# POLITECNICO DI TORINO Repository ISTITUZIONALE

Shaping the uncertainty. Revealing implicitness in ordinary practices

Original

Shaping the uncertainty. Revealing implicitness in ordinary practices / Berta, Mauro - In: Watersheds. A Narrative of Urban Recycle. Guangzhou, Hong Kong, Torino, Venezia / Armando A., Bonino M., Frassoldati F., Federighi V., (Eds.). - STAMPA. - Hong Kong : Sandu Publishing Itd., 2015. - ISBN 9789881358349. - pp. 56-69

Availability: This version is available at: 11583/2585585 since: 2016-10-27T13:17:53Z

*Publisher:* Sandu Publishing Itd.

Published DOI:

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

# 

ALESSANDRO ARMANDO MICHELE BONINO FRANCESCA FRASSOLDATI curated by VALERIA FEDERIGHI



Watersheds. Narrative of urban recycle / Alessandro Armando, Michele Bonino, Francesca Frassoldati with contributions by: Antonio De Rossi, Giovanni Durbiano, Mauro Berta, Jiang Feng, Mattia Giusiano, Valeria Federighi Design and production: Valeria Federighi

©2015 Selection and editorial matter, Alessandro Armando, Michele Bonino, Francesca Frassoldati:

individual chapters, the contributors: photos pp. 108–123 and 145–147, Luca Casonato: photos pp. 142–143, Chen Guanhong: photos pp. 153–155, Alessandro Carboni.

Whereas not otherwise specified, illustrations and graphic materials are the original production of Watersheds.

Illustrations from page 61 to page 67 are copyright free by international law. Every effort has been made to trace all copyrights holders, but if any have been inadvertently overlooked the publishers will be pleased to include any necessary credits in any subsequent reprint.

This publication was made possible through support provided by: - Politecnico di Torino, Department of International Affairs, Polito Research Center at SCUT

- MIUR - Italian Ministry of University and Research, programs of relevant national interest (PRIN) 2011: *RE-CYCLE Italy. Nuovi cicli di vita per architetture e infrastrutture della città e del paesaggio* 

First published in 2015 by Sandu Publishing Co., Limited info@sandupublishing.com www.sandupublishing.com

ISBN: 978-988-13583-4-9

All rights reserved. Except for the quotation of short passages for the purpose of criticism and review, no part of this publication may be reprinted, stored in a retrieval system, reproduced, or utilized, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

Printed and bound in China

A Narrative of Urban Recycle Guangzhou Hong Kong Torino Venezia



| THE LABORATORY  | 006 |
|---|-----|
| SHARING KNOWLEDGE, BETWEEN STORYTELLING AND PROCESSES<br>Michele Bonino                         | 008 |
| PROJECT AND ARCHITECTURE BETWEEN DESKS AND COURTHOUSES<br>Antonio De Rossi, Giovanni Durbiano   | 024 |
| DRAFTING A COMMON DIAGRAM   | 030 |
| FOUR DIAGRAMS AND THE ARCHITECTURE OF THE EFFECTS<br>Alessandro Armando                         | 032 |
| SHAPING THE UNCERTAINTY: Revealing implicitness in ordinary practices<br>Mauro Berta            | 056 |
| A COMPARATIVE MATTER  | 070 |
| BEYOND THE LOCAL PROCESS AND THE MATERIALITY OF SPATIAL TRANSFORMATION<br>Francesca Frassoldati | 072 |
| WHAT'S A PROJECT TO DO?<br>Jiang Feng   | 094 |
| THE EXHIBITION  | 100 |
| EXHIBITION CONTENT / EXHIBITION SHAPE: Logical concept /analogical form<br>Mattia Giusiano      | 102 |
| EXHIBIT AS COVERAGE<br>Valeria Federighi  | 148 |

# SHAPING THE UNCERTAINTY Revealing implicitness in ordinary practices

Mauro Berta

*Watersheds* is a research basically aimed to retrace and to make comparable some complex urban transformation processes – in very different cultural and social contexts, like Italy and China – by representing them through a shared graphic formalism, trying to investigate not only the mere results of these transformations, but most of all the multiple relations among their physical effects and the whole of material and immaterial conditions preceding them, such as political decisions, public debates, technical documents etc.

The underlying research question of this work is quite simple: is there – within the ordinary practices – any system of implicit correlations and interdependences eluding the canonical narratives, but which could foster – if they were made explicit – a better understanding of the transformations themselves? And if yes, how could it be represented and used in order to improve a better awareness of the design process? As it has been said, the four cases share programmatically a common condition, which is a substantial lack of any overall architectural vision, leading the transformation. The redevelopments of Lizhiwan, Kai Tak, Sangone and Piave rivers, namely, are neither the outcomes of any linear top-down processes, nor the fulfillment of any ideal design concepts, but they are rather the complex – and somehow unpredictable – results of a superposition of a large number of self-ruling events, documents, circumscribed rationales and partial material effects, sometimes opposite and spread over long-term periods.

Trying to retrace such a geography is a challenging task, most of all because it needs to combine in a unique interpretation a number of variables in some way incommensurable, like – for instance – intangible events (discussions, regulations, deeds etc.) and their concrete effects (evacuations, land reclamations, new buildings etc.) whose placement in space and time, furthermore, is sometimes exactly defined but often blurred and vague. The diagrams of *Watersheds*, in other words, aim to gather physical space, people, policies and procedures in a synoptic visualization, in order to spatialize the political dimension of the design processes within an unconventional narrative of the urban transformations: a work having a precise cultural background.

56

57

Mapping history. Some milestones of visual representation in the scientific culture

Data maps, which means the graphical representation of storylines and abstract information, are basically a product of modernity. As Edward Tufte explained in his studies, though cartography has deep roots in antiquity, it is only during the 17<sup>th</sup> century that the skills of geographers and historians (and – thereinafter – physicists, naturalists, physicians etc.) began to converge in some brand new forms of representation (Tufte, 2001), matching the concrete dimension of the physical world with the immateriality of chronicles and statistics, and giving history and natural sciences a new intuitive guise.

Some early attempts had actually already been made during the late Renaissance period – like, for instance, Mercator's *Chronologia* (Mercator, 1569) – but those first examples were still nothing more than simple table charts, trying to harmonize the different measures of time and history, coming from the traditional sources (Brotton, 2012).

The real meeting point among scientific storytelling and visual representations could be actually found between mid-18<sup>th</sup> and mid-19<sup>th</sup> century, when two different approaches – a more abstract one and a more physical one – were developed independently.

A forerunner of the first type is the early work of Joseph Priestley, whose *Chart of Biography* (1765) and *New Chart of History* (1769) became an essential epoch-making reference. 'Priestley-style' (Rosenberg, Grafton, 2010) diagrams, conceived within the framework of the Empiricist theory, had a wide influence in the following visual culture, creating a new branch of works: some of which more pictorial – like F. Strass' *Strom der Zeiten* (1804) – or even naïf, like the impressive S. C. Adams' Synchronogical Chart (1881):



59

58

(1804). Friedrich Strass, Der Strom der Zeiten



(1881). Sebastian C. Adams, Synchronological Chart or Map of History, New York: Colby & Co.



some others more essential and broad circulation-oriented, like J. Spark's renowned *Histomap*, published by Rand McNally in 1931, or the several History of Art didactic charts, appeared during the 20<sup>th</sup> century. Unlike Priestley's charts, the famous historical maps by the 19<sup>th</sup> century French engineer C. J. Minard developed instead an approach more fitting to the physical dimension of the events. In Napoleon's Russian campaign and Hannibal's Italian expedition maps (1869), the numeric amounts of human losses are expressively materialized by the thickness of the lines retracing the troops' itineraries, and – in the first one – they are also related to the temperature trend of the Russian winter. These pictures, giving military history an unprecedented dramatic aspect, are probably the first examples of what we call nowadays 'infographic', and they were strongly influenced by the innovations in the scientific representation introduced some decades before by W. Playfair (Playfair, 1801).

Even though their graphic style is rather different, the most part of the examples belonging to both these two families of visualization share a common hermeneutic approach, that is to say that their aim is often merely interpretative or, at least, educational: but seldom data mapping – either physical or abstract – has been used also with an anticipatory and non-neutral purpose, to prove a theory, to induce some changes in peoples' behaviors, or to steer policies and decision-making. Which is much more interesting for our research.

(1869). Charles J. Minard, Carte figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812–1813

That is the case of the medical mapping, appeared in the middle of the 19<sup>th</sup> century. The pioneering study of John Snow about the 1854 cholera epidemics of Broad Street in London introduced for the first time the disease cartography to circumscribe and identify the source of infection: in the same period – in the aftermath of the Crimean war – the famous nurse Florence Nightingale used abstract and eye-catching visualizations to persuade the members of Parliament to improve the sanitary conditions of the troops, by showing that – in the Army engaged in the East – the mortality for preventable diseases was much higher than the one for wounds (*Mortality of the British Army*, 1858).

But one of the most interesting uses of visual representation as an instrument to foster and steer a political debate is represented by the work on conspiracies representation made by the American conceptual artist Mark Lombardi whose *Narrative Structures* (1990s) – strongly influenced by the critique of Capitalism by H. Marcuse (Burke, Tierney, 2007) – analyzed the complex geographies of some international scandals of the late 20<sup>th</sup> century, retracing – with a node and link graphic style – the untold rapports among politics, companies, banks, wars etc.

Lombardi's graphs represent definitely – from a methodological point of view – one of the nearest approaches to *Watersheds'* visualizations, not only because the graphic formalism is quite similar, but most of all because both of them share the same attempt of reducing different streams of events and groups of actors into a unique interpretative structure, whose aim is to influence the process itself.

<complex-block>

65

64

#### What do Watersheds' diagrams show?

The four charts presented in the research prove, first of all, the non-linear nature of the urban transformation processes, revealing the real margins of negotiation – sometimes very narrow – of the supposed decision-makers, and measuring the effectiveness of the project strategies.

Like the former storyline charts, they have an overall synoptic nature, allowing to understand at a glance the whole extension of complex facts, helping to take a critic distance from the objects of study.

Like Lombardi's charts, however, they are based on a nested structure. Every node of the chart could hold potentially entire subsystems of events and subjects, which could be expanded as needed, to deepen the study and to investigate single facts or chains of events.

For this reason the charts are not a static and neutral representation of reality, but they are a dynamic and slanted one, allowing to make selections among facts and interpretations, to explore possible correlations and to create a critical interpretation of the events.

Finally this kind of approach allows to find and highlight some unexpected recurring events – or, specularly, some unpredictable differences in apparently similar situations – which could be studied not only to better understand the past transformation processes, but also to steer and improve the future ones. This is likely one of the most promising outcomes of the research.

#### REFERENCE LIST

66

67

Mortality of the British Army, 1858, London: Harrison and Sons.

Brotton, J. 2012, A History of the World in Twelve Maps, London: Penguin Books Ltd., (La storia del mondo in dodici mappe, Milano: Feltrinelli, 2013, pp. 266–267).

Burke, A., Tierney T. 2007, *Network Practices: New Strategies in Architecture and Design*, New York: Princeton Architectural Press, p. 63.

Mercator, G. (Kremer G.), 1569, Chronologia. Hoc est temporum demonstratio exactissima, ab initio mundi, vsque ad annum Domini 1568, Köln.

Playfair, W. 1801, The Commercial and Political Atlas and Statistical Breviary, London: J. Wallis.

Rosenberg, D., Grafton A. 2010, *Cartographies of Time. A History of the Timeline*, New York: Princeton Architectural Press, p. 157.

Tufte, E. R. 2001, *The Visual Display of Quantitative Information*, Cheshire (CT), Graphic Press LLC (2nd Edition, 2007), p. 20.



(1996–2000). Mark Lombardi, BCCI-ICIC & FAB, 1972–91 (4th Version)

Alessandro Armando is Assistant Professor of Architecture and Urban Design at Politecnico di Torino. He is conducting research about design theory and has been visiting professor at the UKIM University, Skopje. He has worked at the Urban Center Metropolitano in Torino since 2005 to 2014 as a consultantfor planning and architecture.

**Mauro Berta** is Assistant Professor of Architectural and Urban Design at the Polytechnic of Turin. His research activity is focused on Urban Design: he is author of about 80 scientific publications and he signed several architectural and urban projects. In 2010 he won the 2nd prize «PAN – Ardito Desio» (University of Udine, IT) for research activity.

### CONTRIBUTORS

156

157

**Michele Bonino** is teaching Architecture and Urban Desing at Politecnico di Torino. In 2013 and 2014 he was a Visiting Professor at Tsinghua University in Beijing, where he's leading a joint international research on the field of urban regeneration. He is the coordinator of the newly-born Politecnico di Torino Research Center in Guangzhou.

Antonio De Rossi, architect and PhD, is Full Professor at Politecnico di Torino, where he teaches architectural and urban design and is coordinator of the PhD program in Architecture and Building Design. His writing and his designs have been published nationally and internationally.

Giovanni Durbiano is Full Professor of Architectural Design at Politecnico di Torino, and a practicing architect. Among his books: I 'Nuovi Maestri'. Architetti tra politica e cultura nel dopoguerra, Marsilio, 2000: Paesaggio e Architettura nell'Italia contemporanea, Donzelli 2003: Etiche dell'intenzione. Ideologia e linguaggi nell'architettura contemporanea italiana, Marinotti, 2014.

Valeria Federighi is a PhD candidate in Architecture and Building Design at Politecnico di Torino. She holds a professional degree from the same university and a Master of Science in Design Research from the University of Michigan. She is editor of Tourette\_Journal, a practicing architect and co-founder of design-build office Wworks.

Jiang Feng combines education and professional work at the South China University of Technology. His long term commitment within the Research Center of Architectural History and Culture at SCUT focuses on the conservation and adaptation of vernacular architecture. He has been involved in relevant projects on historic architecture in Southern China and in 2005 gained the Honourable Mention of Unesco Asia-Pacific Heritage Conservation Award.

Francesca Frassoldati joined the South China University of Technology in 2008 and since then has developed cultural bridges between European and Chinese universities. Her interests encompass, in broad terms, the process, tension, and spatial effect of social transitions. From 2009 to 2012 she has coproduced the «Tool for Stakeholder Engagement» of the EU-funded project *Revitalization of Traditional Industrial Areas* (European Regional Development Fund).

Mattia Giusiano is Architect and PhD in Architecture and Building Design. In 2014 he is Visiting Professor and researcher at Politecnico di Torino, where he studies the relationship between settlements, environment and infrastructure. Performs professional work with Enrico Boffa and Andrea Delpiano (b|d architetti), mainly dealing with regeneration projects in the agricultural landscape.

## **EXHIBITION CREDITS**

#### PROMOTERS:

School of Architecture – South China University of Technology, Politecnico di Torino, Urban Place Research Unit – The Chinese University of Hong Kong, Università IUAV di Venezia CURATORS:

Francesca Frassoldati (General Coordinator), Michele Bonino, Wallace Ping-Hung Chang, Antonio De Rossi, Carlo Magnani

WORK TEAM:

Alessandro Armando, Mauro Berta, Shuaiyi Chen, Jiang Feng, Mattia Giusiano, Emanuel Lancerini, Mengran Li, Peng Li, Xue Li, Zhichao Liu, Yingyi Lu, Shilei Lu, Bin Zhu

ADVISORS:

Alessandro Carboni for Watersheds (Performing Art, www.progressivearchive.com), Luca Casonato for Watersheds (Photo, www.lucacasonato.com), Giovanni Durbiano (Thinker), Francesca Governa (Politecnico di Torino and Università di Torino, Urban Policy Analysis), Andrea Delpiano (Re-Cycle Lab) PATRONAGE:

Città di Torino, Liwan District, Embassy of Italy in Beijing, Italian Cultural Institute in Beijing, Re-Cycle Italy

#### Special thanks to:

Shenzhen Biennale of Urbanism\Architecture Organizing Committee. 有方 | Position (Shenzhen), Urban Elephant Architects, Haohao Xu, Ching Kan Chan, Yixiang Zhang, Wenjun Yang, Shuangjie Wang, Zhimin Zhang, Gruppo CasaPiave, S.P.A.A. Studio Paesaggio Ambiente Architettura, Paolo Miglietta (Città di Torino), Ippolito Ostellino (Ente Parco Po Torinese), International Affairs Office (Città di Torino), Wenhui Jiang (Liwan District, Hong Kong), Winnie Ho (Energizing Kowloon East Office – EKEO, Hong Kong), Min Zhu, Lin Ye (Sun Yat Sen University), Hang Ma (Shenzhen Urban Planning and Management Center of the Harbin Institute of Technology), Oriental Design Week, Chiara Lucchini, Jessica Jacqueminaz, Valeria Federighi, Nicole Chen, Virginia Valesio, Pierre-Alain Croset, Giovanni Pischedda, Francesca Natale, Ilaria Maria Sala, Yimin Sun.