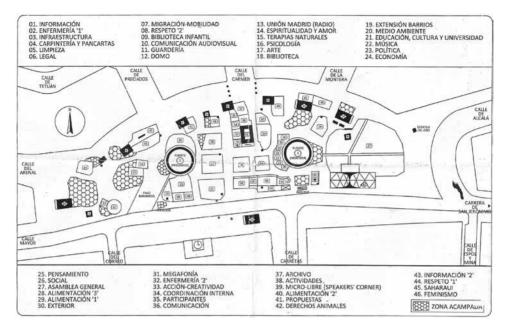
© Ashgate Publishing Ltd

9.4 Left, "Open Streets," street unfolded as yoga studio by Bradley P Johnson. Right, "Parking Day," street unfolded as park, Art Monaco Portland via, my.parkingday.org

#### 152 WHAT IS COSMOPOLITICAL DESIGN?



9.5 "El Campo de la Cebada" and its multiple unfoldings. Image courtesy of Zuloark. things about the Acampada as an object of architectural design is that its growth did not follow a pre-ordained design or vision. The Acampada was an open-ended design object that grew organically as new ideas and possibilities emerged and were discussed and tested in the different committees and working groups. In just three weeks, the square was furnished with a library, a nursery, community gardens, a radio, an internet hub, and a myriad of "committees" and working groups on themes like infrastructures, education, art, psychology, economy, and so on, in which proposals were drafted and then presented and discussed in an  $\[mathbb{C}\]$  Ashgate Publishing Ltd





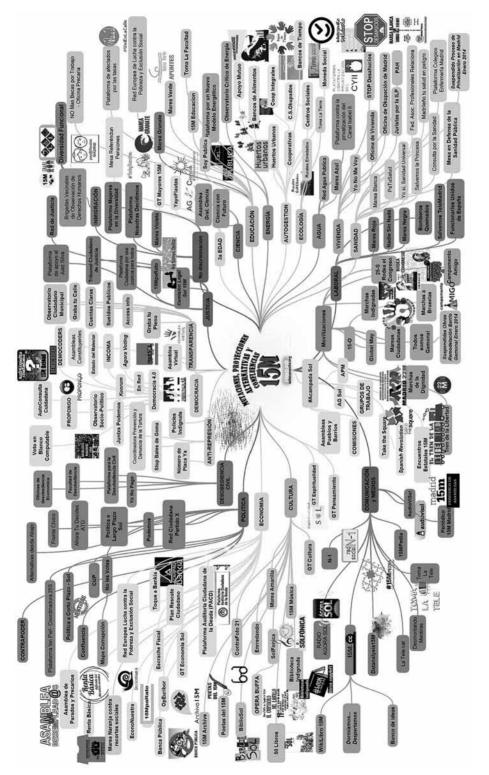


9.6 Map of "Acampada Sol" during the third and final week of its life. Image courtesy of Miguel de Guzmán.

open-air general assembly acting as a political agora. Crucially, the aim of these makeshift architectures was not to materialize previous ideas or plans, but to create structures that would "activate thinking" (Stengers 2005: 1001). In other words, the aim was to transform the square into a lively life-size political laboratory, into a site where it was possible to speculate about the potentialities (and limits) of different political vocabularies and modes of political participation and organization. Over those three weeks the assemblies, committees, and working groups transformed the utterly banal Sol Square into a "collective machine for thinking" in which it became possible to experiment with and test miniaturized forms of direct democracy, forms of collective discussion and decision-making, and to examine broader questions about democratic politics such as: Is it possible to re-imagine forms of democratic participation and decision-making outside of current institutional structures? What kinds of physical, technological, and human means and infrastructure would be required to articulate such forms of democratic politics? What are the possibilities and limits of such endeavors?

For three brief weeks, the "Acampada Sol," along with other similar Acampadas that mushroomed across the country, transformed ordinary public squares into the epicenter of Spanish politics. They managed to short-circuit the public sphere with questions that had previously been outside the political debate and discussion. Three years later, however, there is no trace left of these Acampadas in the squares, which have returned to their old reality as banal sites of passage. Yet this should not deceive us into thinking that the Acampadas were ineffective devices. They remain one of most powerful transformative forces in contemporary Spanish politics. Their importance resided not in the makeshift physical infrastructures that were built in the squares, but in the kinds of possibilities that those infrastructures opened up. The Acampadas unfolded and activated the possibility of a different political cosmology, one based on a new political vocabulary and a new repertoire of political practices and forms of association. A great deal of political activity in Spain over the last three years has revolved around exploring and realizing the possibilities that were unfolded in the squares. As a result of this ongoing exploration, Spanish society has witnessed a radical re-articulation of its civil society, expressed, for example: in the creation of a massive web of civic associations and movements emerging directly out of the working groups created in the Acampadas (Figure 9.7); in the emergence of a new cycle of political mobilizations and demonstrations based on new political subjectivities and alliances, like the so-called "sectorial tides," built around the Acampadas; and in the creation of new political parties which incorporate many of the political demands and methods of participation and decision-making elaborated in the squares (Martínez López and Domingo San Juan 2014).

With the examples in this section we have sought to explore some of the ways in which design, and architectural design in particular, can matter politically. For a long time the political role of architectural design has been understood almost exclusively in terms of its capacity to make power "durable," thanks to the capacity of architecture to translate certain visions of power into physical realities (Mukerji 1997). The architectural devices we have seen in this section offer a



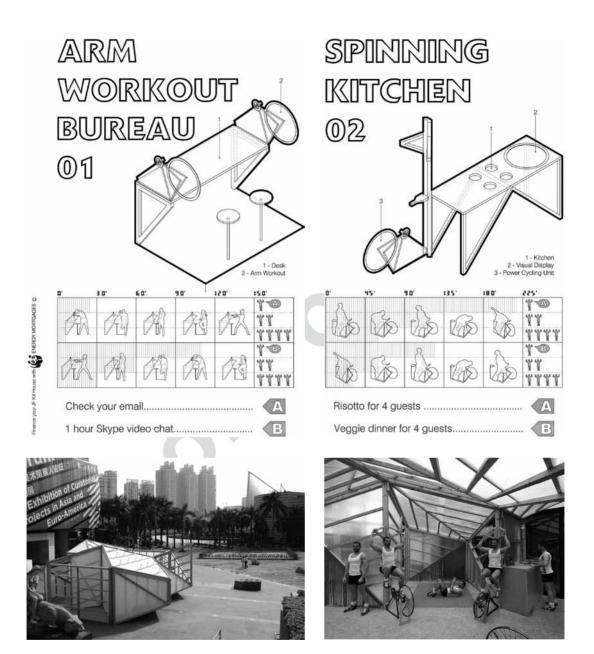


different possibility. The examples of tactical urbanism, "El Campo de la Cebada," or "Acampada Sol" are ephemeral interventions which are not intended to last. Yet their transience does not make them any less powerful or important, since their power does not reside in their ability to make certain visions of orde<del>r,p</del>hysical or eternal, but in their capacity to make them *thinkable*. In other words, their power lies in their ability to activate and unfold *the possibility of an otherwise* for political action and imagination.

#### Questioning the Cosmos of the Political

In this last section we want to explore how design can unfold the cosmos of the political by questioning it. More specifically, we want to explore the political capacities of design when it is used not as a tool to provide answers, but as a way to generate questions. We will focus on a particular example: the Jane Fonda Kit House designed by the Spanish architectural studio Elii (www.elii.es). The "JF-Kit House" (JF-Kit House henceforth) was designed as a prototype for a "house of the future." It was initially built in 2012 in Brussels for the exhibition Paysage in Progress. JF-Kit House (Domestic fitness. Tone up your body up and down!!) that took place at the Centre International pour la Ville, l'Architecture et le Paysage and was later rebuilt in Guangzhou for the 2013 Asian Art Curators' Forum, held at the Guangdong Museum of Art. Within the architectural tradition, "houses of the future" have traditionally been designed to enfold desirable models and narratives of the future, such as Le Corbusier's, L'Espiritu Nouveau, 1922, Jacobsen's, House of the Future, 1929, and Alison+Peter Smithson's, House of the Future, 1955–6. Unlike these "houses of the future," the "JF-Kit House" does not try to anticipate what the future holds, nor does it attempt to provide technical solutions for future problems. It takes a different route inspired by some of the "houses of the future" developed in comedy or science fiction films, such as the one featured in Buster Keaton's 1922 film Electric House. In this tradition, "houses of the future" are not used to solve problems, but instead serve as ironical models that help to radicalize and test the potentiality and limits of technological promises and utopias. Following this route, the "JF-Kit House" has been designed to test hegemonic and taken-for-granted models of sustainability and green architecture. The House does not attempt to offer a desirable or even plausible model; it simply aims to propose a polemic model of the future that can be used to question existing discourses and imagery about sustainability. It does so by exacerbating a current model of sustainability that seeks to mobilize bodies and transform them into active agents in the process of energy production. Taking this idea to an extreme, the "JF-Kit House" offers a fully functioning and replicable off-the-grid house that can be attached as an add-on to any building.

The House proposes a radical future scenario of sustainability in which citizens have to meet *all* of their domestic energy requirements with their own physical activities. Thus, in the "JF-Kit House" things like turning a light on, watching TV, checking your email, or cooking, all require different degrees of physical activity, which the house has systematized in the form of exercise tables that transform



domestic life into a set of choreographies of physical exercises to be performed individually or collectively (Figure 9.8). This new choreography requires a radical reevaluation and reformulation of domestic space. For example, since cooking a dish of pasta or doing the laundry require a considerable amount of energy, the traditional living room needs to be redesigned to make domestic life and energygenerating workouts compatible.

By taking the idea of energy-efficiency to the extreme, the "JF-Kit House" aims to produce a real-life domestic model to explore some of the elements neglected in

9.8 Left, installation of the "JF-Kit House," Guangzhou, China. Right, exercise tables for checking your email, talking over Skype, or cooking. © Uriel Fogué and Elii.

current discussions on sustainability and green architecture. Specifically, the house aims to engage with those approaches that have conceptualized sustainability as a purely expert and technological problem that will eventually be solved with the design of more efficient devices and architectures (Guy and Moore 2005). It is intended to reveal that sustainability also needs be understood as a cultural and political problem that calls for an open debate on the new kinds of domestic spaces, practices, and ways of cohabitation that these sustainable futures would require to be realized. One of the ways in which the House does this is by offering an ironical model of citizenship for future sustainable societies: the "Jane Fonda model of citizenship," which defines the ideal citizen as an individual who can satisfy all her domestic energy needs through her own physical exercise. Through the radicalization of this model, the "JF-Kit House" aims to open a debate about the kind of bodies and practices that are required to participate and achieve the imagined sustainable societies. Specifically, it asks: What kinds of bodies and new practices are imagined to fulfill the promises of these sustainable futures? What kinds of infrastructures are required to produce those bodies and practices? What kinds of transformation of domestic spaces and rituals do these sustainable models demand? Which bodies and practices are excluded from participating in those sustainable futures and their promises? And how can design bring together different entities and actors?

The "JF-Kit House" raises all these questions but does not attempt to answer them. In other words, it does not aim to be a "black box" in the usual techno-scientific sense. It does not aspire to be a device to solve problems through technical and expert knowledge, as did previous "houses of the future," Foucault's school chairs or Latour's speed bumps. Rather, the "JF-Kit House" aims to be a "black box" in the theatrical sense of the term, which is to say that it aims to be a space in which it is possible to *stage* problems, to render them evident and public. In this sense, it does not attempt to use technology and architecture to "solve" the problem of sustainability; rather, it uses technology and architecture to unfold sustainability as a political problem. The political value of the "JF-Kit House," therefore, does not reside in its capacity to offer a model of "sustainable" ways of living together which can bring some sort of cosmopolitical pax romana. Instead, its political value lies in its ability to unfold a fictional scenario that operates as a polemic playfield in which sustainability emerges not as a technical problem requiring a technical solution, but as political problem requiring a new system of cohabitation, a new cosmopolitical regime which requires the production not only of new technologies but also of new bodies, a new set of cultural practices, and a new set of connections and attachments between all these elements.

The "JF-Kit House" can be seen as an example of how architectural design is not just about constructing buildings, but can also be about constructing questions and controversies. The House seeks to create a critical context by designing a controversial battlefield in which it is possible to stage, test, and interrogate the conflicts and interests of the different agents participating in the creation of these sustainable futures. In this sense, it offers a valuable example of how the role of design is not just to provide answers to political questions, but also to work as a way to generate questions that have to be resolved politically.

#### TO ENFOLD OR TO UNFOLD? THAT IS THE QUESTION

The aim of this short chapter has been to discuss the political capacities of design. By talking about the political *capacities* of design, rather than the usual "*politics of* design," we have aimed to highlight the fact that design does not have *a* single politics, but is capable of articulating and generating different political logics and forms. Here, we have explored two sets of capacities, which by no means need to be the only ones. First, we have explored what we have called "the enfolding capacities" of design, which, we have argued, have unduly dominated the debate about politics and design. We say unduly, not because these capacities are unimportant but because, as we have shown, they are not the only way in which design is capable of working politically. Unfolding, we have argued, offers a different and largely unexplored set of political capacities.

Drawing a contrast between enfolding and unfolding has enabled us to map out some of the different ways in which design can operate politically. While enfolding enables design to work as a prescriptive mechanism, unfolding allows it to operate as a propositional mechanism. Moreover, while enfolding enables design to produce answers to political problems, unfolding transform design into a mechanism to generate political questions and problems. And while enfolding enables design to work at the level of the sub-political by making it possible to inscribe political codes into things, sites, and bodies, unfolding allows it to work at the level of the cosmopolitical by making it possible to extend, interrogate and speculate about the kinds of things, sites, and bodies that constitute the cosmos of the political. The question for us, therefore, is not so much which of these capacities are better or preferable, but which ones are put to use and how they come to matter politically. To enfold or to unfold? That *is* the question.

#### REFERENCES

Calvillo, N. 2014. Sensing Aeropolis. Escuela Tecnica Superior de Arquitectura de Madrid.

- Corsín Jiménez, A. 2013. Introduction: The prototype More than many and less than one. *Journal of Cultural Economy*, December, 1–18. DOI:10.1080/17530350.2013.858059.
- Domínguez Rubio, F. and Fogué, U. 2013. Technifying public space and publicizing infrastructures: Exploring new urban political ecologies through the square of General Vara Del Rey. *International Journal of Urban and Regional Research*, 37(3), 1035–52.
- Foucault, M. 1975. *Surveiller et Punir: Naissance de La Prison*. Bibliothèque Des Histoires. Paris: Gallimard.
- Gabrys, J. 2014. A Cosmopolitics of Energy: Diverging Materialities and Hesitating Practices. *Environment and Planning A.* Available at: http://www.esrc.ac.uk/my-esrc/grants/RES-628-25-0043/read.
- Guy, S. and Moore, A. (eds) 2005. Sustainable Architectures: Cultures and Natures in Europe and North America. New York: Spon Press.
- Joyce, P. 2003. *The Rule of Freedom: Liberalism and the Modern City*. London and New York: Verso.
- © Ashgate Publishing Ltd

#### 160 WHAT IS COSMOPOLITICAL DESIGN?

- Latour, B. 1999. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Lydon, M. and Bartman, D. (eds) 2012. *Tactical Urbanism*, 2. Available at: http://www.cnu. org/sites/www.cnu.org/files/tacticalurbanismvol2final.pdf.
- Marres, N. 2012. *Material Participation: Technology, the Environment and Everyday Publics*. Basingstoke: Palgrave Macmillan.
- Marres, N. and Lezaun, J. 2011. Materials and devices of the public: An introduction. *Economy and Society*, 40(4), 489–509. DOI:10.1080/03085147.2011.602293.
- Martinez López, M. and Domingo San Juan, E. 2014. Social and Political Impacts of the 15M in Spain. Available at: http://www.miguelangelmartinez.net/IMG/pdf/M15\_impacts\_v3\_0\_April\_2014.pdf
- Molotch, H. 2003. Where Stuff Comes From : How Toasters, Toilets, Cars, Computers, and Many Others Things Come to Be as They Are. New York: Routledge.
- Mukerji, C. 1997. *Territorial Ambitions and the Gardens of Versailles*. Cambridge: Cambridge University Press.
- Schüll, N.D. 2012. Addiction by Design: Machine Gambling in Las Vegas. Princeton, NJ: Princeton University Press.
- Sennett, R. 2012. The Stupefying Smart City. Available at: http://lsecities.net/media/objects/ articles/the-stupefying-smart-city/en-gb/.
- Stengers, I. 2005. The cosmopolitical proposal, in *Making Things Public*, edited by B. Latour and P. Weibel. Cambridge, MA: MIT Press, 994–1003.
- Thaler, R. and Sunstein, C. 2008. *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.