



# THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

The Kinematography of a City  
**MOVES INTO DRAWING**

Sophia Banou

**INSTRUCTIONS TO WAYFARERS**

Doctor of Philosophy in Architecture by Design  
Edinburgh School of Architecture and Landscape Architecture  
The University of Edinburgh

February 2016

## DECLARATION

This is to certify that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.



## ABSTRACT

This thesis aims to explore the temporal and material limits of architectural drawing through the question of urban representation. Challenges posed by the latter are used to put pressure on the fixity of drawing conventions, in order to expand architectural drawing's range of concerns to the transitory conditions of space that emerge between order and event. Since the eighteenth century, the city has acted as the ground and mirror of the productive, economic, social and epistemological breaks and turns that have marked the passage to modernity. This radical transformation of the city and its modes of experience and inhabitation, combined with the visual culture that has since emerged, have raised questions of presence and representation with regards to both the city and its image in architectural drawing. This thesis aims to bring these questions into the frame of the current concerns in architectural representation, following the deconstructive and cartographic approaches that emerged in the latter half of the twentieth century and the effects of a rising virtuality.

As the understanding of space has shifted from the idea of an a priori extensity of vacuum versus matter to a dynamic multiplicity of relations, respectively architectural representation is understood as itself a transaction: a complex oscillation between the real and the mental. This research becomes concerned with exploring drawing as a situated experience that involves the inhabitation of both the space of the city and the drawing. Such a consideration of drawing as a distinct spatiality consequently brings to the fore a dynamic and productive reciprocity between the city and its representation.

In order to engage with the intangible projective spatiality of drawing and the negotiations that take place in the movement of representation, the thesis examines the processes involved in the representation of the urban through the immersive site-specificity of installation. Installation is proposed as a way of drawing in space, and thus of foregrounding the question of the space of drawing. The thesis unfolds as a movement across the space of drawing, through a series of essays and corresponding installations which cumulatively form a survey of a city, while performing a close inquiry into the agency of the distinct elements of drawing. Edinburgh serves as both the object and the place of performance, the testing ground, for this act of observation and representation.



## ACKNOWLEDGMENTS

I am deeply grateful to my supervisor, Professor Mark Dorrian for the guidance and support that he has offered to me through the undertaking of this research. His work and ethos have been an inspiration. I would like to thank Ella Chmielewska, my second supervisor at the University of Edinburgh for the valuable insights that she has provided for my work, as well as Professor Wolfgang Weileder, who supervised my work in Newcastle, for his guidance in our brief but constructive collaboration in Newcastle.

This research would not have been possible without the funding I received from The Bodossaki Foundation in Athens, to whom I am thankful. Beyond the role of the institution I deeply appreciate its people, for fulfilling this offer with sincere interest and understanding.

I am very thankful to Richard, Paul and Malcolm at the Edinburgh College of Art workshops, and all the technicians at the School of Architecture, Planning and Landscape, and the School of Fine Art at Newcastle University, for the help and advice they have contributed to the fabrication of my installations.

I am also grateful to my good friends Maria and Katerina, who encouraged my initial decision to undertake this research, for the immense support that they have offered me over its lonely course. Special thanks also, to the many friends that have lent a hand to my exhibitions and an ear to my anxieties and hesitations, and particularly Sheila, Amanda, Nikolas and Christos.

Lastly, I would like to thank my mother and sister for always believing in me, and my great aunt Sophia Lavranou, for her patience and her endless love and care.



## CONTENTS

I MOVING: THE CITY AND ARCHITECT IN MOTION 2

II A KINEMATOGRAPHY 3

III SOME DEPARTURES 5

IIII IN KINESIS 6

IIV INHABITATION/INSTALLATION 8

IV WAYFARING 9

II [RE]DEFINING THE KINETIC CITY 8

III THE OLD CITY IS NO MORE 16

IIII A NEW VISION 21

IIIII THE RESTLESS EYE 18

IIIV THE IMAGE OF THE #CITY 35

III IN/THROUGH DRAWING: MOVING WITHOUT TRAVELLING 40

IIII HARD GOODBYES 43

IIIII THE PASSAGE OF REPRESENTATION 46

IIIIII HOW TO REACH THE STARS 54

IIIV HOW TO HOLD THE EARTH 64

IV REREADING THE SPACE OF DRAWING 70

IVI TEXTUAL CITIES 71

IVII READING THE CITY 75

IVIII TRANSCRIPTIONS FROM CITY TO DRAWING 79

IVIV WORKING DRAWINGS 85

IVV FAREWELL 87

*We generally say that a movement takes place in space and when we assert that motion is homogeneous and divisible it is of the space traversed that we are thinking, as if it were interchangeable with the motion itself. Now, if we reflect further, we shall see that the successive positions of the moving body really do occupy (111) space, but that the process by which it passes from one position to the other, a process which occupies duration and which has no reality except for a conscious spectator, eludes space. We have to do here not with an object but with a progress: motion, in so far as it is a passage from one point to another, is a mental synthesis, a psychic and therefore unextended process.*

## I A KINEMATOGRAPHY

Kinematography is a dubious term. Commonly overshadowed by cinematography, it has been used in English by theorists of cinema to refer to the early technology and productions of motion pictures: a recording of movement through moving images, which is distinguished from its cinematic successor by the lack of the particular narrative structures later introduced through the development of the medium. As André Gaudreault and Tim Barnard suggest, this lack of an integrated narrative structure places these early productions outside cinema and somewhere between the preexisting genres of theatre, and documentary, revealing the role of the cinematograph at this early stage as a mere device rather than an independent medium.<sup>1</sup> This thesis often crosses paths with cinema and its collateral techniques and forms of expression, but the primary reason for choosing this rare word to introduce the thesis constitutes an attempt to return even further back, to its pure etymological ability to bring together two notions that have, over the course of this research, been critical to my understanding of architectural practice.

To begin with the latter part of the word, *graphie*, deriving from the Greek *γραφη*, means writing, but also inscription, drawing and script. As such, *graphie* describes an act, as well as a product of representation. Moreover, it entails also the meaning of the *study*, or the *review* of a subject, alluding to a conjunction between representation and the acquisition or survey of knowledge. Less obvious is perhaps the significance to architecture of the first element of the term: *kinesis*. From the Greek *κίνησις*, describing movement as the action(s) of an object in relation to time and space or a fixed counterpart, *kinesis* suggests a change *in* and *of* place. Considering these two terms, what kinematography as a composite word ultimately entails for this study is the possibility of a reconsideration of the acts of recording and narration that occur within the process of architectural design through the prism of mobility, a condition which, I argue – although inherent and productively crucial to the process of architectural thinking and making – is commonly not only overlooked but actively concealed. This is due to the modalities of our perception, but also of representation as a process of acquiring and constructing knowledge. The manifestations of mobility in architecture, as both the constructed place of inhabitation and the creative practice, I will show are multiple, yet their effects seem to converge in what arises as an overarching oscillation between the notions of presence and representation; between the modalities of being in, of inhabiting place, and the modalities of announcing and articulating this experience through practices of representation.

This thesis questions the temporal and material limitations of architectural representation, as they emerge through the problematic relationship between architectural drawing, considered as a static object of fixed convention, and space as an inherently kinetic domain. To this end, the research engages with urban representation as a way of bringing together the complications of architectural space and architectural drawing. The city, traditionally a principal object of architectural concern, is a territorial condition that, especially in light of modernity, has come to define a kinetic field of particular spatial and temporal complexity. The challenges that this complexity entails for architectural drawing are used here to put pressure on the fixity of drawing conventions, in order to expand architectural drawing's – and consequently architecture's own – range of concerns to the transitory conditions of space that emerge between the stabilising effects of order(s) and the

<sup>1</sup> On Kinematography as the early stage of cinema see André Gaudreault with Tim Barnard and Jacques Malthête (2011). *Film and Attraction: From Kinematography to Cinema*. Urbana: University of Illinois Press.



[1] Section across the East side of the Ponte Vecchio, with its characteristic wooden shutters known as 'argani' (winches).

spontaneity of events. The thesis will examine these developments in the experience of the city in parallel to the changes of the image of the city in architectural drawing, through the unfolding of modernity as a time and condition in which the city, but also architecture itself, has undergone major reconsideration, into the contemporary challenges of architecture's autonomy and authority upon the urban. The parallel consideration of these two conditions will indicate the common themes that govern the structures and forms of both: a common tension that manifests as the fragile 'equilibrium' between order and chance, stability and fixity, spatiality and inhabitation.

## II SOME DEPARTURES

The limitations of drawing with respect to the kinetic character of the city first became apparent to me during my earlier studies. Standing on the Ponte Vecchio in Florence, a site indicated to me through the framing of a Masters course I undertook at the University of Edinburgh in 2008-09,<sup>2</sup> I first became conscious of the fluidity entailed in the mobilising of architecture. The inhabited bridge, which dates back to 1345, has traditionally been the site of a vibrant jewelry market. The shops are housed in a cluster of small seventeenth-century buildings, the function of which transforms the views and atmosphere of the entire bridge through the opening and closing of their unique medieval shutters. The architecture of the bridge functions as a calibrator of the constant change that is manifested in its structure. The task of 'fitting' into the conventions of architectural representation the transitory character of the architectural space, as it became animated in coordination with the everyday actions of inhabitants and passers-by, proved to be endless. Contrary to the fixed, timeless image of space that architectural convention promotes, the city was there set in motion before my eyes, equally in its 'void' as in its 'architecture'. This form of kineticism was not limited in the expression of 'human relations' but extended to the agency of artifacts and architectural elements that radically affected architectural form and function [fig. 1]. The intersection of distinct movements: of architecture, its users, and my own perception of the place, found a common barrier in the temporal and material limitations of architectural representation.

The kinetic character of drawing, on the other hand, I believe was the very reason why I chose to be an architect in the first place. As a child, I would often pass summers in my grandparents' remote country house, where the walls would be covered by my father's large symbolist paintings – to me worlds somewhere between Magritte and De Chirico, their forms familiar but otherworldly. I was always so daunted by the fantastic spaces that they created, as well as at the achievement of painting as a craft, that at an early age I became convinced that I would never be able to draw as well – that I would never be able to achieve myself this craft of figuration from which the effect of these imaginary worlds upon me emanated. Eventually however, I somehow discovered architectural projection and drew my first plan, a detailed vision of my own house in the future when I would be all grown up and have my own family. It was such a joy to me to be the master of my very own imagined universe that I continued with more variations and projects. I therefore found my 'place' in visual representation in two ways. First, the convention – a lot of which was of course at the time based on improvisation as I still cannot recall where I saw architectural drawings for the first time – offered me my own space within drawing, one which had rules and rulers that I could follow without the fear of any lack of dexterity. Second, there was another freedom that emerged from drawing orthographically, there

<sup>2</sup> Dorian Wiszniewski, 'Florence: Curating the City, Representation and Seriality, Architectural Design Opening B', M. Arch Year 1 and MSc in Advanced Architectural Design (The University of Edinburgh, School of Architecture, 2008-2009).

was a view of the object that was strictly my own, unlike anyone else's eye could see. There was therefore no expectation to compare it to, no way to judge its integrity as figure, despite the promise of 'reality' entailed within its signification. So, to my painter father's disappointment I decided then, at the age of eight, that I would someday become an architect, a 'technocrat' as he thought. I was relieved that in that way I would allow myself two kinds of indulgence – to draw, and to thus also 'inhabit' spaces away from the fears of reality.

Drawing was then to me a child's way of escaping the idleness of reality by creating my own space, but it was more importantly a way of handling the delicate balance between escape and attachment, between self-definition through difference and belonging through similarity. This short story of my own was not a conscious beginning to this research, but I consider it as one of the wonderful discoveries that I have made over its course. If inhabitation is about holding a place, holding on to it, architectural thinking emerges for me when this need to hold on, to be grounded within a place, coincides with the intention to exceed its ground. Representation then becomes the way towards a kind of self-definition. However, what is at stake in architectural representation is the definition, the integrity and subjective autonomy, of not only the self but of multiple subjects: the dweller, the architect, the city and finally architecture itself. By reclaiming the foregone 'movement' between architectural space and representation, the thesis intends to interrogate the mechanisms of drawing, its core structures, against the preconceptions that guide and inform our normative representations. Through this enquiry, I am not attempting to propose a drawing methodology, but rather seeking to investigate the ways in which drawing acts as not only a tool of communication but also as an agency of design and spatiality. In this 'kinematography', which takes the form of a study of mobility as well as of a 'mobilised' writing, although at first glance the city appears to embrace the kinetic and the drawing the representation, I will attempt to illustrate that the transition from city to drawing and back, effectively concerns a continuous movement that is performed through acts of representation and inhabitation; that the kineticism of the city does not essentially differ in kind from the kineticism of drawing.

### III IN KINESIS

Since the eighteenth century, the city has been the place of radical productive, economic, social and epistemological fermentations. The rapid shift of scale, which was the effect of the continuing urbanisation that has taken place since the beginnings of the industrialisation of production in the later eighteenth century, has at times magnified both the multiplicity and intensity of the forces that act within the urban. From the mid-nineteenth century onwards, the radical transformation of the city, which often took effect not only through its expansion but also through the imposition of drastically intrusive masterplans, meant a respective shock for the ways in which the city was experienced and inhabited. The life of the city was characterised by the excitement for the "distinct modes of thinking and experiencing place and time"<sup>3</sup> that were derived from the rapid technological advancement, the mechanisation of vision and movement, as well as the spectacle of mass consumerism. At the same time however, the modern metropolis was the place where, as Georg Simmel writes, the intensification of "differences" created effects of alienation and detachment for the individual.<sup>4</sup>

At the same time however, the technological, philosophical and scientific advancements of modernity gave way to the expression of an altogether new understanding of space, questioning the notions of time and change. The expansion of the capabilities of vision through the developments in the field of optics in the nineteenth century, the dissemination of photography and the cinematograph and the scientific propositions of Herman Minkowski and Albert Einstein at the turn of the century, contributed to an understanding of space, which shifted from the idea of an a priori extensity of vacuum versus matter, to a dynamic multiplicity of relations. The nature of space in relation to time, the perception and experience of space as contingent event and as multiplicity, and – through the manifestations of this new-found mobility in the life of the city – the ways in which this perception expressed a more direct effect upon the psychological and social aspects of dwelling in the city, were some of the questions that preoccupied the cultural production of modernity. Within this frame, the new theories of visual perception posed a challenge for the investigations of modernist artists, who engaged with the task of accommodating the new paradigm of space and vision “in motion” within the visual arts.<sup>5</sup> The phenomenological approach to vision of the Impressionists, the dynamic of geometric forms in Suprematism, the kinetic themes of the Futurists, and the multiple viewpoints of Cubism, together illustrate the range of interpretations that the paradigm of a kinetic space found in the visual arts.

The question of kinetic space places under new light the discrepancies that arise between the real and the representational by entailing the mobility of both the environment and the viewer, of the spectacle and the spectator. But, if in modernist art the shift that took place in the experience of the real had at the time an inevitable effect on representation, it cannot be overlooked that the experience itself was respectively already conditioned by representational forms and technologies. These did not simply concern the modalities proposed by media such as photography and cinema, but also the economic, social and ideological orders that collectively construct the city through processes of representation. In effect, this entanglement of reality and representation is a question of not dual but multiple origins as the city is revealed as itself a place of congested representations. The understanding of this emerges more prominently, not at the heart, but in the ‘aftermath’ of modernity, in the social critique of the Marxist philosopher Henri Lefebvre, the linguistic perspectives of Roland Barthes or the spatial turn of philosophers such as Michel Foucault. However, as Diana Agrest writes, it is a condition that is not new, not even for modernity, as the city has historically posed as the representation and the scene of relationships of power.<sup>6</sup>

This thesis seeks to bring the question of this complex kineticism of the city into the frame of current concerns in architectural representation. If modernist art extracted from modernity the dynamism of speed and novelty, architectural thought of the time was rather inspired by the rationalism of functionalist efficiency. Architectural drawing, which has historically posed as a means of arresting and ordering space (ordering it by arresting it), maintained the privilege of the static over the kinetic as expressed in the orthogonal projection of the figure-ground drawing. Normative architectural representations still today insist upon conventions that consider architectural space through the contrast of the static built and the void unbuilt, disregarding the web of dynamic relations that structure space. The urban ensemble, as the multiplicity that it has come to be defined through the industrial and post-industrial era, becomes here useful in understanding the ways in which the inhabitation of the real becomes further entangled with the virtuality of representation.

<sup>3</sup> Stephen Kern, *The Culture of Time and Space 1880-1918*, (London and Cambridge, Mass.: Harvard University Press, 1983), p.1.

<sup>4</sup> Georg Simmel, ‘The Metropolis and Mental Life’ (1903), in Gary Bridge and Sophie Watson (eds.), *The Blackwell City Reader* (Oxford: Blackwell, 2002) pp. 103-110; p. 103-104.

<sup>5</sup> László Moholy-Nagy, *Vision in motion* (Chicago: Paul Theobald and Company, 1947).

<sup>6</sup> Diana Agrest, ‘The City as the Place of Representation’, *Design Quarterly* (113/114), City Segments (1980), pp. 8-13.

Despite the fixity suggested by the tradition of a long-standing convention – the core principles of which have been established at least as early as the 15<sup>th</sup> century – architectural drawing, a writing in its own right, is considered in this research as a transition. Regarded often as an act of translation from reality to a form of language – that is, a systematic mode of representation – architectural drawing is always a kind of displacement, either when it concerns the transcription of a survey or of purely mental concepts.<sup>7</sup> As Robin Evans has showed, this kinetic, albeit analogical understanding of drawing, is still limited.<sup>8</sup> Post-structural theorists such as Roland Barthes, Gilles Deleuze, and particularly Jacques Derrida through his discussion of translation,<sup>9</sup> have challenged the stability of meaning within processes of signification, and consequently the fixity and hierarchy of the relationship between the representation and the referent. If then the city emerges out of modernity as a constant negotiation between systematic order, and event, then drawing respectively can be considered as itself a transaction: this complex oscillation between the real and the conceptual takes place there through a respective negotiation between convention and subjectivity. Consequently, drawing is proposed in the context of this thesis as a displacement of both the re-presented ‘presence’ and the architect, whose consciousness it excels. As in the pre-cinematic cinematography, where the capabilities of the new medium remained under the influence of previously established norms, architectural drawing is often limited by the imposition of conventions that seek to stabilise not only the mobility of the city as its object, but also the mobility derived by drawing’s very agency. I would like to argue that this stabilisation of architectural representation is in essence phenomenal and antithetic to the ways in which architectural drawing and thinking proceed. Following the deconstructive and cartographic approaches that emerged in the latter half of the twentieth century, the thesis engages with drawing as a performative practice rather than a systematic language, and as a representational field of action rather than a representational order. Considering this, the research aims at developing new ways of transversally representing the complex interactions of movement that form the contemporary city by re-examining the processes and agents involved in architectural representation, through both text and drawing. The question of the representation of this mobility, although rooted in the experimentations of modernity, not only is still pertinent, but is perhaps put under further pressure due to the increasing focus on digital modes of representation in architectural drawing but also in the practices of everyday life.

#### IV INHABITATION/INSTALLATION

On drawing the similarities and associations between the formulation of the city and its representation in architecture, this research becomes concerned with exploring drawing, as itself a situated experience. If, as theorists propose, the city is formed out of processes of representation, in drawing there is also produced a spatiality specific to the representation, one that is similarly defined by a negotiation between the event of interpretation and the order of convention. Considering drawing in this manner, this research proposes a representational practice that, without necessarily setting aside pre-existing conventions altogether, puts focus on drawing as a device able of critically collecting and recording the distinct kinds of mobility – that is, the distinct kinds of agency – that come to act upon it, with equal attention as to those that act upon its object of representation. Seen under the light of the mobility of meaning suggested by post-structuralist approaches to space and text, as well as the “cartographic” strategies that emerged in architectural practice over the last three decades of the twentieth century,<sup>10</sup> notions of order and chance as reflected in the relationship

of convention/syntax and interpretation can become blurred, mobilising the definition of the subject. Considered in this way, drawing takes on the form of a documentation, rather than a 'project', which involves the inhabitation of both the space of the city and the drawing as distinct spatiality. The consideration of drawing, as such, foregrounds the dynamic and productive reciprocity between the city and its representation.

The documentation carried out in this research performs the survey and representation of a city. My own place of work and residence, Edinburgh, acts as the field of this representation. In doing so the city will occasionally reveal its character and specificities that will more or less stir the process of drawing. However, the object of this study is not this specific place, but the very intricacies that emerge out of this specificity and its finding another place in architectural drawing. The research then follows the consecutive phases of this drawing through a sequence of scriptive and transcriptive operations, where representation acquires a form of investigative inhabitation and the intangible projective spatiality of drawing becomes the site of architectural design. To this end, drawing often escapes the scale and dimensional limitations of normative print media and crosses over into the immersive site-specificity of installation. Installation serves here as a way of drawing in space, and thus of bringing to the fore the question of the space of drawing.

## V WAYFARING

The thesis is structured in two parts. This first proposes, in Chapters II and III respectively, a kind of historical indexing of mobilities in the city and in architectural drawing, which come together in Chapter IV in a discussion on textuality. Textuality is proposed as a common condition between space and representation as forms of narrative rather than linguistic structures. The concept of textuality then raises a question of continuity and 'translatability' between city and drawing. The *Instructions* thus seek to set the scene for the unfolding of the latter part of the thesis as a wayfaring across the space of drawing through a series of essays and corresponding site-specific installations, which cumulatively form the survey of the city.

The wayfarer here represents not only the subject in motion, but also a figure of crossings and hybridizations. In Hieronymus Bosch's *The Wayfarer* (1516) – considered by some as a representation of the prodigal son – the figure appears to stand on a kind of crossroads [fig. 2]. His position is not only one of displacement but also of choice. On one side of the panel the rural house, old and dilapidated, stands as a symbol of stasis and domestication; on the other side, across the gate spreads the land of the unknown, a field of travels. The wayfarer stands in-between the two, between the conventional and the unexpected. In the context of this thesis, the unravelling of the script, as both writing and drawing, has been treated too as a kind of wayfaring. The wayfaring of the architect through representation suggests to me not only a change of place – that is, a move from the reality of experience to the space of representation – but also an esoteric process of wayfinding within one's own mind, an inquiry that often oscillates between ideas of order and acts of 'deviation'.

The second part, the *Speculum*, invites the reader to wander in the terrain of my own wayfaring. An exploration of drawing carried out through a survey of Edinburgh, this *speculum* stands as a *mise en*

<sup>7</sup> Although I would like to argue that these are never clearly distinguished, and this I will show is exactly due to the 'kineticism' of drawing.

<sup>8</sup> Robin Evans, 'Translations from Drawing to Buildings', in *Translations from Drawing to Buildings and Other Essays* (London: Architectural Association, 1997), pp. 153-193.

<sup>9</sup> Jacques Derrida, *Positions*, trans. Alan Bass (Chicago: University of Chicago Press, 1981), p. 20.

<sup>10</sup> Mark Dorrian, 'Architecture's Cartographic Turn', in Frederic Pousin (ed.), *Figures de la Ville et Construction des Savoirs* (Paris: CNRS Editions, 2005), pp. 61-72.



[2] *The Wayfarer*, Hieronymus Bosch (ca. 1516)

*abyss*, staging city and drawing together.<sup>11</sup> The text is structured around three parts, each focusing on the 'line', the 'gaze' and the 'surface' as distinct elements that carry agency within drawing. The *Line* essay revisits the question of representation through a consideration of the Platonic relationship between origin and copy. By tracing the origins of architecture itself and its linear tradition, this text questions architecture's autonomy by looking into the ways in which the validity and integrity of architectural drawing is established. The *Gaze* essay considers the notion of order through a critical review of urban representation in relation to attitudes of spectatorship. It continues the discussion of the ways in which the congested visuality of the city comes to take effect within drawing. The *Surface* essay clarifies the understanding of drawing as itself a place of representation. This text is concerned with the intersection of the situated material practice of drawing and the situated experience of the architect as reader, considering drawing as a both projected and projective condition. Taking into account theories of site-specificity in art and architecture, the essay reflects on the consecutive 'sittings' of drawing and the architect, involved in the process of architectural drawing.

In parallel to the essays are presented three architectural drawings/installations. The large-scale installation *Weaving Lines/Looming Narratives* constituted a first experiment with architectural notation in a small urban site in Edinburgh. It was fabricated and presented in Newcastle, where I was a student for the first two years of this research, in February 2013. The second installation, *Kaleidoscopic City*, reflected on and transferred the techniques of the previous installation into the scale of the urban, in a critical discussion on normative and historical forms of representation and city-viewing, through the mapping of a larger area of the city's centre. *Kaleidoscopic City* was installed and presented at the Plenitude & Emptiness Symposium on Architectural Research by Design, at ESALA, Edinburgh College of Art in October 2013. The third installation, *Draw of a Drawing*, shifted focus from the city to the drawing itself by miniaturizing the preceding representation and inscribing it into the material situation of the surface. These 'drawings', which often resisted convention, not only in terms of graphic signification but also in terms of material instantiation, constitute stages of what eventually forms the 'kinematography' of Edinburgh. The thesis finally concludes with the installation *The City [within] The Drawing*, which was presented in Edinburgh in March 2015 as a cumulating piece that brought the drawing back to confront its city.

<sup>11</sup> The *speculum* was a genre of survey text aiming to present an encyclopaedic knowledge of a field in a single volume.



It is 8.30 in the morning on Florence's Ponte Vecchio. The bridge is empty and the dark wooden walls of the shop-window shutters define impermeable solid boundaries on either side of the passage. The river is nowhere to be seen until you reach the middle of the bridge, where the little square on the west allows a visual outlet to the body of water framed by the palazzi along the banks of the Arno. By 9 o'clock the first shop owners begin to arrive. Some pull up the few modern rolling shutters that protect their shopfronts while others wait for the work of a single man. As the shop owners arrive, the man with the cane begins a strange dance from shop to shop that gradually opens up the whole of the bridge to full function. By moving the facades, the movements of his cane also set in motion the shops and passers-by, and the street vendors and artists that then accumulate. Furthermore, they set in motion my gaze across the bridge, through the transparency of the shopfronts onto the river and the city beyond it. The intense temporality of the experience of the bridge as drawn by the controlled animation of these mediating 'secondary' structures, reveals the choreography that unfolds out of the activities of the inhabitants as partaking in the negotiation of the 'architecture' of the bridge as a not fixed but fluid and contingent condition.<sup>1</sup>

In the essay *The City as the Place of Representation*, Diana Agrest argues that the city and its architecture have been defined historically by a constant struggle between "orderlessness" and a desire for order.<sup>2</sup> As a place formed out of an accumulation of orders, the city constitutes a place of representation – that is, a place where the projections of these orders find meaning through the anchoring to place. According to Agrest, these orders manifest themselves within ideologies that find their way into the life and function of the city through processes of representation: in the events that take place in the city (the city as representation, or as the scene of representation), as well as in the articulation of the "reality" of the city through language(s) (the representation of the city).<sup>3</sup> Considered through Agrest the city emerges as a place where the struggle between order and orderlessness, emerges as a negotiation between relations of spectacle and spectatorship, where practices of inhabitation are found in a constant interaction with practices of representation.

On one end of the spectrum of the city as a struggle between conditions of order and disorder, architect and urbanist Rahul Mehrotra proposes the concept of the 'kinetic city'. For Mehrotra, the kinetic city is a characteristic particular to developing world megacities, where the 'ordered' and the respectively 'disordered' kinetic, often reflect the cultural contrast between colonial and vernacular patterns of inhabitation.<sup>4</sup> His definition however may be useful for the consideration of the kineticism of the city in more general terms. Mehrotra describes the 'kinetic city' as an urban subcategory; as the part of the city which is "constantly reinventing itself", defined by an ephemeral materiality [fig. 3-4].<sup>5</sup> This definition puts particular focus on manifestations of informal spaces – that is, spaces that are not the object of 'official' architecture but rather regard spontaneous makeshift structures such as ephemeral markets, fairs and shanty towns. These spaces, indeed defined by a distinct temporality, reveal the inherent dynamic of space, nevertheless, appear to remain. In Mehrotra's terms, 'other' to the city. Disappearing as unexpectedly as they appear, these normally perishable architectures are presented as the 'exception of the rule'. The "kinetic city" as defined by Mehrotra, emerges at the interstices and margins of the city, which is by comparison declared as static.<sup>6</sup> Mehrotra's definition encompasses the vernacular, the informal and the cultural ritual, as remaining outside the realm of architecture and thus, outside the "order" it affords the city. But can the dynamics that are so obviously defined in such temporal manifestations of the urban indeed be as clearly separated from normative expressions of architecture?

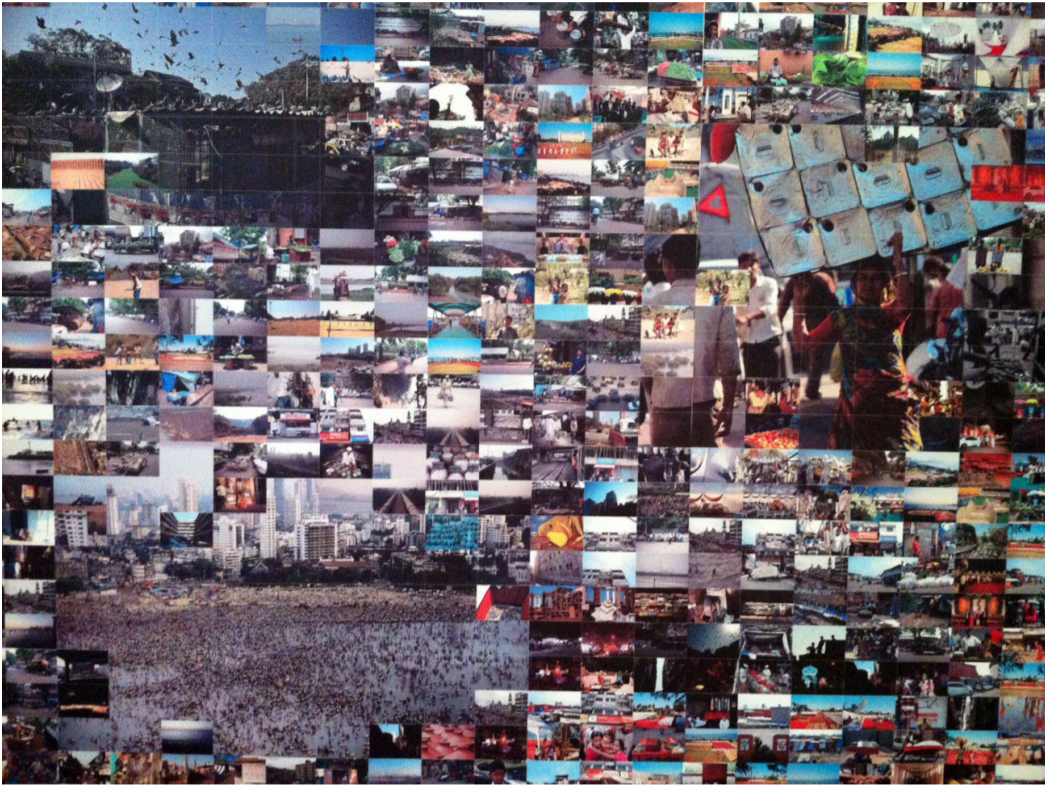
<sup>1</sup> These observations are based on the fieldwork carried out in Florence, Italy, in October 2008, for the purposes of the MSc in Advanced Architectural Design 2008-2009 at the School of Architecture, University of Edinburgh, for the studio course 'Florence: Curating the City, Representation and Seriality', led by Dorian Wiszniewski.

<sup>2</sup> Diana Agrest, 'The City as the Place Representation', *Design Quarterly* (113/114), *City Segments* (1980), pp. 8-13; p. 8.

<sup>3</sup> *Ibid.*, p. 8-9.

<sup>4</sup> Rahul Mehrotra, 'Static Spaces, Kinetic Places: Public Space in the Mega City of Bombay', in *Cities and Markets* (Vienna: IFHP World Congress, 2003).

<sup>5</sup> Rahul Mehrotra, 'Negotiating the Static and Kinetic Cities: The Emerging Urbanism of Mumbai', in Andreas Huyssen (ed.), *Other Cities, Other Worlds: Urban Imaginaries in a Globalizing Age*. Durham and London: Duke University Press, 2008), pp. 205-218; p. 206.



[5] Ponte Vecchio, Florence  
[3-4] From the exhibition *The Kinetic City*, British School of Rome, RMA Architects (2013)



The Ponte Vecchio example presents us with an instantiation of the urban, which involves – in its daily routine – a varying degree of both mobility and formality: from the street vendor to the austere rigidity of the Vasari Corridor, which stands on the bridge as a ‘silent’ symbol of power and authority above the city [fig. 5]. The boundaries between the informal and the architecture of the city, are there blurred to reveal a range of expressions of mobility. These regard not only the material form of the city but also the ways in which agency upon the space and the image of the city is established. How can we then otherwise define the kinetic within architecture and the urban constellations it constructs? For, if we consider hard the characteristics of the kinetic, where can we draw the temporal, spatial, scalar, as well as representational limits of the city’s kineticism?

Humans seek in the city the common place where the diverse orders that they produce (formal or informal) can relate, and where this multiplicity of orders can find coherence on producing what is in fact revealed as a chimeric whole. However, according to Agrest, the city is by its nature heterotopic. In its orderlessness, the city is a place that “undermines language and representation”.<sup>7</sup> Or rather, the problem arises from the contradiction between the city as a place of the actualization of representation, and the representation of the city through its projected simulations. It is interesting to note here how representation is also involved in Mehrotra’s definition of the kinetic and the static:

The first is the formal or Static City. Built of more permanent materials such as concrete, steel, and brick, it is comprehended as a twodimensional [sic] entity on conventional city maps and is monumental in its presence. The second is the informal or Kinetic City. Incomprehensible as a twodimensional entity, it is perceived as a city in motion – a three-dimensional construct of incremental development.<sup>8</sup>

The static city is to Mehrotra a “spectacle” which is “dependent on architecture for its representation”.<sup>9</sup> It appears then that even within Mehrotra’s definition, the kinetic can be considered beyond the criterion of the material endurance and ‘formality’ of built form, and through a more complex understanding of patterns of inhabitation in conjunction with the ideologies that come to shape the city and the knowledge of the city, through habits of perception and representation. The space of collective dwelling, the city inevitably becomes the acting out, and in that sense the representation of social relations. Yet, neither the definition of the city, nor the social relations that it encompasses are diachronic and immutable.

This discrepancy between the ‘nested’ representational orders of the urban, can be considered through the crisis of representation that Agrest traces in the emergence of the capital city in the 17<sup>th</sup> century, and the concurrent turn of thought from associations of analogy to a relationalist approach to knowledge.<sup>10</sup> This turn consequently gave rise to processes of signification and representation as a means to knowledge, which were reflected in the city’s form through the transformation of its space to a space of action.<sup>11</sup> Agrest argues that it was then that the city transformed from the representation of the state and therefore a kind of absolute order to an accumulation of orders that were sometimes in agreement, but sometimes conflicting. But at the same time these orders were, and increasingly are, no more solely within the control of architecture, thus challenging the integrity of architecture’s authority upon the city.

<sup>6</sup> Ibid., p. 206.

<sup>7</sup> Agrest, ‘The Place of Representation’, p.8.

<sup>8</sup> Mehrotra, ‘Static Spaces’, p. 206

<sup>9</sup> Ibid., p. 207.

<sup>10</sup> Agrest, ‘The Place of Representation’, p. 9.

<sup>11</sup> Ibid., p. 11.

Nevertheless, as practices of dwelling have since the advent of modernity become more and more detached from physical instantiations of space, the dissociation between the city as a space of representation, and the ways in which the image of the city is 'translated' in representation is also increasing. Since the advent of modernity, as marked in the figure of the city through the nineteenth century European urban renewal projects, the mobility of the city has become more prominent. Over the last two centuries of urbanization, this mobility has manifested in a variety of ways, which reflect the close entanglement between inhabitation and representation as well as the changing form of the city. This relationship between modes of inhabitation and practices of representation, we will follow through a historic observation of mobilities as they emerge through a sequence of forms of cultural production, which engage with the experience of the city.

Within this review, excursions into the Henri Bergson's theory on perception will provide a frame for the complex relationship between the kinetic character of the city and the complications of the human subject. If as Agrest suggests, architecture has since the emergence of the capital city lost its object,<sup>12</sup> perhaps the unravelling of the city's kinetic character could reclaim it, by redefining within the architecture of the city not only the object but also architecture's own conditions of subjectivity.

## I THE OLD CITY IS NO MORE

*In vain we force the living into this or that one of our moulds. All the moulds crack. They are too narrow, above all too rigid, for what we try to put into them.*<sup>13</sup>

Henri Bergson, *Creative Evolution*, p. 2

The large scale urban interventions that took effect in particular from the mid-19th century onwards, have commonly established an understanding of the city as the site of prevalence of the formal over the vernacular – at least with regard to the city's built form. The twentieth century has witnessed the most rapidly increasing urbanization in history, leading according to UN officials to the equation of urban and rural population in 2009.<sup>14</sup> But the attraction of the urban – as the dense centrality of population and meaning that it has come to signify from the 20th century onwards –<sup>15</sup> as a place to live in as well as an object of investigation, can be traced in a time much earlier than this moment of its 'officially' established quantitative predominance. The accelerating industrialization of production and the respective technological revolution from the late 18th century onwards, involved significant developments in the areas of production and transportation as well as the advent of a new visual culture that emerged from the development of new technologies of vision. These advancements had a direct impact not only on the pace and habits of everyday city life but also on the ways in which the city as an 'entity' was experienced.

By the mid-nineteenth century, 'modern life', the life of the city dweller, became a central preoccupation of diverse forms of cultural and scientific production. The figure of the inhabitant of the frantic space of the 19th century city is often epitomized by the character of the Parisian *flâneur*.

<sup>12</sup> *Ibid.*, p. 13.

<sup>13</sup> Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Henry Holt, 1911), p. 2

<sup>14</sup> "While in the end it took a slightly longer [compared to UN demographer's original estimation for 2008], by the spring of 2009, most likely in one of China's booming coastal cities or the swelling slums of Africa, a young migrant from the hinterlands stepped off a train or a jitney and tipped the balance between town and country forever". Anthony Townsend, 'Urbanization and Ubiquity', in *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia* (W. W. Norton & Company, 2013), pp. 1-18; p. 1.

<sup>15</sup> The United Nations demographics on Popular Density and Urbanization note the ambivalence of the urban and the rural in the 21st century. However, what they state as the most common distinguishing characteristic, is the scale of the density and concentration of population, as opposed to the initial distinction according to "circumstances of living". See 'Population Density and Urbanization', United Nations Statistics Division. <http://unstats.un.org/unsd/demographic/sconcerns/densurb/densurbmethods.htm#D> [Accessed 15 January 2016]

<sup>16</sup> For Benjamin the *flâneur* is the "explorer" of the crowd: "*The crowd is the veil through which the familiar city is transformed for the flâneur into phantasmagoria*". See Walter Benjamin, 'Paris – Capital of the Nineteenth Century (Exposé of 1939)', in *The Arcades Project* (Cambridge, Mass.: Harvard University Press, 1999), pp. 14-26; p. 21.

As Walter Benjamin illustrates, the flâneur is himself a figure of transition. He is neither at home neither surrendered to the metropolis, but rather conceals the anxiety for the new, by conquering the alienation afforded by the city to the advance of a leisurely attitude of exploration.<sup>16</sup> From 1853 to 1927 Paris was a city undergoing a major transformation under the plans of the then prefect of the Seine, George-Eugene Haussmann. Through the tearing down of the old historic quarters for the construction of the now emblematic large boulevards, a radical transformation of scale took place. This transformation of scale regarded both the built and the animate within the built; the population of the urban. The shift from the narrow alleys to the boulevards, and from the personal vernacular to the regulation of the mass standard led, as Walter Benjamin writes, to the gradual alienation of the individual from their urban surroundings.<sup>17</sup> The overwhelming change of the city seems to have displaced the individual from the immediate experience of the city, to the alienated experience of the city through the crowd, which becomes itself part of the city's new landscape.<sup>18</sup> The aggregation of the expanding urban population, and the radical transformation of the everyday through new forms of production and consumption that were the result of industrialization, were rendering the city unfamiliar, turning it into an overwhelming environment for its inhabitants, as the changing socio-political image of the city was also being expressed in its physical form. In this context of 'modernization', which in fact implied a form of regulation of the city for reasons of not only sanitization but also political and social reform, emerged the character of the *flâneur*.<sup>19</sup>

As Walter Benjamin points out, the standardization of the city created a need for a respective 'standardization' of the population.<sup>20</sup> In this context became popularized the genre of the physiology, a form of pamphlet publication (feuilleton) which, sold on the streets, attempted a re-cognition of the city through a series of reviews of its characters, dispositions and characteristics.<sup>21</sup> Among these characters, the *flâneur* can perhaps be considered as one of the most emblematic of the new urban experience. He was described as an idle stroller, a petit-bourgeois who, detached from the overwhelming city, seeks pleasure in the anonymity of the crowd [fig. 6]. Benjamin, who theorized and thus revived the figure of the *flâneur* in the 1930s, presents the writer Charles Baudelaire himself as a paradigmatic *flâneur*. Through his writings Baudelaire wanders the "Parisian Landscapes" reminiscent of the Old Paris: "My memory teems with pity/ As I cross the new Carrousel/ Old Paris is no more/ The shape of a city/ Changes more quickly, alas! than the heart of a mortal", he writes in *Les Fleurs du Mal* [fig. 7-8].<sup>22</sup> Literary scholar Victor Brombert observes, that in Baudelaire's work the city is revealed as the "domain of the unstable and the transitory [...] the negation of a fixed landscape, eternally submitted to unyielding laws".<sup>23</sup> As Brombert points out, the fascination with the mobile, fugitive character of the city suggests at the same time a nostalgia for the past; for the historicity of the city.<sup>24</sup> The appeal of the transitory contains both an excitement and an anxiety, which are concurrent and mutually dependent, and go hand in hand with the longing of fixity. The city is the manmade that triumphs over the natural by enduring. In this sense it also represents, in the 'modern' form that it is gradually acquiring, a clash between the formal and the informal, between the ordered and the spontaneous. To Baudelaire, the primary activity of the *flâneur* is that of observation. Yet, his seemingly idle strolling goes beyond the pleasure of a 'visual leisure'. It is a spontaneous investigation, a mode of experience and engagement that constitutes a response to the uncanniness of the modern city and its crowd.

Like the 'painter of modern life' the city dweller has first to learn to become an "observer of life" before he can "set himself the task" of representing and in that way reconstructing it for himself.<sup>25</sup>

<sup>17</sup> *Ibid.*, p. 21.

<sup>18</sup> Similar figures emerge in Edgar Allan Poe's novel *Man of the Crowd*, which Charles Baudelaire had translated in French. See Charles Baudelaire, "The Painter of Modern Life", in Jonathan Mayne (ed.), *The Painter of Modern Life and Other Essays* (London: Phaidon Press, 1964), pp. 1-40; p. 7.

<sup>19</sup> The reconstruction of Paris was declared as a way of modernizing and sanitizing the old city. The new wide streets would allow for ample "light and air". Nevertheless, the purpose of this endeavor is traced by scholars such as Walter Benjamin in Haussmann's intention to secure the city from civil war, by eliminating the possibility of the erection of barricades, an event that had been crucial to the unfolding of the 1832 Paris Uprising. See *Ibid.*, p. 23-24.

<sup>20</sup> Benjamin, Walter, 'The Flâneur', in *Charles Baudelaire: A Lyric Poet in the Era of High Capitalism*, trans. Harry Zohn (New York: Verso Books, 1983), pp. 35-66; p. 35-36.

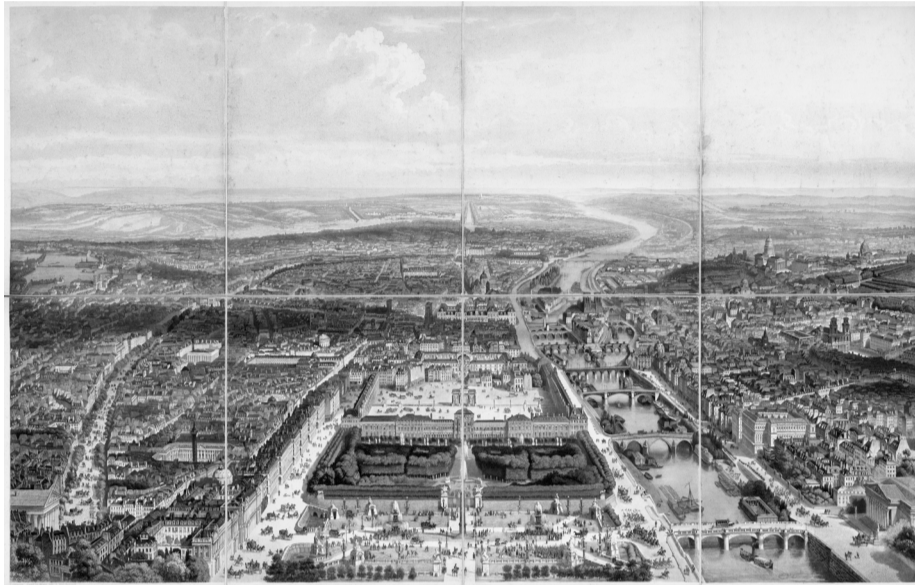
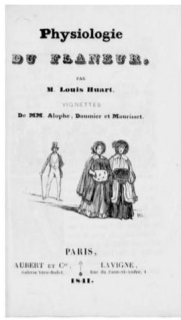
<sup>21</sup> Benjamin traces this idea of standardization in the network of controls introduced upon the structure of the city through measures such as the numbering of houses, but also the censorship laws implemented in literature since 1836. See *Ibid.*, p. 36 and *Ibid.*, p. 47.

<sup>22</sup> Charles Baudelaire, 'The Swan' [*Le sygne*], in *Le Fleurs du Mal* (1861). Available at <http://fleursdumal.org/poem/220> [Accessed 23 January 2016].

<sup>23</sup> Victor Brombert, 'Baudelaire: City Images and the Dream of Stone', *Yale French Studies* 32 (1964), pp.99-100, 102-105; p. 103.

<sup>24</sup> Brombert also writes: "The city combines change and immobility. The landscape of stone, made by man, stands as though in defiance of the 'natural' landscape. The aesthetics of Baudelaire, as represented by his Parisian poetry, thus require "a paradoxical fusion of transitoriness and almost Parnassian stasis". *Ibid.*, pp. 103-104.

<sup>25</sup> See Baudelaire, 'The Painter', p. 15.



The visual interaction with the city, is performed not as a mere act of observation but as an act of inhabitation which demands a close looking. Ultimately, beyond the specificity of the paintings of Constantin Guys and the writings of Charles Baudelaire, the *flâneur*, standing for the modern city dweller, observes for the sake of a new kind of familiarization with the reality of the modern city, and is thus carrying out an, albeit personal, act of representation by reconstructing the image of the city through his observation.<sup>26</sup> His observation, although detached, is highly immersive. He enjoys but also appropriates the estrangement provided by the crowd and the scale of the city, yet in doing so attains a ‘connaissance’, a new way of understanding and relating to the life of the city as the “unstable and the fugitive”.<sup>27</sup> This act of observation becomes thus definitive of both the city and the *flâneur* as the dweller who weaves the city’s image through the immersive participation into the street life of the city. On becoming a “man of the crowd”,<sup>28</sup> the *flâneur* in makes the city his own.

The *flâneur* constitutes the reflection of the new cultures of urban experience that followed the formation of the modern capital, as well of the figure of the city that is itself transforming. On reappropriating in a sense the city through his practice, the *flâneur* can be considered as the last ‘resistance’ to modernity’s mechanistic rationalisation, however, at the same time he is through this resistance the perfect personification of modernity. Faced with the changing city, he is both anxious and astounded.<sup>29</sup> The *flâneur* as the figure of the urban spectator expresses the antithetic tendencies that structure modernity: the excitement for the mobility and novelty of the transitory, and the desire for order derived by the eternal.<sup>30</sup> If Baudelaire defines modernity as “the ephemeral, the fugitive, the contingent, the half of art whose other half is the eternal and the immutable”, it appears that modernity is in many ways also defined by the exact friction between both ‘halves’: the mobile and the immutable. On the one hand modernity emerges from the fascination with the machinist: a newfound degree of power and speed. On the other hand it appears that this increased mobility found its counterpart in the resulting, yet often immobilizing, systematization of the urban, made possible through the mass, totalising interventions on the city’s built form, the administrative and planning regulations introduced, as well as the social implications of the industrialised mass production of commodities. In the transition from the preindustrial city, to the modern metropolis occurred a significant shift upon the status of the city dweller.<sup>31</sup> On one hand, in the former the city dweller stood as a ‘free man’ as opposed to the feudal bondsman, as citizenship meant a certain authority upon the organic growing of the city (through the right of build and at times even to elect governance).<sup>32</sup> On the other hand, in the modern paradigm, the density of population along with the separation of the workplace from the dwelling that industrialisation entailed,<sup>33</sup> marked the alienation of the individual from the city as the place of collective dwelling. It could be said, that this shift reflected in the balance of the shared authority upon the city as form and as institution, between the individual and the state; marking a transition from the collective to the mass, from the vernacular and the small scale to the standard. The discrepancy between stillness and fixity in the city, became far more prominent through the centralised (re)ordering of the built and the amplification of the animate.<sup>34</sup> As the city’s figure became more stabilised through the iconic imagery of large scale “urban renewal” projects, the city dweller experienced a newfound mobility, which was however paired with a detachment from his urban surroundings that created the need for the establishment of a different form of associating with, and hence inhabiting, the city.

Paris’ reconstructive ‘Haussmannization’ was probably one of the most radical projects of urban renewal of the modern era. Although such projects indeed marked a transition from informality to

<sup>26</sup> Drawing from Baudelaire’s figure of the *flâneur*, David Frisby also argues that “the activity of reading the city as text itself emerges out of a desire to know and to analyse that which is new in the modern metropolis”. David Frisby, ‘The Metropolis as Text: Otto Wagner and Vienna’s ‘Second Renaissance’’, in Neil Leach (ed.), *The Hieroglyphics of Space: Reading and Experiencing the Modern Metropolis*. (London and New York: Routledge, 2002), pp. 15-30; p. 15.

<sup>27</sup> “For the perfect *flâneur*, for the passionate spectator, it is an immense joy to set up house in the heart of the multitude, amid the ebb and flow of movement, in the midst of the fugitive and the infinite. To be away from home and yet to feel everywhere at home. [...] He marvels at the eternal beauty and the amazing harmony of life in the capital cities, a harmony so providentially maintained amid the turmoil of human freedom. He gazes upon the landscapes of the great city...”. Baudelaire, ‘The Painter’, pp. 10-11.

<sup>28</sup> The influence of Edgar Allan Poe’s short story the ‘The Man of the Crowd’ (1840) – which Baudelaire had also translated- is prominent in his references to the work in the Painter of Modern Life. See *Ibid.* p. 7.

<sup>29</sup> See Brombert, ‘Baudelaire: City Images’, p. 103.

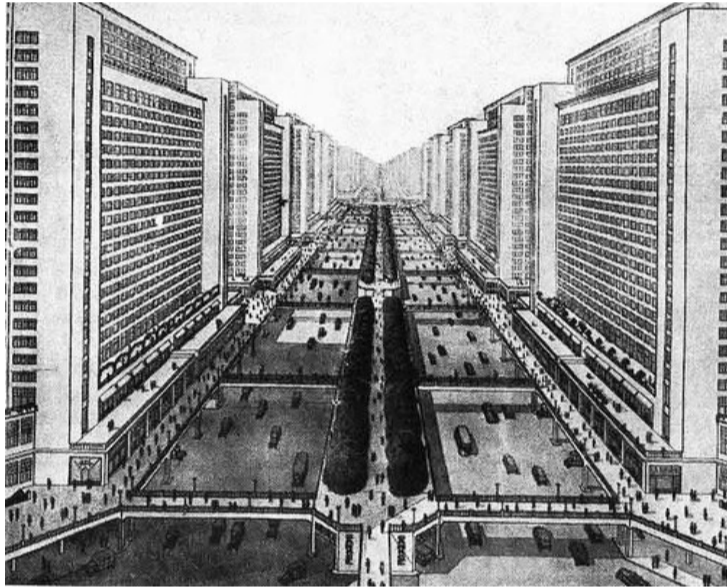
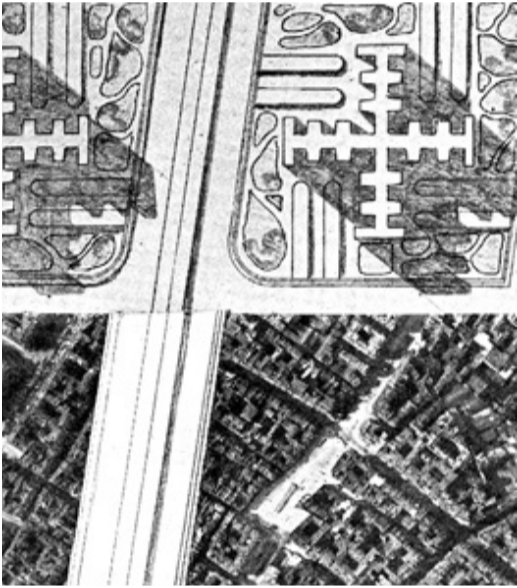
<sup>30</sup> Baudelaire, ‘The Painter’, pp. 3 & 12. See also *Ibid.*, p. 103.

<sup>31</sup> Gideon Sjoberg defines preindustrial cities as communities that “have arisen without stimulus from that form of production which we associate with the European industrial revolution”. Gideon Sjoberg, ‘The Preindustrial City’, *American Journal of Sociology* 60(5) (1955), pp. 438-445; p. 438.

<sup>32</sup> In Medieval England burgesses (the city dwellers of free men of the boroughs) enjoyed fewer taxes, whereas the German proverb “City air will make you free” indicates the status of the German ‘Free Cities’ or the Italian City States of the High Medieval period, which afforded the citizens electoral rights and rights to the commons.

<sup>33</sup> Walter Benjamin, Walter Benjamin, ‘Paris – Capital of the Nineteenth Century (Exposé of 1939)’, in *The Arcades Project* (Cambridge, Mass.: Harvard University Press, 1999), pp. 3-13; p. 21; p. 8

<sup>34</sup> The animate: From Latin *anima*, that which has a soul, the living.



[9] *Plan Voisin*, Le Corbusier (1922)  
[10] *Ville Radieuse*, Le Corbusier (1924)

more systematically ordered expressions of architecture, they cannot be considered to demarcate architectural space as devoid of mobility. For if Florence's Ponte Vecchio market still stands today as an illustration of the kinetic informal, one cannot overlook the imposing presence of the Vasari Corridor, the exclusive austere structure that traversed the city for the sole purpose of the protected movement and observation of the individual ruler, as itself an expression of the city's kineticism.<sup>35</sup> What emerges from both examples of Haussmann's Paris and the dynamics of the Ponte Vecchio, is the impossibility of the separation between architectural space as built form and inhabitation.

## II A NEW VISION

*Matter or mind, reality has appeared to us as a perpetual becoming. It makes itself or it unmakes itself, but it is never something made. Such is the intuition that we have of mind when we draw aside the veil which is interposed between our consciousness and ourselves.*<sup>36</sup>

Henri Bergson, *Creative Evolution*

In the 'modern turn' of the city, architecture assumed a primary role by acting as a reforming tool for the state and capital. As urbanization was accelerating, architecture was conquering its own 'move' to modernity and proposing new visions for the city that suggested even more radical stabilizations of its form. Le Corbusier's *Ville Voisin* (1922) proposal for the already recently reconstructed Paris and the consequent prototype of the *Ville Radieuse* (1924), proposed the construction of an array of high-rise towers that would allow wide areas of vegetation in between [fig. 9-10]. Urban mobility, by then increasingly relying on cars, was to be accommodated in aerial highways that would connect the towers and their interior activities directly. Le Corbusier's vision of the modern metropolis thus takes the alienating effects of the 19th century metropolis a few steps further. The segregation between nature, built form, and activity is in his proposals clear and indisputable. Public and private space become the two extremes of the spectrum between areas of natural landscape and the skyscraper.<sup>37</sup> In *Delirious New York*, Rem Koolhaas counters Le Corbusier's vision with the real metropolis of New York [fig. 11].<sup>38</sup> Koolhaas remarks, that the 'modern city' as envisioned by Le Corbusier was never in fact expressed in the figure of the real city. Despite the similarities with 1930s' New York (Le Corbusier first visited New York in 1935), such as the skyscraper and the canonicity of the grid, as Koolhaas writes, *Ville Radieuse* was promoted by Le Corbusier for its differences, rather than its similarities to New York. To Le Corbusier, Manhattan was always lacking in scale: the skyscrapers were too small and so were the distances between them. One of the critical differences emerging from Koolhaas' contrast between the two cities, Le Corbusier's functionalist ideal "Cartesian" city and the real metropolis of Manhattan, is that the former, in its otherworldly homogeneity, by decongesting as Koolhaas writes the "congestion" of the city,<sup>39</sup> eliminated also the possibility of 'flânerie', and along with it any form of interpretation and appropriation of the city as a whole by its inhabitants. His "mobilization of the Ground",<sup>40</sup> that is, its liberation through the concentration of the built, was in fact refusing the very essence of the urban by immobilising the city as form and as image. In contrast, Rem Koolhaas writes of Manhattan:

<sup>35</sup> The Vasari Corridor (Corridoio Vasariano) is a structure constructed in 1564 on designs by painter and architect Giorgio Vasari. It was built upon request of Cosimo I dei Medici, Grand Duke of Tuscany, to secure his safe traversing of the city from his residence at the Palazzo Pitti to his official seat at the Uffizzi.

<sup>36</sup> Bergson, *Creative Evolution*, p. 272.

<sup>37</sup> Characteristic of this contrast between the absolute control of Le Corbusier's 'Cartesian Skyscraper' and the public green spaces in-between them is the description of the latter as the "jungle (= nature in its purest form)". See Rem Koolhaas, 'Europeans: Buer! Dali and Le Corbusier Conquer New York', in *Delirious New York: A Retroactive Manifesto for Manhattan* (New York: The Monacelli Press, 1994), pp. 235-281; p. 253.

<sup>38</sup> *Ibid.*

<sup>39</sup> "When he first strips, then isolates the Skyscrapers and finally connects them with a network of elevated highways so that automobiles (= businessmen = modern) instead of pedestrians (medieval) can shuttle freely from tower to tower over a carpet of chlorophyll-producing agents, he solves the Problem but kills the Culture of Congestion. He creates the urban non-event that New York's own planners have always avoided (despite their lip service to it): Decongested Congestion". *Ibid.*, p. 257.

<sup>40</sup> *Ibid.*, p. 259.



[11] View of New York (ca. 1930)  
[12] *Flagrant Delit*, Madelon Vriesendorp (1975)

Le Corbusier has correctly perceived that Manhattan has “re-established the pedestrian, him alone”. The essence of Manhattan is exactly that, that it is a Mega-Village enlarged to the scale of a Metropolis, a collection of Super-“Houses” where traditional and mutant lifestyles are simultaneously provoked and sustained by the most fantastic infrastructure ever devised.<sup>41</sup>

The “fantastic infrastructure” that facilitated the programmatic congestion of Manhattan, and defined the way in which the skyscraper Super-Houses did not function in isolation but as the collective entity of the city, was none other than the grid of public space that enabled the congestion between them. Le Corbusier’s “Decongested Congestion” of a ‘Cartesian’ Manhattan was hence according to Koolhaas an “urban non-event”.<sup>42</sup> On the other hand, compared to Le Corbusier’s institutionalised idea of urbanity, by persisting on the ‘paranoid-critical’ multiplicity derived by the congestion of fantasies and desires – the projects and projections that the modern capital as embodied in Manhattan entailed –<sup>43</sup> New York had remained ‘non-modern’.<sup>44</sup> As Yeoryia Manolopoulou argues in her reading of *Delirious New York* (and its accompanying illustrations by Madelon Vriesendorp), the modern city is drawn in them as “the physical sign of the tension between impulse and control” and thus, as an “ongoing portrait of its people” [fig. 12].<sup>45</sup> It appears then to emerge as a negotiation between the chanceful mobility of individual desires and the controlled predeterminations of system(at)ic architectures. Manhattan’s essence is ultimately revealed as deriving from both the canonicity of the grid and the programmatic flexibility of the skyscraper. Like his *City of the Captive Globe*, it is “a city where permanent monoliths celebrate metropolitan instability”.<sup>46</sup>

Indeed, the systematic or the ‘mechanically produced’ represented an appealing potential for any form of production in the heyday of modernity – including art and architecture. Nevertheless, the possibility of reproduction that it entails contradicted the multiplicity that the pursuit of novelty of the ‘modern’ promised.<sup>47</sup> In *The New Vision*, Le Corbusier’s contemporary, artist and Bauhaus educator László Moholy-Nagy, performed a review of the status and the potential of the visual arts under the influence of visual technologies, such as photography.<sup>48</sup> In his review, Moholy-Nagy attempts a systemization of the techniques and expressions of the visual arts beginning with sculpture and concluding with architecture. Drawing from his own experiments in photography, and texts such as the *Realist Manifesto* by Naum Gabo and Antoine Pevsner or the *Futurist Manifesto* by Filippo Tomasso Marinetti, Moholy-Nagy proposes a new comprehension of space that revolves around the concepts of motion, light and time. Moholy-Nagy denounces material volume as the formal expression of space which he expands to include the visual phenomena produced by a combination of speed and light. Volume for him manifests both in the circumscription of mass and the “virtual”, visually perceived contour [fig. 13].<sup>49</sup>

We deny volume as a spatial form of expression: space can as little be measured by a volume as liquid with a measuring stick... [...] we eliminate (physical) mass as a plastic element. Every engineer knows that the static power and power of resistance of an object do not depend on mass... We free ourselves from the thousand year old error of art, originating in Egypt, that only static rhythms can be [art’s] elements. We proclaim that for present-day perceptions, the most important elements of art are the kinetic rhythms.<sup>50</sup>

Moholy-Nagy’s description of architecture overcomes the sharp distinction between the built and the unbuilt, envisioning new forms of building that would incorporate structures made of glass and

<sup>41</sup> Ibid., p. 257. This constitutes Koolhaas’ response to Le Corbusier’s critique on the American skyscraper. According to Le Corbusier the monolithic fixity of the skyscraper contradicts the mobility of the modernity as “the age of speed” while the pedestrian is compared to a louse limited and distressed by the congested artificiality of the skyscraper. See also Le Corbusier quoted in Ibid., p. 251.

<sup>42</sup> Ibid., p. 257.

<sup>43</sup> Koolhaas refers to Salvador Dalí’s method of ‘Paranoid Critical Activity’ to discuss architectural design and the formation of the Manhattan in particular. Ibid.

<sup>44</sup> Le Corbusier quoted in Koolhaas: “*New York is not yet modern*”. Ibid., p. 263.

<sup>45</sup> Yeoryia Manolopoulou, *Architectures of Chance* (London: Ashgate, 2015), pp. 112-113.

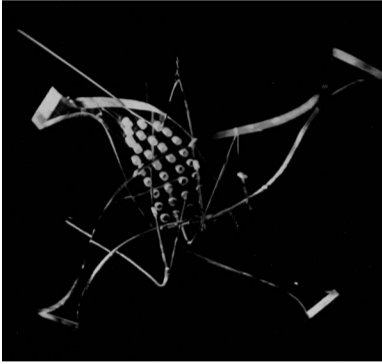
<sup>46</sup> Rem Koolhaas, ‘The City of Captive Globe’, in *Delirious New York: A Retroactive Manifesto for Manhattan* (New York: The Monacelli Press, 1994), pp. 294-296; p. 296.

<sup>47</sup> As David Frisby points out the fleeting, transitory character of modernity is most prominently expressed in Karl Marx’s focus, on his analysis of modernity, on “*the revolutionary new destruction of the past, the ever new destruction of the present, and the ever same reproduction of the ‘socially necessary illusion’ of the commodity form as the barrier to a qualitatively new future*”. Frisby, ‘The Metropolis’, p. 16.

<sup>48</sup> László Moholy-Nagy, *The New Vision: From material to architecture* (New York: Brewer, Warren & Putnam, 1932).

<sup>49</sup> Ibid., p. 134.

<sup>50</sup> László Moholy-Nagy and Alfred Kemény, ‘The Dynamic Constructive system of force’, in Passuth, Krisztina, *Moholy-Nagy* (New York: Thames and Hudson, 1980), p. 290.



[13] *Virtual Volume*, László Moholy-Nagy  
[14-15] *Space Modulator with Perforations and Virtual Volume*,  
László Moholy-Nagy (1940)



steel and, through transparency, would allow for the superposition of views and reflections; this proposition posed as an ocularcentric dematerialization of form already practiced by Moholy-Nagy in his experimentations with light. First, his photograms were proposed as a dematerialised form of painting, then his light modulators proposed an “immaterial” practice of kinetic sculpture [fig. 14-15]. Architectural space, he predicts, is to be marked by a shift “from closed to open space, from restricted inner space to absolute space”,<sup>51</sup> that is, from a materiality of the “building material” the “fluctuating play of forces” of spatial relations.<sup>52</sup> From the realm of enduring materiality, the city is to be transformed to the realm of the visually experienced immaterial (mainly manifested in for Moholy-Nagy in impressions of light).

Beyond his fascination with the potential that new technologies offered for the representation of space, what Moholy-Nagy’s approach suggested was in fact a clearly anthropocentric attitude towards the understanding of space and artistic production. Envisioning an art that would facilitate social change, Moholy-Nagy placed humans in the epicentre of the production of art and architecture, announcing them the primary agents of space:

If we want to understand correctly the mode of human expression and shaping in art and in other related domains, and if we want to achieve progress therein, we have to examine the contributing factors: namely, man himself as well as the means he applies in his creative activity. Man as construct is the synthesis of all his functional apparatuses, i.e. man will be most perfect in his own time if the functional apparatuses of which he is composed – his cells as well as the most sophisticated organs – are conscious and trained to the limit of their capacity.<sup>53</sup>

In this statement Moholy-Nagy points out not only the agency of human experience but also the multiplicity involved in the formation of this experience, placing an emphasis on the relations between part and whole. Moholy-Nagy also brings to the fore the issue of the articulation of space – what he defines as the “space-time problem”, as a twofold condition: the physical level involving the agency of the mobility of perception, which he defines as the “vision in motion”, and the psychological level, which involves the ‘envisioning’ of feelings.<sup>54</sup> The mere representation of objects or the physical description of motion becomes secondary to the “visual force and emotional wealth of *relationships* [my italics]” that nestle within space: in its materials, in its inhabitants and in the invisible relationships that occur between them.<sup>55</sup> Human beings are considered as part of this space which appears to expand from the physicality of objects to their psychological and emotional depths. Echoing the wayfaring of the *flâneur* in the space of the city, Moholy-Nagy writes: “The experience of space is a psychological need... an organic component of living. There is a ‘biological’ connection between perceiving and dwelling”.<sup>56</sup> To this end, Moholy-Nagy proposed the fulfilment of an equilibrium between “the in and the out” through the achievement of organic unity between subconscious, body, and space, rather than the creation of formulae that would “resolve the intuitive factors of human expression into predictable and manageable elements”.<sup>57</sup>

Although theories of the interrelations of space-time had by then already emerged in the works of scientists such as Henri Poincaré, Hermann Minkowski and Albert Einstein,<sup>58</sup> the understanding of space and time through the fluid continuity of relations between the animate (inhabitants) and the inanimate (construction materials), and the bridging of the physical and the psychological through

<sup>51</sup> Moholy-Nagy, *The New Vision*, p. 138.

<sup>52</sup> *Ibid.*, p. 6.

<sup>53</sup> László Moholy-Nagy, ‘Production-Reproduction’, in Passuth, Krisztina, *Moholy-Nagy*, p. 289. [originally published in *De Stijl* 7 (1922) pp. 97-101].

<sup>54</sup> Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobald and Company, 1947), p. 115.

<sup>55</sup> *Ibid.*, p. 114.

<sup>56</sup> Moholy-Nagy, *The New Vision*, p. 148.

<sup>57</sup> “Harmony does not abide in an esthetic formula but in the organic and uninterrupted functioning of each entity”. *Ibid.*, p. 149.

<sup>58</sup> Herman Minkowski’s work drew on Albert Einstein’s theory of relativity as proposed in his 1905 paper ‘On the Electrodynamics of Moving Bodies’, see: Albert Einstein, *The Principle of Relativity* (1905), trans. George Barker Jeffrey and Wilfrid Perrett (London: Methuen and Company, 1923). <http://www.fourmilab.ch/etexts/einstein/specrel/www/> [Accessed 25 April 2013]. See also, Herman Minkowski, *Space and Time: Minkowski’s Papers on Relativity*, trans. Fritz Lewertoff and Vesselin Petkov (Montréal: Minkowski Institute Press, 2012). <http://www.minkowskiistitute.org/mip/> [Accessed 25 April 2013]

this connection is more akin to the ideas that had already emerged in the work of French philosopher Henri Bergson that seems most prominent in Moholy-Nagy's attitude towards the experience and representation of space and motion.<sup>59</sup> Bergson's oeuvre is throughout concerned with the concept of a continuous and heterogeneous duration (*la durée*), and the discrepancies and associations that are revealed between the expression of duration around and within human consciousness and the functioning of perception. Through his work, Bergson contradicts both Kant's concept of space as an absolute, and, later, the scientific theory of general relativity.<sup>60</sup> As opposed to the absolute of a space-time continuum, Bergson's duration represents a ubiquitous organic – that is, tied to an understanding of *durée* as a continuity of action between animate and inanimate matter – flow of temporality, in Gilles Deleuze's words, "a case of 'transition', of a 'change'", which is primarily experienced on a psychological level.<sup>61</sup> This idea of change as temporal and qualitative phenomenon rather than purely spatial, introduces the concept of motion as an expression of movement that does not simply refer to a displacement, a change of locality, but also a change that regards physical matter as much as emotional affect.

Both Moholy-Nagy and Bergson bring together these two types of movement. Bergson achieves this connection through a division: the distinction between space and time by means of duration. Duration represents a kind of temporal qualitative change that human perception is uncomfortable in perceiving:

But we find it extraordinarily difficult to think of duration in its original purity; this is due, no doubt, to the fact that we do not endure alone, external objects, it seems, endure as we do, and time, regarded from this point of view, has every appearance of a homogeneous medium. [...] if we try to determine the exact part played by the real and the imaginary in this very complex process, this is what we find. There is a real space, without duration, in which phenomena appear and disappear simultaneously with our states of consciousness. There is a real duration, the heterogeneous moments of which permeate one another; each moment, however, can be brought into relation with a state of the external world which is contemporaneous with it, and can be separated from the other moments in consequence of this very process.<sup>62</sup>

According to Bergson, our perception proceeds through a mechanistic logic of discontinuities, by perceiving processes at immobile intervals rather than continuous movements, in a selective process of objectification. Our mind substitutes continuity for discontinuity and heterogeneity for homogeneity and experience is revealed as an act of representation that produces composites of duration and space, but which is then unable to separate between the two:

Of becoming we perceive only states, of duration only instants, and even when we speak of duration and of becoming, it is of another thing that we are thinking. [...] It consists in supposing that we can think the unstable by means of the stable, the moving by means of the immobile.<sup>63</sup>

The discrepancy between the continuous flow of duration and the discontinuity of our perception is then compensated by the spatialization of time through the projection of its continuity onto space as independent successive images. Time is therefore abstracted as a homogeneous fourth dimension of space. In this way qualitative duration, or "lived time", is perceived as measured, spatialized time

<sup>59</sup> Although there is no clear evidence that Moholy-Nagy was directly influenced by Bergson, the connection between the two emerges also in the work of John Cage, while, as Martin Hammer and Christina Lodder, write, the admiration of his contemporary artists such as Naum Gabo was known. See Wayne Joseph, Branden, 'White on White', in *Random Order: Robert Rauschenberg and the Neo-avant-garde* (Cambridge Mass.: MIT Press, 2003), pp. 25-72; p. 49-52.

<sup>and</sup> Martin Hammer and Christina Lodder, 'Dematerialising Sculpture: Methods and Motives', in Martin Hammer, Christina Lodder, Sebastiano Barassi and Geraldine A Johnson (eds.), *Immaterial: Brancusi, Gabo, Moholy-Nagy* (Cambridge: Kettle's Yard, 2004), pp. 47-70; p. 52-52.

<sup>60</sup> Henri Bergson in fact begins *Time and Free Will* with a criticism on Kant, writing on him and the empiricists: "The authors of these theories seem indeed to have put aside the problem of the nature of space, in order to investigate simply by what process our sensations come to be situated in space and to be set, so to speak, alongside one another: but this very question shows that they regard sensations as inextensive and make a radical distinction, just as Kant did, between the matter of representation and its form". Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (1889), trans. F.L. Pogson (New York: Dover Publications, 2001). p. 94.

<sup>61</sup> Gilles Deleuze, 'Duration as Immediate Datum', in *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1991), pp. 37-49; p. 37.

<sup>62</sup> Bergson, *Time and Free Will*, p. 110.

<sup>63</sup> Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Henry Holt, 1911), p.273.

that proceeds in discrete instances rather than continuity. The spatialization of duration is only a localized perceptive illusion, or rather a symbolic representation. Nevertheless, space, bound as part of a unified organic *Whole* itself, endures – that is, it is found in a constant state of becoming.

Bergson's theory offers an understanding of the universe as actualization by means of multiplicity and continuity: a constant becoming. Multiplicity does not suggest here merely a multiplicity of parts or units, a quantitative material multiplicity. It also involves a qualitative multiplicity, one that relates to states of consciousness. Considering this the concept of multiplicity suggests not a sum of parts but the formation of a composite where the whole exceeds the sum of the parts while at the same time the part exceeds the whole. This composition results in "lived experience", which derives as the combination of duration and space. Although distinct, the two endure together. The experience of space involves, according to Bergson, a *qualitative* and therefore *inextensive* – that is, not defined through terms of spatial extensity – intervention of the mind, as opposed to the phenomenologist (or empiricist) idea of the "alliance of sensations".<sup>64</sup> Space thus is formed as the composite of both extensity and duration.<sup>65</sup> This understanding of space in relation to time as opposed to pure extensity not only introduces the agency of perception in the formation of space but also sheds new light on the understanding of matter. Similarly to Moholy-Nagy, Bergson posits that matter is not defined by fixity and impenetrability, which are characteristics of extensity.<sup>66</sup> Matter also endures in a perpetual state of change, and form is described in Bergson's terms as "a snapshot view of a transition".<sup>67</sup> In this process of becoming, individuals are presented as 'privileged bodies,' as the animate centres of indeterminacy that through their 'actions' define form across the changing of matter. What we as humans then perceive as space, the space that encompasses the space of the city or architecture is, according to Bergson, not only in constant motion but also in a motion that is produced by action. The individual emerges then as an organizer of reality through the juxtaposition of states and the reconstitution of 'passages' with ends. Through the static, we perceive the kinetic; through changing, we persist and thus dwell in space. Bergson's correlation of matter and consciousness challenges the typical primacy of the visual within perception. Even when performed by means of looking, perception is never purely visual, a connotation that appears to refer to the theoretical immaterial intangibility of an image, but expands from, or rather bridges, the realm of the mental and the realm of material sensations.

Through this conjunction of the kineticism of space with the agency of human experience, it is not then hard to understand how the city may, as Manolopoulou writes, in a sense "resembles its people", by emerging as a projection of their fantasies and desires, not only with regard to design but also to the modalities of experience and representation.<sup>68</sup> This idea suggests a kind of kineticism, a fluidity that – particularly considered through Koolhaas' reading of Manhattan that Manolopoulou refers to – may derive from the animate – as Bergson writes "as though by a mirror – yet is only actualised when it comes to the city, on a political, economic, or purely social level, in the 'leeway' provided by the 'infra-structure' (physical and ideological) that the collective is provided with (such as, for instance, the urban grid). The city then 'resembles' its people at varying degrees, by being formed out of the very structures that they produce. These are structures that, on one hand, remain as contingent as the fleeting character of modernity: "All that is solid melts into air, all that is holy is profaned...".<sup>69</sup> On the other hand, they range from the individual to the collective and the authoritative. In the unfolding of the urban, the inhabitants of the city can be considered both as the observers and as partaking in the spectacle at play. However, what appears to have changed through the violent inflation of the city

<sup>64</sup> *Ibid.*, p. 95.

<sup>65</sup> "We must thus distinguish between the perception of extensity and the conception of space: they are no doubt implied in one another, but, the higher we rise in the scale of intelligent beings, the more clearly do we meet with the independent idea of a homogeneous space". *Ibid.*, p. 97.

<sup>66</sup> *Ibid.*, p. 90.

<sup>67</sup> Bergson, *Creative Evolution*, p. 302.

<sup>68</sup> "It is strange how the city resembles its people. Madelon Vriesendorp's paintings presented in Rem Koolhaas's *Delirious New York* capture this theme implicitly. In *Flagrant delit*, Manhattan is depicted as a city of faces. The buildings are human portraits, 'looking' through a large window at a bedroom interior where the Chrysler and the Empire State Buildings are painted as strange as strange anthropomorphic towers, lying in bed together". Manolopoulou, *Architectures of Chance*, p. 112.

<sup>69</sup> Karl Marx, 'The Manifesto of the Communist Party' (1848), in *Marx/Engels Selected Works I* (Moscow: Progress Publishers, 1969) pp. 98-137; p. 124.

scale and the standardizations of urban living imposed with the advent of modernity, are the ways in which their agency is introduced into the city's matter and image: a shifting of mobility from the systemic built to the animate individual.

### III THE RESTLESS EYE

*I am an eye. A mechanical eye. I, the machine, show you the world as only I can see it. Now and forever I free myself for from human immobility.*<sup>70</sup>

Dziga Vertov

If modernist artists such as Moholy-Nagy, inspired by photography and x-ray vision, envisioned the enrichment of the immediate experience of the city by means of an architecture that would take on the full physical and psychological potential of human perception, the filmic perspective on urban experience would instead challenge this potential by introducing the machine further into the daily processes of perception. Henri Bergson's theory of duration is closely related to the modalities of cinema. In his 1907 essay 'Creative Evolution', Bergson engages with cinema as a model for perception. In the cinematograph Bergson sees not the expansion of, but the replication of human perception:

Such is the contrivance of the cinematograph. And such is also that of our knowledge. Instead of attaching ourselves to the inner becoming of things, we place ourselves outside them in order to recompose their becoming artificially. We take snapshots, as it were, of the passing reality, and, as these are characteristic of the reality, we have only to string them on a becoming, abstract, uniform and invisible, situated at the back of the apparatus of knowledge, in order to imitate what there is that is characteristic in this becoming itself... Whether we would think becoming, or express it, or even perceive it, we hardly do anything else than set going a kind of cinematograph inside us.<sup>71</sup>

Contrary to Bergson's identifying of the cinematic process with the mechanism of human visual perception, Soviet cinematographer Dziga Vertov saw in cinema the revealing of perception's limitations, and an opportunity for the mechanical expansion of the latter, from the mere observing to the 'constructing' of reality:

I am kino-eye. I am a builder. I have placed you, whom I've created today, in an extraordinary room which did not exist until just now when I also created it. In this room there are twelve walls shot by me in various parts of the world. In bringing together shots of walls and details, I've managed to arrange them in an order that is pleasing and to construct with intervals correctly, a film-phrase, which is the room.<sup>72</sup>

Vertov's masterpiece, the 1929 silent documentary film *Man with a Movie Camera*, brings cinematic observation to its primal subject: the city. *The Man with a Movie Camera* takes a look in the day of the

<sup>70</sup> Dziga Vertov, 'The Council of Three' (1923), in Annete Michelson (ed.), *Kino-eye: The Writings of Dziga Vertov* (Berkeley and Los Angeles: University of California Press, 1992), pp. 14-21; p. 17.

<sup>71</sup> Bergson, *Creative Evolution*, p. 306.

<sup>72</sup> Dziga Vertov, 'The Council of Three', p. 17-18.

Soviet city through the masterful observation of the 'kino-eye': an almost cybernetic fusion between the man and his camera [fig. 14]. Inspired by the physical and social dynamics of industrialised Soviet everyday life, Vertov finds in cinema the potential of a 'precise' study of movement that he can only succeed through the focus on the "real energy" of life.<sup>73</sup> Vertov's cinema is clearly modernist, almost purist in its principles: "Radical necessity, precision, and speed are the three components of movement worth filming and screening", he writes.<sup>74</sup> Rationalist, effective and precise, Vertov's cinema does not aspire to imitate the 'inadequate' human eye but instead grasps at the opportunity to compensate for the "imperfections" of man by reducing him/her to pure vision and movement.

The *Man with a Movie Camera* presents a celebration of movement in the city life, yet not by means of a 'realist' narrative. As Judith Mayne illustrates, the film presents a metanarrative of both the socialist society and the semiotic function of cinematic forms by laying bare the commonly naturalised process of cinematic production/construction, the labour of the cinematographer, which is embedded into the film's narrative as itself part of the social production and movement of the Soviet city. As Mayne writes, the film evolves into an analysis of movement. But it is equally an analysis of vision as movement. As the movement it engages with ranges from the daily life of the city's population, to the labour of the cameraman, the film editor, and even the spectators of the film in the theatre, the film points out the alternation of visual perspectives and challenges the centrality of human vision [fig. 16-20].<sup>75</sup> The uncovering of the technique breaks the illusion of identification between the cinematographer and the spectator dispersing subjectivity among multiple vantage points.<sup>76</sup>

In this manner, Vertov's film illustrates paradigmatically the transition from cinematography to cinematography,<sup>77</sup> that is, from a mere recording of motion to a representation whose reality is inextricably welded to its processes. Judith Mayne observes that the film is organized "around an opposition between perception and construction".<sup>78</sup> The demonstration of both the process and the effects of editing and filming as part of the film's narrative, reveal a reciprocity between reality and representation/narration. The city, not the film, is now edited, animated or frozen still, at the will of the inventive agency of the editor-spectator, as emancipated by the machine, while the audience, identifies through the camera with the labouring population of socialist society, and the *Man with a Movie Camera* as one of them. The 'looking' that emerges from the negotiations between filming, editing and spectatorship is itself presented as an act of labour, bringing together perception and production. In Vertov's view of Soviet Moscow, the movement of the city becomes a celebration, not of a 'reconciling' leisure, but of labour. Cinema, the 'looking' of the kino-eye, signifies there a representation that is constantly in the making at the intersection of a purist realism and mechanical transformations of juxtaposition. As Mayne proposes, the production of the cinematic image through processes of montage brings out the role of cinema as ideology and social practice.<sup>79</sup>

In his books on Cinema, Gilles Deleuze approaches cinema not as ideology but as a system capable of producing relevant concepts. He adopts Bergson's concept of the image to develop around the paradigms of the 'time-image' and the 'movement-image',<sup>80</sup> a classification of cinematographic concepts and through that, a semiotic taxonomy of the image.<sup>81</sup> Deleuze collates Bergson's images with the semiotics of American logician Charles S. Peirce, in order to interpret through the 'pre-verbal signs' of cinematic imagery the emergence of a conceptual discourse.<sup>82</sup> This imagery, Deleuze considers – respectively to Henri Bergson's notion of 'pure perception' – as 'pure semiotics'. Although

<sup>73</sup> Dziga Vertov, 'The Council of Three', p. 20.

<sup>74</sup> Dziga Vertov, 'We: Variant of a Manifesto' (1922), in Annete Michelson (ed.), *Kino-eye: The Writings of Dziga Vertov* (Berkeley and Los Angeles: University of California Press, 1992), pp. 5-9; p. 8.

<sup>75</sup> Judith Mayne, 'Kino-Truth and Kino-Praxis: Vertov's *Man with the Movie Camera*', in David Allen and Teresa de Lauretis (eds.), *Cine-Tracts 2* (1977), pp. 81-91; p. 82.

<sup>76</sup> *Ibid.*, p. 83.

<sup>77</sup> On cinematography, see André Gaudreault, Tim Barnard and Jacques Malthête, *Film and Attraction: From Kinematography to Cinema* (Urbana: University of Illinois Press, 2011).

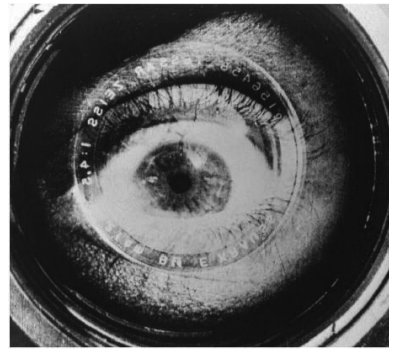
<sup>78</sup> Mayne, 'Kino-Truth', p. 86.

<sup>79</sup> *Ibid.*, p. 81.

<sup>80</sup> Bergson, *Matter and Memory*.

<sup>81</sup> Gilles Deleuze, *Cinema 1: The Movement-Image* (1983), trans. Hugh Tomlinson and Barbara Habberjam (London and New York: Continuum, 2005), p. ix.

<sup>82</sup> *Ibid.*, p. ix.



[16-20] Stills from *The Man With A Movie Camera*, Dziga Vertov (1929)



he first proposes this in *The Movement-Image*, he further clarifies his positioning of cinema's semiotic function in relation to Pierce's theory of semiotics in his latter book on cinema, *The Time-Image*.<sup>83</sup> As Deleuze remarks, semiology proceeds through a 'double transformation', which involves the reduction of the image to the analogical utterance, and the codification of the signs into a 'digital' structure. Narrative then emerges between the analogical and the digital. Deleuze then points out that the assimilation of cinema to such a language system is only an approximation that introduces false appearances through the analogical consideration of images as utterances.<sup>84</sup> To the semiotic model of resemblance and codification, Deleuze then proposes – through Bergson's understanding of the movement-image as belonging to the object – the notion of modulation:

By themselves, resemblances and codifications are poor methods; [...] It is modulation that nourishes the two moulds [resemblance and code] and makes them into subordinate means, even if this involves drawing a new power from them. For the modulation is the operation of the Real, in so far as it constitutes and never stops reconstituting the identity of the object.<sup>85</sup>

Deleuze concludes that rather than a language, cinema is the 'system' of this modulating movement image, which proceeds through processes of differentiation and specification. Although 'utterable', this system is according to Deleuze independent from language, yet – due to its semiotic function – liable to transformations introduced by a language system.<sup>86</sup>

In the production of post-war cinema, Deleuze sees a development parallel to the conceptual practice of modern philosophy: a transition from the movement-image to the time image, from actuality to consciousness. In a reversal of Bergson's explanation of the functioning of perception, this transition suggests in cinema a practice which is experienced through pure duration instead of the representation of time through spatialized movement: the articulation of time overtakes space. Both the time and the movement image are Deleuze's instantiations of duration. In Bergson's terms images are found somewhere "between the thing and the representation", between the virtual and the actual.<sup>87</sup> They are 'passages' themselves that facilitate the organic unity of mind and matter as objectified processes of change: in Deleuze's terms, images are themselves the modulation of the object. Deleuze's time-image represents the continuous flow of duration, it is itself a becoming, a difference. The movement-image, on the other hand, constitutes time spatialized as an interval, which creates effects of discontinuity.

Cinema acquires a less 'active' and more 'semiotic' function through the implementation of time-images that produce meaning by proceeding through the 'illustration' of psychological states rather than actions.<sup>88</sup> Although these images may represent actions, their semiotic value emerges from their function as processes of recognition, recollection or dreaming, processes that, by approaching the virtual rather than the actual, produce difference.<sup>89</sup> These images are thus always more than themselves: functioning as signs they are not fixed but open to the creation of relationships of context and interpretation. Rather than juxtaposition, they allow interpenetration.<sup>90</sup> Cinema then no longer imitates a perception guided by consciousness, but through its representations creates new present consciousness by blurring the distinction between actuality and virtuality. By producing new forms of images, new expressions of "direct time" cinema shifts from being a replica of the apparatus of human knowledge to becoming "the organ for perfecting the new reality".<sup>91</sup>

<sup>83</sup> Gilles Deleuze, 'Recapitulation of Images and Signs', in *Cinema 2: The Time-Image* (1985), trans. Hugh Tomlinson and Robert Galeta (London and New York: Continuum, 2005), pp. 24-41.

<sup>84</sup> *Ibid.*, p. 26.

<sup>85</sup> *Ibid.*, p. 27.

<sup>86</sup> *Ibid.*, p. 28.

<sup>87</sup> Henri Bergson, *Matter and Memory* (1896), trans. Nancy Margaret Paul and W. Scott Palmer (London: George Allen and Unwin, 1911 [1896]), p. xiii.

<sup>88</sup> According to Deleuze movement-images are defined by perceptions, actions and affects that occur from the movement of bodies, thus constituting respective sub-categories of movement-images. See Deleuze, *The Movement-Image*.

<sup>89</sup> These processes and the associations between them he discusses in Gilles Deleuze, 'From Recollection to Dreams: Third Commentary on Bergson', in *Cinema 2: The Time-Image* (1985), trans. Hugh Tomlinson and Robert Galeta (London and New York: Continuum, 2005), pp. 42-65.

<sup>90</sup> The contrast between these two notions suggests for Bergson the distinction between quantitative and qualitative (respectively) concepts of multiplicity within duration. See Bergson, *Time and Free Will*, p. 121-123.

<sup>91</sup> Deleuze, *The Movement-Image*, p. 8.

As noted, Deleuze traces this turn, which he particularly notes in the work of Japanese director Yasujiro Ozu, and later in films of Italian neorealism, around the Second World War:

Why the Second World War was taken as a break? The fact is that, in Europe, the post-war period has greatly increased the situations which we no longer know how to react to, in spaces we no longer know how to describe. These were 'any-spaces-whatever', deserted but uninhabited, disused warehouses, waste ground, cities in the course of demolition and reconstruction. And in these any-spaces-whatever a new race of characters was stirring, kind of mutant: they saw rather than acted, they were seers.<sup>92</sup>

It appears that the violence of war and the effects of warfare, which were both physical and emotional, led to a reshuffling of the modalities of the sensory-motor schema – that is, of the way of being in and experiencing place. The violence of warfare is incomparable – however it could be said that the shock brought upon the relationship between the individual and the ways in which s/he related to place at the time had an effect similar to the processes of alienation and reengagement that emerged since the early times of industrialization and urbanization: once again, the shattering of the 'dwelling' shocks the very existence of the dweller. Of course, the two phenomena cannot be considered independently, as the effects of modernity were still constant and ongoing at the time of the war. Nevertheless, this "new reality" of human existence was imprinted in painting, sculpture, and photography, but it was probably cinema that, through its inherent association with time and movement, and its close connection with the mechanisms of human perception, best articulated it by making visible, as well as producing, that which was until then only experienced.<sup>93</sup> In this context, cinema was at the time not constituting ideology, but through producing or perhaps *practicing* as a shared consciousness, it was at the same time establishing its impact on the cultivation of a new popular culture.

The impact of cinema as ideology and social practice is also found in Jonathan Beller's concept of the cinematic mode of production (CPM). What Beller's concept of CPM proposes, is that cinema and its "successors", such as television and the world wide web, have implemented a new way of conducting an often unconscious and ubiquitous, value-productive, visual labour, which has resulted in the reformulation of perception.<sup>94</sup> As a result, the concept of the "image" stands now as a signifier of these cinematic social relations of production. These remarks bring us back to the interrelation between the spatial and the psychological. Moreover, in accordance with the function of the gaze as a reciprocal interaction between subject and object,<sup>95</sup> they describe a power relation that shifts from the subject to the object and vice versa. Within this reciprocity we can recognise Beller's initial proposition that "the unconscious emerges from cinema", as much as the proposition that cinema also emerges from the unconscious.<sup>96</sup> Just like the time and movement images of perception emerge from consciousness, cinema in turn also produces consciousness through the effects of montage.

Apart from the 'liberation' of the eye from the constraints of space and time that the humanist body imposes, what cinematography offered in the long run, was a new way of representing perception, through the active deconstruction and re-composition of the visual. The linking together of spatially and temporally disparate shots creates connections beyond scale, time and topography, and montage offers the ground for the creation of new realities. As a 'mechanical' apparatus of knowledge,

<sup>92</sup> Gilles Deleuze, 'Preface to the English Edition', in *Cinema 2: The Time-Image* (1985), trans. Hugh Tomlinson and Robert Galeta (London and New York: Continuum, 2005), p. xi.

<sup>93</sup> As instantiations of this in the arts we can consider, among others, works such as Pablo Picasso's *Guernica* (1937), or the almost dematerialised sculpture of Alberto Giacometti.

<sup>94</sup> Jonathan, Beller, 'KINO-I, KINO-WORLD: Notes on the Cinematic Mode of Production', in Nicholas Mirzoeff (ed.), *The Visual Culture Reader: Second revised edition* (New York and London: Routledge, 2002), pp. 60-85.

<sup>95</sup> See Jacques Lacan, 'The Split between the Eye and the Gaze' (1864), in *The Four Fundamental Concepts of Psychoanalysis*, trans. Alan Sheridan (New York: Norton 1978, pp. 67-78.

<sup>96</sup> Beller, 'The Cinematic', p. 69.

cinema produces new consciousness that is common to the maker and the observer as a maker in their own right. Beller's expansion of the cinematic to a range of media including radio, television and the internet, which he presents as "deterritorialized" factories of a visual labour, suggest that these modes of virtuality operate with regard to the structuring of consciousness and ideology in a manner similar to that of cinema. This further proposes that the modes of 'social relations' that Beller defines through the cinematic, transform visual perception from immediate experience into a form of 'alienated labour', which is not only externally structured but also dissociated from 'natural language'.<sup>97</sup> Looking is no more constructed by the viewer but also by the medium. It is no more a conquering of the real, but a never conquering. Visuality then, defined by Beller as "the semi-automatization of the visual" – that is, an alienated form of visual experience –<sup>98</sup> registers as the primary mode of experience. In Beller's understanding of a 'cinematized' society language is thus rendered inadequate: 'natural' notions of language become inadequate when the appearance and experience of reality is overwhelmed, as well as produced out of the proliferation of imagery through cinematic modes of representation that bypass the linguistic model of representation.<sup>99</sup> Thus occur instantiations of experience that are classified as "ineffable", "illegible" or "immaterial", through the saturation of signification by the visual and the marginalization of language.<sup>100</sup>

The dissociative effects of 'visuality' as defined by Beller, can be considered through Deleuze's observations on post-war modes of spectatorship and the transition of the viewer from an 'actor' to a mere 'seer', from experiences of space to experiences of duration.<sup>101</sup> The growing impact of produced visuality and the effects of abstraction and simulation that it brought upon the unfolding of social relations within the urban can be also traced in the practices and critique of the Situationist International, and particularly the work of Dutch artist Constant Nieuwenhuys.<sup>102</sup> Initially, the Situationists proposed the *psychogeographic* re-interpretation and re-appropriation of the city through the practice of the *derive*.<sup>103, 104</sup> This new form of 'flânerie', aimed at overcoming the repression and social manipulation imposed through the psychological effects of the urban, through strategic but playful walking tours that would subvert the normative use of urban spaces. Considering architectural functionalism as a repressive mechanism that was concerned with the enhancement of productive labour rather than the well-being of the people, the Situationists further asserted the need for a new form of architecture that would oppose the "unimpressive" homogeneous functionalist architecture of modernity and focus instead on the participatory construction of "situations and atmosphere".<sup>105</sup> This vision found its paradoxical embodiment in Constant's proposition for New Babylon. A model for the continuous global city of a future of total urbanization, New Babylon envisioned a world where humans, no longer involved in the – by then – automated production, would be able to engage with the leisurely activity of creating their own spaces in an endless process of spatial improvisation. Regaining control over space, the inhabitants of the city would regain freedom. To recall Bergson's idea of freedom, they would slip from the fixity of space to the mobility of endurance, however this endurance appeared to be largely displaced.<sup>106</sup> The paradox of New Babylon lies in the fact that the architecture of the future city is drawn there almost as non-architecture: as pure being in a space that dissolves to give way to the social [fig. 21]. Placing emphasis on the psychological impact of space, this urbanism approaches space through an imaginary that clearly prioritizes the virtual.

The contradiction that emerges in the situationist approach to city and its architecture illustrates the tension that emerges in the normative perceptions of dualisms such as chance and control, fixity and mobility and consequently mind and matter. On one hand, situationist practices emerged as

<sup>97</sup> Ibid., p. 63.

<sup>98</sup> Ibid., p. 63.

<sup>99</sup> Beller writes on the marginalization of language: "Images now allow for the paradox that the world states itself before human language. To register the crisis that the proliferation of images poses for language and thus for the conscious mind would be to agree with Godzich that today language is outpaced by images. [...] Bodies become deprived of the power of speech. This image-consciousness or, better, image/ consciousness participates in the rendering of an intensified auratic component, theorized as 'simulation' or 'the simulacrum', to nearly every aspect of social existence in the technologically permeated world". Beller, *Ibid.*, p. 68.

<sup>100</sup> "The city today is experienced as a field of ineffable effects suspended in an ether of immaterial signs". Stan Allen, 'Contextual Tactics', in *Points+Lines: Diagrams and Projects for the City* (Princeton Architectural Press, 1999), pp. 10-17; p. 14.

<sup>101</sup> Gilles Deleuze, 'Preface', *The Time-Image*, p. xi.

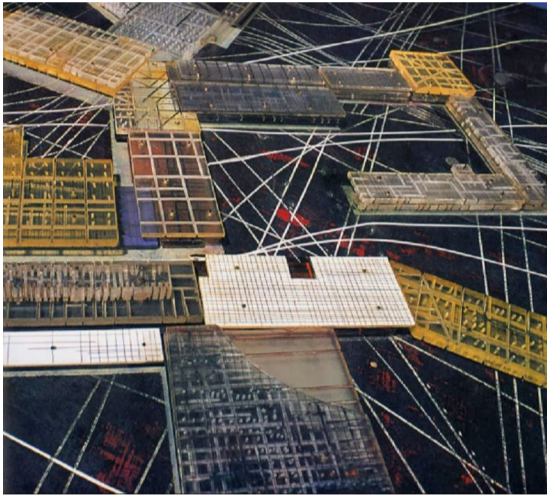
<sup>102</sup> "[...] the most abstract of the senses, and the most easily deceived, sight is naturally the most readily adaptable to present day society's generalized abstraction". Guy Debord, *Society of the Spectacle* (New York: Zone Books, 1994 [1967]), p. 18

<sup>103</sup> Guy Debord, 'Theory of the Dérive', in Ken Knabb (ed.), *Situationist International Anthology* (Berkeley: Bureau of Public Secrets, 2006), pp. 62-66.

<sup>104</sup> Debord wrote to Constant in January 1957: "[...] this movement will really be founded on psychogeography, the construction of ambiances, behavior and architecture". Mark Wigley, *The Activist Drawing: Retracing Situationist Architectures from Constant's New Babylon to Beyond* (New York: Drawing Center, 2001), p. 15.

<sup>105</sup> See the text of Constant's unpublished 1960 lecture, 'Unitair Urbanism', in *Ibid.*, p. 9.

<sup>106</sup> As Constant writes, the aim of New Babylon would be "the construction of concrete situations" that would not however be as "immobile" as "traditional buildings". *Ibid.*, p. 17.



- [21] *Entrance of the Labyrinth*, Constant Nieuwenhuys (1972)  
[22] *New Babylon*, 'Gele Sector', Constant Nieuwenhuys (1958)  
[23] *New Babylon*, 'Group of Sectors', Constant Nieuwenhuys (1959)

politically charged but playful practices of interaction with the city. The creation of the situation was there only possible because of the resistances and negotiations that occurred between urban space and inhabitation. Like Mehrotra's kinetic city, the concept of the *détournement* is almost parasitic.<sup>107</sup> It can only occur through integration within a given structure, without which it risks dissolving into the virtual. On the other hand, the aspiration of Situationist architecture, one which would be indifferent to form and where emotional and psychological situations would constitute the matter towards a social reconstruction, appears to overlook the very material conditions of these social relations while illustrating a very distinct concrete materiality in its modes of representation (namely Constant's spectacular drawings but particularly models) [fig. 22-23].<sup>108</sup> As much as the Situationists proclaimed the identification of the spatial with the social, and in turn with the imaginaries that social relations produced, Constant's twenty year long project of New Babylon instead concluded in a denial of their actuality and of the chanceful 'teleology' that binds consciousness to matter and users to spaces, by denying their physical and spatialized instantiations, denying the move from the mental ('psychological') to the material.<sup>109</sup> Rather than reshuffling the conditions of the urban, as in their psychogeographic maps, the Situationists resorted in New Babylon to the production of never-actualized simulations of spaces that, in their ethereal virtuality, derived directly from the 'spectacular' that they critiqued. The actuality of space as a specific condition was substituted by the perpetual production of an unattainable indeterminate virtuality, which, removed from physicality, relied on the detached experience of an alienated visuality within generic instantiations of an architectural infrastructure. In its purely nomadic character,<sup>110</sup> New Babylon may thus claim full authority for the user, yet it overlooks the anchoring of the social to the spatial and – in Bergson's words – of the kinetic to the static, while subduing to 'cinematic' modes of not only perception but also inhabitation.

#### IV THE IMAGE OF THE #CITY

Beller's idea of the cinematic mode of production finds clear justification in today's digital domination of the visual, especially as achieved through technologies of mobile communications and the internet. The cybernetic 'kino-eye' is in the 21st century ubiquitous through mobile video and photography. At the same time the withdrawal to virtual simulation rather than representation as a process of knowledge and inhabitation, is respectively increasing through the substitution of experience with imagery. What appears to make this clearly visual-centric mode of production, as well as consumption, of the city so appealing and integrated into our daily lives, is the endless potential of dissemination of the produced imagery and the ways in which this 'sharing' has by now become welded not to our collective, but individual consciousness.<sup>111</sup> The individual user does now not only conduct but also invoke the visual labour of others.

The boom of mobile photography can be associated with the development of social networking media such as Facebook and, more prominently, Instagram.<sup>112</sup> Instagram offers its users access to a form of idealized photography through pre-sets such as square framing and visual filters. This form of popular photographic practice has not only contributed to a vast production of images, which in turn introduces a very specific type of visual culture, but also to the development of a form of urban experience-come-representation. As part of the social media frenzy of the turn of the 2000s,

<sup>107</sup> *Détournement* is "The integration of present or past artistic productions into a superior construction of a milieu. In this sense there can be no situationist painting or music, but only a situationist use of those means. In a more elementary sense, *détournement* within the old cultural spheres is a method of propaganda, a method which reveals the wearing out and loss of importance of those spheres". 'Definitions', in *Internationale Situationniste* 1 (June 1958), trans. Ken Knabb. <http://www.cddc.vt.edu/sionline//si/definitions.html> [Accessed 10 January 2016]

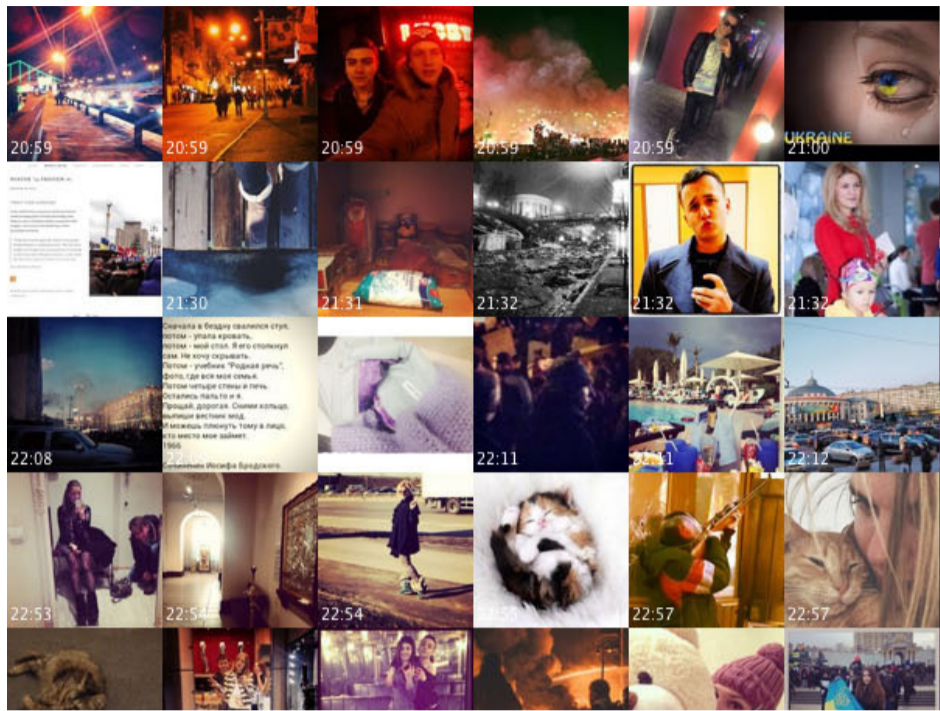
<sup>108</sup> Mark Wigley provides some exquisite descriptions of the details of New Babylon from Constant's unpublished 1960 lecture at the Stedelijk museum in Amsterdam and New Babylon's models. *Ibid.*, p. 9-12.

<sup>109</sup> *Ibid.*, p. 9.

<sup>110</sup> Similar approaches emerge in the Italian 'Radical Architecture' of Archizoom and Superstudio. The speculative projects of No-Stop City and Supersurface portray a future of globalized consumerist communities and nomadic living within generic artificial environments. See Andrea Branzi, *No-stop City: Archizoom Associati* (Paris: Blanchard Press 2006), and Superstudio, 'Twelve Cautionary Tales for Christmas', *Architectural Design* 12 (1971). <http://socks-studio.com/2011/09/17/twelve-cautionary-tales-for-christmas-12-ideal-cities-by-superstudio-1971/> [Accessed 02.02.16]

<sup>111</sup> "Social media is sort of like a full-time job [...]. A great way to alleviate social media fatigue [...] is by participating in online games, and thanks to the wonderful world of hashtagging, you can do that every day of the week on Instagram". The tediousness of online life resolved by the hashtag. Kottenko, Jam, '#throwbackthursday is Only the Start: Instagram Hashtags for Everyday of the Week', *Digital Trends* (August 4 2013), <http://www.digitaltrends.com/social-media/instagram-through-the-week-with-these-popular-hashtag-games/#ixzz3iEKVYxCD> [Accessed on 25 August 2015]

<sup>112</sup> *Instagram*, <https://instagram.com/>



[24] Images composition from the *144 Hours in Kiev* project (2014)  
 [25] 'Roofer' selfie on a crane by the Shanghai Tower, Ivan Knuzetsov (2014)



Instagram has gained increasing popularity reaching by August 2015 the number of 300 million users being able to through it edit and share their photos to a number of online social platforms and websites. Organized by means of 'hashtags', the often spontaneous but most commonly staged images create social connections for the users who by now construct the images of not only their surroundings but also their very own selves. Among the overproduction of images, the image of the city reveals the city itself as commodity. By means of the hashtag emerge urban 'images' constructed not by the individual, neither by the collective but by a constructed condition of 'collective individuality' – that is, an aggregate of images that remain singular and detached from one another, never producing a collective cumulative impression, yet influenced by constructed modalities of observation that are produced through the popular culture of the medium.

Such 'impressions' have become the subject of projects such as *The Exceptional & The Everyday: 144 hours in Kiev* by researchers Lev Manovich, Mehrdad Yazdani and Alise Tifentale, and web developer Jay Chow. *The Exceptional & The Everyday* focuses on the collective representation of the events of the Ukrainian Revolution that took place in Kiev in February 2014 as portrayed through more than 13,000 photos by 6,165 Instagram users [fig. 24].<sup>113</sup> The authors of the project approached social media not as a representation of reality but as a reality in its own right, which is "separate from the 'real' reality on the ground":

This picture is not a "photo" of social reality. Instead, it can be compared to a modern painting. It contains some references to the world outside, but it is not its realistic copy.<sup>114</sup>

As the project's title indicates, the purpose of this compilation is to bring to light the semiotic reduction of the city to the exceptional event and the respective foregoing of the everyday, through the image of the city in the space of digital representation. As people become 'user profiles,' places and events become 'hashtags'. Hashtags can be used to indicate as well as to instruct views through online 'events'.<sup>115</sup> Through the stylization of the 'shared image', places, like individuals, often become idealized, commodified spaces of representation. Social media offer neither a subjective image of reality – such as the ones often presented on mass media of information – nor an objective one. What they offer, however, is an image constructed out of the combined subjectivities of their users. The cumulative perspectives of these images reflect the way in which images of places are constructed in the collective consciousness. At the same time, the digital dimension of these images illustrates the transition of this collective consciousness from the actuality of real space to the virtuality of mediated perception. In the phenomenal spontaneity of the digital virtual, emerge trends that can result in mannerisms and create 'informal conventions': self-determination willingly succumbs to a tendency to confine with the norm while a discrete visual censorship is applied over the collective imagery, keeping in line with the 'morals' and principles of the relevant overlooking establishment. In this massively mediated and at the same time largely individuated process of place-making, is for once recorded the pluralistic image of the city, in the making. The experience of the city – the way of living in the city, is now changing not through the physicality of form but through the ways that it is now staged and lived through the consumption of imagery. If practices such as the *dérive* turned attention from the space to the event, the so-called 'social media' brought to the fore the withdrawal from the spatial to the visual/virtual, where even the mortality of the body is overcome for the sake of the image [fig. 25].<sup>116</sup> The rhetoric of a 'cinematized living', as discussed by Beller, could not be further embedded to the understanding we have not only of our world but also our very own selves,

<sup>113</sup> "The collection resulted in 13,208 images shared by 6,165 Instagram users. The images were tagged with 5,845 unique tags. [...] To compare the patterns during the days of the Revolution with a more normal period, we also downloaded over 400,000 images shared in the same area of Kyiv after the revolution between February 24 and May 14, 2014". *The Exceptional and the Every Day: Intro*, Available at <http://www.the-everyday.net/> [Accessed on 25 August 2015]

<sup>114</sup> Ibid.

<sup>115</sup> The Weekend Hashtag for instance is a hashtag announced by the Instagram network every Friday instructing themes for the weekend activity of users. The hashtag can instruct the types of content, suggesting thematics of not only content but also looking and framing (i.e. orthographic, panoramic etc.).

<sup>116</sup> The latest extreme trend of the 'selfie culture', the process of photographing one's self to share online, is the appearance of young users known as *roofers* or *skywalkers*, illegally and at the risk of their lives, breaking in to high rise buildings and other emblematic structures to capture extreme city views for the shake of online fame and profit.

as they are both increasingly becoming subject to the cinematic modes of production involved in the collective virtuality of digital and network media.

The situationist model of the city as illustrated in New Babylon has perhaps offered the most accurate prediction for the 21st century city, where a withdrawal from the actuality of the physical allows room for the blossoming of an 'orderlessness,' a virtual informality, within the simulation. The power of the individual over space is substituted for power over the image. This suggests a recourse to fantasy; to a virtuality whose only expediency, unlike the immanent virtuality of human consciousness, is not to enrich but rather to bypass the comprehension of reality. As such, the digital can be considered as the space of a dwelling performed through acts of observation and representation, where the kinetic and the individual can potentially overcome the confines of order. But how do these images relate to reality? How do they this time relate to the city and the being in and through the city? If cinema signified a return to the pre-verbal, the digital suggests a return to the pre-representational. The images that we produce do not any longer represent for the sake of knowledge – they simulate for the sake of appearances that produce consciousness rather than convey knowledge. As Agrest concludes, architecture has thus been denied its object. But, most importantly, in a sense the individual is denied their right to space: it is easier to persist, to dwell, in dis-placement – that is, in the virtual rather than the actual.

The immersive capabilities of the visual/virtual are often capable of placing the physicality of the city on a secondary level. The individual is dis-placed, alienated not only from the city but also from their very self. Does this imaginative freedom of appearances make up for the incoherence of the city in the 'eyes' of language? It appears that even within the virtual as experienced in the digital, the user is not really transposed from an experience of a multiplicity that is transcendental to one that is immanent. On the contrary, the illusory freedom of the digital once again replicates the frictions that traditionally occur between order and disorder, and all the relevant dualisms that overlook what Agrest describes as the "desire for order".<sup>117</sup> If, following Bergson's paradigm, we consider that the universe is defined by an inherent becoming, which is expressed as an immanent movement of the individual, we need to acknowledge that this movement can often only be grasped by means of space whose nature is inevitably bound with the respective restlessness of the individual. The attachment to place offers the dweller the contingency of an absolute datum that seeks to become the ideal "common place". This city, or the expectation of the city as such, is a utopia; it is a paradoxical ideal dwelling. For if the city does become this common place, the universal "operating table" of signification as an absolute fixed ground of meaning,<sup>118</sup> it will cease to move and become still, incapable of producing new meaning. The motivating force of this apparent mobility appears to be exactly the pursuit of fixity.

<sup>117</sup> Agrest, *The Place of Representation*, p. 8.

<sup>118</sup> See Michel Foucault. *The Order of Things: An Archaeology of the Human Senses* (New York: Vintage Books, 1994), p. xvi.

Throughout the practices that have been reviewed in this Chapter, the common theme that emerges is the consideration of distinct forms of mobility, and the multiplicity that this often entails, as means to further 'freedom', to a further emancipation of the human subject. It is only in discussions of the *flâneur*, who marked the early days of modernity, that questions about the limits of this freedom are perhaps raised, as the 'disquieting' effects of the modern city discreetly loom over the excursions of the Parisian city dweller. However, from Le Corbusier to Koolhaas – despite their differences, and from Moholy-Nagy to Vertov and the Situationists, even when this new-found autonomy is only phenomenal, the anthropocentric point of view remains prominent. In fact, it can perhaps be said that through the emerging kineticism of the modern city, the position of the subject is in turn set in a kind of motion as its centrality is cunningly compromised by what appears to be the means to the expansion of this subjectivity through the intensifying of the human powers of perception.

The challenge emerges from the implications of the changing conditions of living in and experiencing the city as requiring new modes of attachment to place. As the city changed, over the course of modernity, from the space of power to the space of production, as Diana Agrest suggests and as both the Situationists and Beller have also illustrated, the practices of urban life have been ever-increasingly enacted within a virtual sphere of imagery and visual consumption. In this milieu of congested representations, the position and identity of the subject is constantly renegotiated, through the image. Most recent practices such as Instagramming illustrate this tendency, which was foreshadowed in the complete dematerialisation of the event in New Babylon – but also through forms of mass mediation of experience of the urban, such as the cinema and, even before it, immersive optical installations such as the panorama.

The Bergsonian privileging of the animate is conveyed in these examples of urban mobility through the consideration of the human as privileged body. The limitations of these approaches thus manifest on two levels. On one hand they overlook the instability of the subject given the fact that its immersion within its object is a condition that challenges its own authority. On the other hand, they overlook the registration upon the city and its image, of conditions that exceed human perception. Perhaps then it is possible to propose that architecture has not, as Agrest suggests, lost its object, but that there is nestled within modernity a mobility whereby not only the object but also the subject have been displaced within the emergence of the city as a place that is not 'of' representation. Rather, it is a place where both the subject and the pre-existing, normative orders of articulation and signification, such as language and drawing, are constantly required to redefine their position towards and within the 'real'.



*A mind born to speculate or to dream, I admit, might remain outside reality, might deform or transform the real, perhaps even create it -as we create the figures of men and animals that our imagination cuts out of the passing cloud.*

Henri Bergson, *Creative Evolution*, p. xi.

At the start of the twenty-first century, the multifarious ascendancy of the image appears to be still intensifying. The proliferation of images, contributing to an increasingly mediated experience of reality has affected deeply the way we approach and engage with our surroundings and consistently promoted a disassociation from the physicality of space in favour of visually consumed impressions. We increasingly 'place' ourselves in this world through simulated spaces and representations. This shift can be considered as forming the contemporary counterpart of the questions posed about the representation of space and time by the modernist artists in the early decades of the twentieth century – while at the same time extending the problematic of the role of architecture within society through the lens of the attitudes to architectural representation that emerged from the political and philosophical debates of the 1960s.

The cinematic, emerging from the processes of early modernity, and the digital, culminating in the times of the postmodern, can be seen as virtual manifestations of space and time that have radically affected the ways in which individuals and communities inhabit space, by assimilating and extending – or perhaps occasionally even diverting from – previously established processes of perception and knowledge. The privileging of the image as simulation as opposed to representation – a representation that suggests abstraction rather than imitation – has marked not only a turn in the modes of perception and inhabitation of space, but also a crisis in the modes of its representation within architectural practice. While the definition of the urban is constantly redefined through the emergence of new modes of experience and articulation combined with a still increasing urbanization, architectural representation remains largely attached to conventions that have been established at least as early as the Renaissance<sup>1</sup> despite the fact that digital technologies, from the open access Google Earth, to more exclusive tools such as GIS, GPS, large scale 3D scanning, and drone image capturing, offer an abundance of ways for observing and recording the world. Within this challenge to representation, where does architectural drawing as a tool for the design of spaces, and as a language of representation stand, with respect to the shifts incurred in the processes of consciousness and inhabitation?

Furthermore, as the individual and their inherent mobility are ever more withdrawing into a virtuality, which becomes embodied and spatialized primarily through the visual, how does drawing mediate between these redefined manifestations of fixity and change? Gilles Deleuze wrote that movement is a "translation in space",<sup>2</sup> an abstraction by means of mental projection that involves a change in space. Considering movement through this concept of translation, architectural drawing, which can be considered as a bidirectional projective translation between concept and concrete reality – that is, a translation that does not only involve a translation from 'drawing to building',<sup>3</sup> but also from the physicality of site and drawing to conceptual idea – can be in turn understood as being intrinsically spatial and kinetic at the same time. Considering further its mediative character, as a passage itself between the actual and the virtual, how can drawing reinstate architectural design's position with regard to the interpenetration of the – real and virtual – orders and 'disorders' that shape the contemporary city?

<sup>1</sup> Although evidence such as Vitruvius' treatise *De Architectura*, indicate that orthographic drawing conventions were already present in his time (ca. 1<sup>st</sup> century BC), the elevation of the Campanile of the S. Maria del Fiore in Florence dating back to 1334 (a copy from Giotto's original), is probably the oldest surviving orthographic drawing of a building. See Robin Evans, 'Translations from Drawing to Building', in *Translations from Drawing to Building and Other Essays* (London: Architectural Association, 1997), pp. 153-193; p. 167-168.

<sup>2</sup> Deleuze, Gilles, *Cinema 1: The Movement-Image* (1983), trans. Hugh Tomlinson and Barbara Habberjam (London and New York: Continuum, 2005), p. 8.

<sup>3</sup> As suggested in Robin Evans' 1991 Essay. Evans, 'Translations from Drawing to Building'.



[26] *Goodbye to Language*, 'Split' frame, Jean-Luc Godard (2015)  
[27] Cinematographer Fabrice Aragno and Jean-Luc Godard on set, with their prototype stereoscopic cameras.

## I HARD GOODBYES

In 2015, film director Jean-Luc Godard, presented in Cannes a 3D essay film with the title *Goodbye to Language* (*Adieu au Langage*), the first by the French director to make use of 3D filming techniques,<sup>4</sup> The title of the film immediately suggests a conflict between the word and the image while it can also be considered to refer to the concept of *langage* as treated by linguist Ferdinand de Saussure: not as a systematic, self-contained convention of signification (*langue*) but as the innate faculty of speech that manifests between the systematic and the individual enunciation (*parole*).<sup>5</sup> In the film, it is the language of cinema that is once more revisited by Godard through the use of prototype 3D filming techniques, the asynchronicity of sound and image, the location of action outside of the frame. At the same time, however, the questioning of the narrative structure and its articulation, cannot be separated from the questioning of language as a whole. Godard's film is an essay on the crisis of representation as a crisis of communication, expressed in both interpersonal and wider social relations. *Goodbye to Language*, unfolds through the mirroring narratives of two couples, which are named "Nature" (*La Nature*) and "Metaphor" (*La Métaphore*). The narratives are disrupted and sutured by a wide range of film clips, print citations and references spoken by the characters, offering commentary on a number of issues from politics to philosophy. But the recurring commentary is on the 'spectacle' and its effect on language, as aphorisms spread throughout the film point out the growing inadequacy of language as a mediative means of representation; an inadequacy that in the film itself seems to be juxtaposed to the effect of the cinematic image.<sup>6</sup> The distinct narratives are bound, among others, by the presence of Godard's dog, Roxy, who, presented always alone in an ambiguous relationship with the other characters, becomes the messenger for the celebration of the pre-verbal immediate experience of the animal, while roving across natural landscapes, presented in saturated colours and the phenomenal stereoscopic immediacy of the 3D image.

Although the film remains a complex structure of puns, verbal and visual references that appear to demand thorough interpretation,<sup>7</sup> at the same time, through the constant disjunctions, variations and repetitions of the mirroring narrative, focus is inevitably placed on the event of the cinematic image itself: its constituents and the constellations of meaning that it produces beyond, or in parallel to, the narrative.<sup>8</sup> As film theorist David Bordwell remarks, in *Goodbye to Language* "We are moved, to put it plainly, by beauty – sometimes exhilarating, sometimes melancholy, often fragmentary and fleeting. Instead of feeling with the characters, we feel with the film".<sup>9</sup> We thus feel *through* the *medium* [fig. 26-27]. Experience as nature, and language as metaphor, are in this film tangled together as nested representations that seem to equally construct and deconstruct one another. At the age of 85, Godard's revisiting of both medium and structure illustrates that the disjunction between immediate experience and language – in the sense of the verbal or any other structured system of signification, is in the 21<sup>st</sup> century not only still pertinent but also capable of reaching new grounds. Godard's goodbye to language could perhaps be interpreted as signifying the eventual redundancy of representation as *language*. On the other hand however, it could as well suggest a reconsideration of the very notion of language, of formalisms and conventions, through which representation could come to constitute a kind of 'nature' of its own, a kind of experience in its own right.

Although this crisis of representation can be traced in the ongoing social and technological developments that were accelerated by the advent of modernity, it was only theorised as the intersection of a linguistic (post)structuralism and the consciousness of conditions of spatiality in

<sup>4</sup> Rather than using a professional 3D camera, the film was shot by a prototype configuration that involved the stereoscopic array of two cameras, corresponding to the vision of the left and right eye respectively. Among other innovations, the film introduced the 'split shot', in which as if by a 'split of the retina', the composite 3D image split to the individual narratives of its two distinct filming components, to later recompose into a single image. Camera models appear in the film credits in the film credits equally to actors and other contributors.

<sup>5</sup> Ferdinand de Saussure, 'The Object of Linguistics', in *Course in General Linguistics*, trans. Wade Baskin (New York: Philosophical Library, 1959), pp. 7-17.

<sup>6</sup> "What they call images/ are becoming the murder of the present"; "Soon, everyone will need an interpreter to understand the words coming from their own mouths". *Adieu au Langage*, dir. by Jean-Luc Godard (StudioCanal, 2014) 00:14:10 and 00:39:38. [Amazon Video]

<sup>7</sup> Aphorisms, movie clips and citations from Plato to Walter Benjamin and many more, some of whom are credited in the end of the film, equally with the actors, crew and even the camera models and lenses used. Ted Fendt offers an (inconclusive) overview of the numerous works (text, film and music) cited in the film. Ted Fendt, "Adieu au Langage" – "Goodbye to Language": A works cited', *Notebook* (October 12 2014). <https://mubi.com/notebook/posts/adieu-au-langage-goodbye-to-language-a-works-cited> [Accessed 5 September 2015]

<sup>8</sup> See film theorist David Bordwell's review in David Bordwell, 'Adieu Au Langage: 2 + 2 x 3D', *Observations on Film and Art* (September 7 2014). <http://www.davidbordwell.net/blog/2014/09/07/adieu-au-langage-2-2-x-3d/> [Accessed 5 September 2015]

<sup>9</sup> *Ibid.*

the 1960s. On one hand, a linguistic turn of philosophical thinking expressed through the theories of thinkers such as Roland Barthes, Michel Foucault or Jacques Derrida, drawing largely on the structuralist linguistics of Saussure, foregrounded the role of semiotic structures with respect to the organization of knowledge. On the other, almost concurrently, a spatial turn – most clearly manifested in the writings of Michel Foucault and Henri Lefebvre – was placing focus on the implications of spatiality on the structures of knowledge and power.

A prominent Marxist theorist of the time and a major influence on the Situationist theory of Unitary Urbanism, was Henri Lefebvre who, proposing to understand space as the result of concrete processes of social production, referred to the inadequacy of architectural representation to take into account the complex interaction between humans and their environment. According to Lefebvre, out of the social are produced three distinct although always interrelated and of equal value, conditions of space: *perceived*, *conceived* and *lived*, which reflect respectively three modes of spatial production. *Perceived space* constitutes the first dimension and refers to the collective. Although Lefebvre's triad rejects an a priori condition, *perceived space* can be considered as the most 'primary' instantiation of space that relates to the material dimension of the society as a collective, as it emerges from the "deciphering of space" through *spatial practices*.<sup>10</sup> On the other hand, *conceived space* is related to mental products, *representations of space* that emerge from the practice of architects, planners, scientists, and other 'technocrats' who aim at administering space.<sup>11</sup> These instantiations of space are abstracted and conceptualized representations that tend towards verbal systems of representation, as they seek to both produce knowledge and impose 'order' through the use of signs and codes. Contrary to the mental and abstracted *conceived*, *lived* or *endured* space involves the direct inhabitation of spaces, which entails the attribution of symbolic meaning to space, not through processes of knowledge, but through non-verbal acts of signification. These spaces are defined as *representational*, or *spaces of representation* – they constitute the space of the users but also the space of artists, writers and philosophers who "only aspire to describe".<sup>12</sup>

The implication of thinking of space, and particularly the space of the city, not only as a social product but also through the web of relations that the overlapping of such processes of production involves, is the understanding of space as a 'concrete abstraction'.<sup>13</sup> Notwithstanding the critique that Lefebvre developed against the linguistic theories that emerged from post-structuralist thought (he felt they fetishized the mental against the social and the physical)<sup>14</sup> it is possible to observe the influence of linguistic and semiotic concepts in his theory.<sup>15</sup> All three processes appear to converge not only on the spatial, but also on the representational.

On the one hand, the *conceived* space of representations – such as maps and architectural drawings – are presented as self-righteous tools of not only the production of knowledge but also, most importantly, the exertion of power. For Lefebvre, conventional representations present geometricized, quantifying impressions of space through which architecture appears to dominate the *lived* – depriving thus the user of any authority over space.<sup>16</sup> At the same time however, the *lived* is respectively grounded within representation through its ability to produce symbolic meaning through 'use', while the *perceived* is in turn unfolded through a process of 'deciphering', of an interpretation of meaning through the enactment of social relations. In effect, all three instances of space described by Lefebvre can be considered as relating to processes of representation. Sociologist Christian Schmid, has traced the triadic schema of space presented in the *Production of Space* (1974) to Lefebvre's

<sup>10</sup> Henri Lefebvre, *The Production of Space* (1974), trans. Donald Nicholson-Smith (Oxford and Cambridge, Mass.: Blackwell, 1991), p. 38.

<sup>11</sup> *Ibid.*, p.38.

<sup>12</sup> *Ibid.*, p. 39.

<sup>13</sup> *Ibid.*

<sup>14</sup> Lefebvre specifically refers to "Julia Kristeva's σημειωτική, Derrida's 'grammatology', and Roland Barthe's general semiotics". *Ibid.*, p. 5.

<sup>15</sup> For an analysis of the linguistic aspects of Lefebvre's theory of space, see Christian Schmid, 'Henri Lefebvre's Theory of the Production of Space' in *Space, Difference, Everyday Life: Reading Henri Lefebvre* (London: Routledge, 2008), p. 34-37.

<sup>16</sup> Lefebvre, *The Production of Space*, p. 361-362.

earlier work *Le Langage et la Société* (1966), where Lefebvre proposes an earlier triadic schema in the development of a theory of language largely influenced by Friedrich Nietzsche's poetics and, specifically, the concepts of metonymy and metaphor.<sup>17</sup> In this theory, language evolves in three dimensions, the syntactic, the paradigmatic and the symbolic, which Schmid directly correlates to Lefebvre's three dimensions of space. Lefebvre's theory of language suggests that there is a deep connection between the ways in which the two are produced – one that he finds is reflected in his reference to Nietzsche's definition of truth:<sup>18</sup>

A mobile army of metaphors, metonyms, anthropomorphisms, in short, a sum of human relations that have been poetically and rhetorically heightened, transposed, and embellished, and which seem to a people, after a long usage, fixed, canonical and binding.<sup>19</sup>

Language, and respectively space, appear to emerge not only from the syntactic and the systematic (the paradigmatic) but also from the poetics of connotation and ambiguity that lie in the symbolic value of the 'spoken word' or, in turn, the 'lived space'. There is an expression of language to be discovered in the pre-verbal in the same way that there is a concrete spatiality emerging from the immateriality and ephemerality of inhabitation. Despite their differences, Lefebvre's spatial dimensions all proceed through acts of signification. Space, emerging only in the interplay of the three dimensions, remains an abstraction that may be irreducible to concrete form, but not possibly to representation, as it is always produced itself from relevant acts of translation. Like the metonymic, space is born out of a constant metamorphosis of the 'real' lived into an abstracted spatiality, and of the perceived and the conceived to concrete reality. As such it acquires a 'reality' of its own inasmuch as it has a direct effect on social reality. Social space is, according to Lefebvre, inseparable from the mental and the physical, and to the extent then that these three dimensions intertwine, they all include elements of both abstraction, and reality.<sup>20</sup>

Architectural representations have traditionally aimed at a sense of precision, of an accuracy and 'fidelity' that would authenticate the process of design through representation as an anchored upon the 'real'. Nevertheless, there is an odd reversal that takes place between Lefebvre's model, where it is the lived that is the most 'real' and concrete as related to the body and its senses, and the architectural as an instance of the conceived that is the most virtual. To architecture, on the contrary, it is the 'lived' which is regarded as the least material, the least present, which is traditionally almost completely neglected by the translation of representation, and normally concluded in the design process within notions of utility,<sup>21</sup> function or program. If the space of the city is indeed 'constructed' representationally in the interplay of individual-come-collective inhabitation and of conceptions such as those of the 'self-righteous' architect/planner, how does the practice of drawing relate to that of inhabitation as spatial experience and spatial production? In other words, how can drawing, as a systematic way of representing space, relate to the representational aspects of the space of a city as an ensemble of the physical, the relational and the experiential, and not as 'building'?<sup>22</sup> The static city of architectural representation can be therefore considered as, not merely abstract, but partial. Thus, concepts such as Lefebvre's 'lived space' are commonly reflected in architectural discourse in notions such as the 'migrational metaphorical' in Michele De Certeau,<sup>23</sup> the 'dark' in Paul Carter,<sup>24</sup> or the 'illegible' and 'intangible' in Stan Allen;<sup>25</sup> all of which advocate for the disassociation between the city and its drawing in two ways – the obscurity of the subject and the respective inability of the method of representation.

<sup>17</sup> Nietzsche's notion of the metaphor suggests that through language we are only able to grasp metaphors rather than things themselves. It is through this metaphors however that we are able to conceptualize the world through a metonymy, that is, an identification of things that are not identical. See Schmid, 'Henri Lefebvre's Theory', p.34, and Lefebvre, *The Production of Space*, p. 138.

<sup>18</sup> Lefebvre, *The Production of Space*, p. 138.

<sup>19</sup> *Ibid.*, p.138. See also Schmid, 'Henri Lefebvre's Theory', p. 35.

<sup>20</sup> *Ibid.* p. 35

<sup>21</sup> Utility was already defined by Vitruvius as one of the three essential qualities of architecture (*utilitas, firmitas, venustas*). Vitruvius, *On Architecture* (ca. 30 BC), trans. Richard Schofield (London: Penguin Books, 2009), p. 19.

<sup>22</sup> This is a point that Mario Gandelsonas also makes, referring to the architect's fantasy of treating 'the city as building' as a way of domesticating the complex forces that act within the city through the reduction of the city's spatiality to the built. See Marion Gandelsonas, 'The City as the Object of Architecture', *Assemblage* 37 (1998), pp. 128-144; p. 130.

<sup>23</sup> Michel De Certeau, 'Walking in the City', in *The Practice of Everyday Life* (Berkeley: University of California Press, 1988), pp. 91-110; p. 93.

<sup>24</sup> Paul Carter, *Dark Writing: Geography, Performance, Design* (Honolulu: University of Hawaii Press, 2009), p. 1.

<sup>25</sup> Stan Allen, 'Notations+Diagrams: Mapping the Intangible', in *Practice:*

Lefebvre's theory associates the linguistic and the spatial through a series of relationships and processes of representation. As opposed to other linguistic approaches to the city, such as Barthes' attempt at 'Semiology and the Urban',<sup>26</sup> or Kevin Lynch's semiotic analysis of *The Image of the City* (both in the late 60s),<sup>27</sup> Lefebvre is the first to bring into this play between space and language the very literal representational space of architecture through drawing. Conceived space brings to the fore the agency of not only designed space but also architectural conceptions and representations, and places them equally alongside, rather than against, the eternal opposition of the 'real'.

Lefebvre's theories of language (*Le Langage et la Société*), the urban (*Le Droit à la Ville*) and their evolution into his theory of the production of space, contributed to a wider discourse around the sociopolitical nature of the spatial that took place in the 1960s, and which accelerated under the impetus of the events of May '68. The questioning of the role and capabilities of architecture within capitalist society was already evident in the 60s in speculative architectural projects, which questioned and criticized the way in which cities and societies functioned. In parallel to the critique of the spectacle in Constant Nieuwenhuys' 'New Babylon' in the Netherlands, Archizoom's ironic proposal of the catatonic and featureless 'No Stop City' in Italy, was presented as an instrument towards "a society freed from its own alienation, emancipated from the rhetorical forms of humanitarian socialism and rhetorical progressivism",<sup>28</sup> while Archigram's visions of futuristic nomadic cities in England – despite the lack of any clear ideology – often made claims for an architecture that would allow for greater "personal freedom" or "freedom of choice".<sup>29</sup> What arises as common in these very different approaches to architecture is that the reaction to modernist architecture – and at times the 'establishment' that it had come to identify with – took in each one the form of taking to the extremes the very tactics of alienation, consumerism, functionalism and representation that were found at the core of the systems that they critiqued. The understanding of space in relation to its social extensions, which became more prominent through the uprisings of May '68, foregrounded at the time the issue of the social impact of design as means to power, and the social responsibility of architecture. Unable to find ground for these explorations in the then current market of architectural production, these architects turned from building to drawing and writing, where the 'conceived' – although remaining conceptual – could be liberated from the market and its dominant power structures, and therefore able of engaging further with the social and intellectual developments of the time.

## II THE PASSAGE OF REPRESENTATION

The 'refuge' of representation is not an uncommon narrative, neither is the concept of the virtual or simulation something new for architecture. Despite architecture being commonly paralleled to music, rather than painting or sculpture, as being an art whose practitioners work in distance to their final work through mediative – in Nelson Goodman's terms *allographic* – notations,<sup>30</sup> architectural drawings have very often posed themselves as sites for an architectural practice that was unable to find, or perhaps at times even uninterested in finding, its way to a built reality. The seminal influence of purely conceptual representations such as those of Giambattista Piranesi or the unbuilt works of Etienne Louis Boullée cannot be dismissed as non-architectural. Similarly to the utopic architectures of the 60s, in 1980s Russia, the social and qualitative limitations of massively

*Architecture, Technique and Representation* (London: Routledge, 2009), pp. 41-69.

<sup>26</sup> Barthes, Roland, 'Semiology and the Urban', in Neil Leach (ed.), *Rethinking Architecture*. (New York & London: Routledge, 1997), pp. 166-172.

<sup>27</sup> Lynch, Kevin, *The Image of the City* (Cambridge, Mass. And London: MIT Press, 1960).

<sup>28</sup> Andrea Branzi, *No-Stop City: Archizoom Associati*, (Paris: Blanchard Press 2006), pp.148-149.

<sup>29</sup> Peter Cook, *Archigram* (New York: Princeton Architectural Press, 1999), p. 83.

<sup>30</sup> The 'allographic', in contrast to the 'autographic', is a term introduced by Nelson Goodman to suggest a product that does not constitute a final work but is rather a mediative, notational reference to an external value, such as architectural drawing or musical notation. Goodman, Nelson, *Languages of Art: An Approach to a Theory of Symbols* (Indianapolis: Hackett Publishing, 1969), p. 121. The term is also used by Stan Allen through Goodman to point out that the architect's direct engagement is with the drawing rather than the built space itself. See Allen, 'Mapping the intangible', p.45.

produced, state-funded, Soviet architecture in the 1980s, was the trigger for the formation of the group of the Paper Architects, who envisioned architecture in a way different from that which the current established system would allow them to produce.<sup>31</sup> Although the term ‘paper architecture’ retains a derogatory tone, often used to refer to an architecture that is distanced from the real issues of space and practice, their drawings became a creative outlet not only materially, but also conceptually, exactly due to this liberation from the materiality of a built realisation. Russian Paper Architects, such as Alexander Brodsky and Ilya Utkin,<sup>32</sup> found in drawing a way to comment on a restricted reality, through the creation of utopic and allegorical design proposals that exceeded its limitations.

Reacting to the functionalist paradigms of modernist architecture, the tendency that took place in Europe in the 1960s towards a kind of paper architecture, was also influenced by the visual culture that had emerged from the very system it was trying to subvert, such as the attitudes of advertising or the disjunctive effects of cinematic montage. Along with a society that was more and more moving towards mediated modes of experience of both space and events through an attention economy,<sup>33</sup> it makes sense that architecture could also resort to what had long been one of its critical battlefields – the space of representation. Influenced by the speculative architecture of the 60s, and thinkers such as Lefebvre and the concurrent post-structuralist discourse, Bernard Tschumi was among a number of young architects, who at the time engaged with the idea of an architecture that would act as a catalyst for “social change”.<sup>34</sup> To this end, he proposed the role of the architect as critic through strategies of “counterdesign”, which would rely on the architectural means of expression for the subversion and denouncement of conservative approaches and practices towards the city.<sup>35</sup> Through his projects, writing and pedagogy, Tschumi argued for the reconsideration of architecture’s object, a task he considered impossible to carry out without at the same time questioning its mode of representation.<sup>36</sup> Similarly to Lefebvre, Tschumi suggested that what traditional forms of architectural drawing excluded were the concepts of occupation and event. Beyond the consideration of program in terms of utility, the event itself poses for Tschumi as architecture, while architecture in turn comes to constitute an event.

Tschumi’s book *The Manhattan Transcripts* (1977-1981) presented an alternative and inclusive form of spatial representation and notation.<sup>37</sup> Originally designed as a series of four exhibitions and installations in London and New York, the *Transcripts* constitute a project that, in Tschumi’s words, is neither ‘real’ nor ‘fantasy’, but the transcription of “an architectural interpretation of reality”.<sup>38</sup> In effect a presentation of the distinct elements of the American city (the park, the street, the tower, the block), the *Transcripts* constitute a kind of typological reading of the city. Rather than regressing to the historicism of the postmodern, they juxtapose reality and representation through an expansion of architectural drawing that immediately suggests an expansion of the object of architecture. In the *Transcripts* architectural drawing convention is grafted with movement diagrams that can be traced to dance notation and functional diagrams [fig. 28].<sup>39</sup> Furthermore, photographic elements are treated as fragments of an immediate reality, which come to infuse generic impressions of another, built, reality in the realm of architectural drawing. Transcribed through architectural drawing conventions such as orthographic and perspective projection, these drawings are disrupted by the introduction into representation of events and accidents through different media of representation. The drawings are disrupted in two levels: with regard to the representational mutation of the physical reality they depict; and with regard to the mutation of the notational system that directs their representations.

<sup>31</sup> Architectural production in Russia at the time was limited to low-quality, state funded, standardized buildings that rejected any consideration of the context or the individual.

<sup>32</sup> See Anna Soklina, ‘In Opposition to the State: The Soviet Neoavant-garde and East German Aestheticism in the 1980s’, *Art Margins* (2002). <http://www.artmargins.com/index.php/featured-articles/310-in-opposition-to-the-state-the-soviet-neoavant-garde-and-east-german-aestheticism-in-the-1980s> [Accessed 20 September 2015]

<sup>33</sup> Herbert A. Simon defines attention economy as an information-centred and information-rich economy where attention becomes compromised by the overwhelming amount of information. In such an economy attention then turns into a value-laden labour. See Herbert A. Simon, ‘Designing for an Information-Rich World’, in Martin Greenberger (ed.), *Computers, Communication and the Public Interest* (Baltimore: The Johns Hopkins Press, 1971), pp. 32-62.

<sup>34</sup> Bernard Tschumi, ‘Introduction’, in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 2-24; p. 5-7.

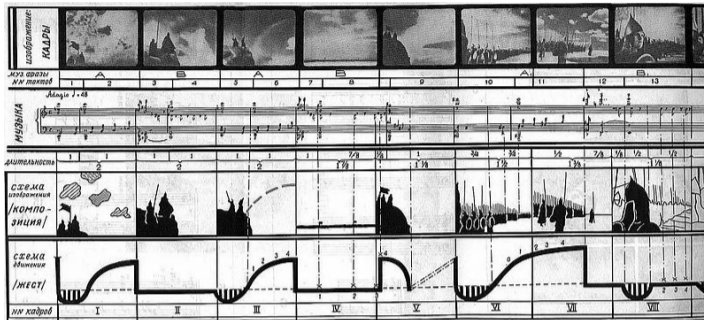
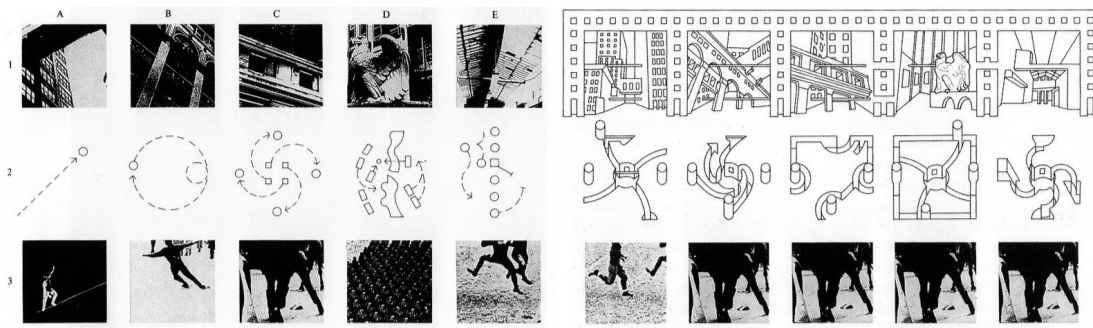
<sup>35</sup> *Ibid.*, p. 11.

<sup>36</sup> Bernard Tschumi, ‘Spaces and Events’ (1983), in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 141-152; p. 143.

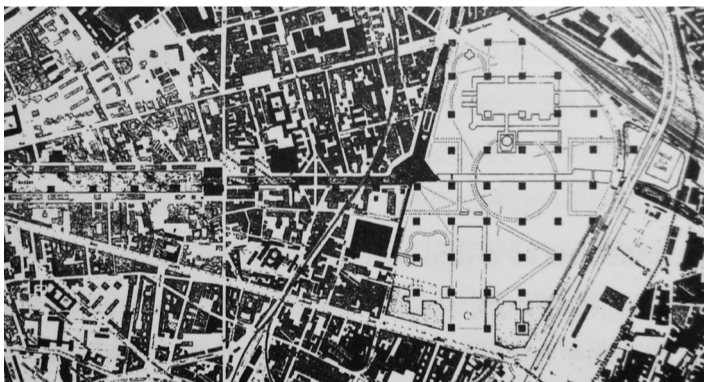
<sup>37</sup> Bernard Tschumi, *The Manhattan Transcripts* (London: Academy Editions, 1994).

<sup>38</sup> *Ibid.*, p. 7.

<sup>39</sup> An earlier exploration with the analogies between cinematic and architectural space-time and the use of cinematic editing operations for the development of tools of architectural design can be found in Tschumi’s *Screenplays* (1976).



[28] *Manhattan Transcripts*, Bernard Tschumi (1976-1981)  
 [29] *Vertical Montage*, sequence from *Alexander Nevsky*,  
 Sergei Eisenstein (1939)  
 [30] *Parc de La Villette*, 'Points Grid', Bernard Tschumi (1982)



Although in the beginning each of the three elements maintains its distinct mode of representation – the object in architectural drawing, the event in photography and movement in diagrams – through sequences of encounter, they always gradually mingle to produce a condition that, according to Tschumi, reflects the *architectural*. The interrelation between these three elements is made palpable through the common ground they find on paper. The seriality of their ‘encounters’ reveals the ensemble of the *Transcripts* as a process in the making rather than a finished product. The sequential narrative that the *Transcripts* consistently follow can also be traced in Eisenstein’s story boards [fig. 29]. But even the operative terms Tschumi uses to describe the emerging ‘formal strategies’ between frame and content, are undoubtedly cinematic: repetition, disjunction, distortion, fade-in etc. More importantly however, they are always sequential, suggesting the unfolding in time of the reading of a drawing as text: a step beyond the verbal and closer to the image, closer to the *cinematograph* of our own perception.

Tschumi’s reading/survey suggests that occupation of spaces implies an inevitable disjunction, to the degree that space, movement, and event are independent. However, his intention is not to reconcile this conflict, but rather to maintain and make ‘use’ of its inherent dynamic. This disjunction leads to a certain ambiguity, a certain disruption in the prescribed fixity of architecture. And it is this space of ambiguity that lies in-between the desire for order and the unpredictability of the event that Tschumi attempts to carry into his representations, as capable of reordering the ensemble that is architecture. In representing the complex relations that emerge between space and action, Tschumi sought to detach inhabitation from the idea of program as it had been defined in the functionalist doctrine of modernist architecture, and reveal it as another kind of ‘material’ for architectural design. This idea of a disjunctive ‘coalition’ between space and occupation and the effect of the new cinematic visuality, runs throughout Tschumi’s teaching at the Architectural Association<sup>40</sup> and his earlier works,<sup>41</sup> but is perhaps culminated in his proposal for the Parc de La Villette in Paris. Moving on from survey to design, La Villette also poses another question: the idea of introducing program and action through external concepts in architecture and the ways in which these can be embodied, or rather spatialized in design. He introduces there the design strategy of “abstract mediation”, where the abstraction of geometric formations – such as the application of the square grid – poses as an intermediary in the superimposition of the introduced concept against the reality of the site [fig. 30].<sup>42</sup>

Tschumi, along with Peter Eisenman, Daniel Libeskind, Coop Himmelblau, Zaha Hadid, Rem Koolhaas and Frank Gehry, were the seven architects presented at a 1988 exhibition at New York’s Museum of Modern Art, curated by American architects Mark Wigley and Philip Johnson under the title ‘Deconstructivist Architecture’.<sup>43</sup> According to the curators, the works selected presented not a new style but “a different sensibility in architecture, one in which the dream of pure form has been disturbed” [fig. 31-32].<sup>44</sup> In the texts accompanying the exhibition publication, the common ground of Deconstructivist Architecture was mostly summarized as regarding a formal exploration of structure, through a destabilizing of the geometric purity and formal unity that had been tightly welded with architectural tradition, and pivotal to the architectural production of high modernism. The concept of *Deconstructivism* appears in Wigley’s text in the exhibition catalogue to pose as a further destabilization – albeit not necessarily a conscious one – of the formal strategies developed by the early twentieth century Constructivist movement of the Russian avant-garde [fig. 33].<sup>45</sup> According to Wigley, deconstructivist architecture disturbs the tradition of the architectural object, disturbing in

<sup>40</sup> “At the end-of-year exhibition [at the Architectural Association] texts, tapes, films, manifestos, rows of story-boards, and photographs of ghostlike figures, each with their own specific conventions, intruded in a space arranged according to codes disparate from those of the profession”. On the course ‘Theory, Language, Attitudes’. Tschumi, ‘Spaces and Events’, p. 142-143. On the studio *Joyce’s Garden* see Bernard Tschumi, ‘Abstract Mediation and Strategies’ (1987), in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 141-152; pp. 191-206; p. 192-195.

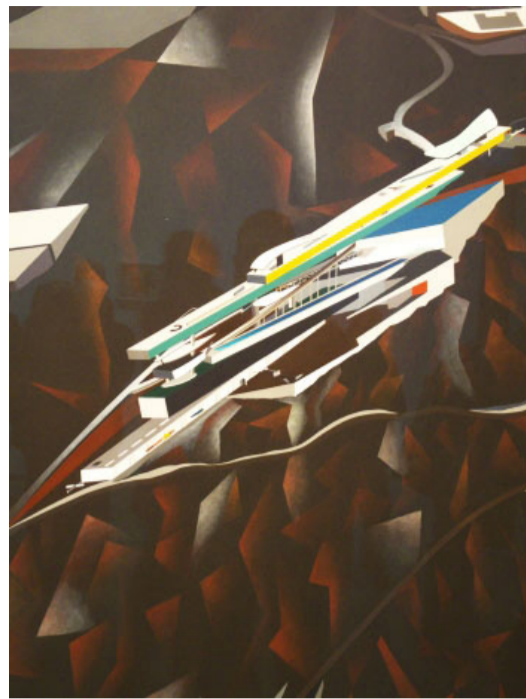
<sup>41</sup> Such as the *Screenplays* (1976) or the *Advertisements for Architecture* (1976-77).

<sup>42</sup> Tschumi, ‘Abstract Mediation and Strategies’, p. 195-196.

<sup>43</sup> The exhibition took place June 23- August 30 1988 as part of a series of exhibitions investigating on the then current tendencies in architecture.

<sup>44</sup> “Architecture has always been a central cultural institution valued above all for its provision of stability and order. These qualities are seen to arise from the geometric purity of its formal composition... The projects in this exhibition mark a different sensibility, one in which the dream of pure form has been disturbed. Form has become contaminated. The dream has become a kind of nightmare”. Mark Wigley, ‘Deconstructivist Architecture’, in Philip Johnson and Mark Wigley (eds.), *Deconstructivist Architecture* (New York/MoMA, 1988), p. 10.

<sup>45</sup> Wigley makes wide reference to the works of El Lissitzky, Kasimir Malevich and Vladimir Tatlin. Ibid. p. 11-16.

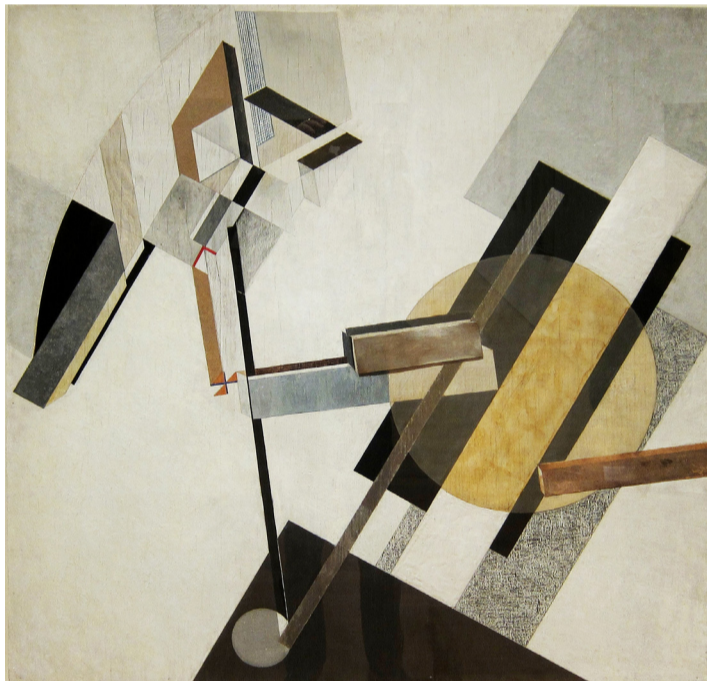


[31] *Rotterdam Building and Tower*, Rem Koolhaas (1981)

[32] *Peak Competition*, Hong Kong, Zaha Hadid (1983), MoMA

[33] *Proun 19D*, El Lissitzky (1922), MoMA.

Zaha Hadid was the only architect included in the exhibition to mention artists like El Lissitzky, Alexadner Rodchenko and Kazimir Malevich as influences to her work.



turn the structure from within by uncovering a “contamination” of form that is intrinsic to architecture, albeit repressed by convention.

Johnson and Wigley both suggest that the deconstruction that takes place within deconstructivist architecture regards a dismantling that concerns structure as form. Wigley points out that the works included in the exhibition engage with the ‘centre’ of architectural tradition in that, unlike other conceptual works, they are concerned with the relation between *building* and structure, that is, they aim outside drawing and to building:

This work carries out the kind of subversion usually regarded as possible only in realms distanced from the reality of built form. The projects are radical precisely because they do not play in the sanctuaries of drawing, or theory, or sculpture. They inhabit the realm of building. [...] each aims at building - confronting the basic problems of building-structure and function. [...] Critical work today can be done only in the realm of building: to engage with the discourse, architects have to engage with building; the object becomes the site of all theoretical inquiry.<sup>46</sup>

Architecture then culminates in building and deconstruction seems to regard the subversion of form as the carrier of architectural meaning. The underlying definition of the architectural object as building is a proposition that seems to continue on the dualism of mind versus body or concept versus matter. Building is about concrete form, mental concepts remain immaterial and hence unable of proposing any valid criticism for the ‘real’, as remote from the challenges of the built (the modes of practice and construction, the institutions involved). Architecture thus remains forever allographic. The debate over architecture’s real object is longstanding. Vitruvius defines architecture as the art of building while Tschumi also traces this contradiction in ontological questions of space, from Boullée’s understanding of building as a secondary practice of an architecture found equally in ‘writings and drawings’, to the idea of space as a sensory experience of materiality.<sup>47</sup> What arises, however, from Wigley’s statement is not only the contradiction between the built and the unbuilt, the conceptual and the material, but also an evaluation of the intentionality of the concept that emerges through the insistence on the built (where each project “aims to be built”). Does the drawing ‘intend’ to be built? And consequently, does it always stand as the representation of a space due to its potency of being materialized as a built, material structure? Finally, does the object of architecture then lie in the inquiry and production of spatial concepts, or does architecture only produce meaning through built form? As Tschumi argues, it is rather in the built that architecture becomes liable to be “mystified” by the powers that implement it.<sup>48</sup> It is in its built instantiation that architecture becomes appropriated, absorbed, and thus ceases being critical. In this front, judging from late capitalism’s spectacle buildings (such as the megastructures proliferating in Chinese cities), ‘deconstructivist’ architecture in particular would have a lot to answer for.<sup>49</sup> Yet, in Wigley’s terms architecture appears to be synonymous with its object, considered as *that* built structure, and here is where the complication of the crossover between architecture and philosophy as expressed in the concept of deconstruction lies, with regard to its ‘translation’.

In the essay ‘The Translation of Architecture’, Wigley finds the connection between philosophy and architecture in the operative character of the architectural metaphor of logos as ground, as elaborated from Immanuel Kant<sup>50</sup> in Heidegger’s *An Introduction to Metaphysics*.<sup>51</sup> According to

<sup>46</sup> Ibid. p. 12-13.

<sup>47</sup> Ibid., p. 34

<sup>48</sup> Tschumi, ‘Introduction’, p. 12.

<sup>49</sup> “No more weird architecture” says Chinese president’, Dezeen (20 October 2014). <http://www.dezeen.com/2014/10/20/no-more-weird-architecture-in-china-says-chinese-president/> [Accessed 10 January 2016]

<sup>50</sup> See Immanuel Kant, *The Critique of Pure Reason*, trans. Paul Guyer (Cambridge: Cambridge University Press, 1998).

<sup>51</sup> Mark Wigley, ‘The Translation of Architecture’ (1988), in Neil Leach (ed.), *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge, 1997), pp. 662-663.

Heidegger, metaphysics is charged with establishing this ground and, through it the idea of being as presence.<sup>52</sup> Philosophy then can be understood as the construction through addition of structures upon this ground; structures that upon being erected also bring into visibility and stabilize the ground. The edifice then stands as a presentation of the ground's presence, but in this way is also limited by the grounding of its foundations. As Wigley points out, this negotiation between ground and structure, between presence and representation, is embodied in language and the relation between speech and writing. Through Heidegger, Wigley counters the triad of thought, speech and writing with the architectural analogue of ground, structure and ornament. The traditional hierarchy between presence, presentation and representation is highlighted by the structural associations across the three, through the understanding of architecture as an additive and supplementary process. Thus there emerges a two-way translation between architecture and philosophy, in which both are intertwined and mutually defined. The metaphor works both ways: it creates a spatio-structural model for the functioning of philosophical thinking while it rationalizes the structure of architectural construction. For Wigley, there is no need for a translation, rather the metaphor is made redundant in the literality of structure and ornament, and in an architectural practice that is inherently deconstructive.

In this text however, Wigley engages with deconstruction in its original philosophical sense, which does not regard a purely formal de-Constructivism (in the sense of an architecture that “employs the formal strategies” of the Russian Constructivist artists)<sup>53</sup> but a ‘non-method’ of inquiry deriving from the writings of Jacques Derrida. Drawing from the structuralist linguistics of Ferdinand de Saussure and pointing out the purely conventional relation between signifier and signified, Derrida’s concept of deconstruction challenges the fixed hierarchies of representational thinking and through it the rational basis of Western metaphysics and the dualisms it asserts.<sup>54</sup> Derrida’s idea of deconstruction subverts – almost reverses – additive logics of construction by challenging the presumed self-evident priority of foundations. What the concept of deconstruction fundamentally reveals is the instability of representation and consequently the question of language within architectural practice. Wigley persistently focuses on the idea of structure and ornament as built form, finding the architectural in the philosophical and thus seeking to bind the two in a reciprocal attachment through the metaphor of structure. The point of departure however, for Derrida is not form as figure but as sign: writing.<sup>55</sup> It is in the written that deconstruction is revealed through an act of reading as an inherent condition of instability.<sup>56</sup> What is crucial to the processes of representation involved in Derrida’s concept of deconstruction is the slippage that can occur between form and content, rendering thus the opposition between the two, as the signifying and the signified, itself unsustainable (given that the signifier is according to Derrida always in a position to act, and inevitably does act, as another signifier).<sup>57</sup> The question then should not be how deconstruction can be translated to architecture, but where does the association between form and content occur in architecture. Where does the deconstruction, which is at work in signification, take place? And through this, where is the *place* of representation?

Derrida indeed often sought to shed some light on his troubled relationship to architecture. An instance can be found in his 1986 interview with Eva Meyer for *Domus*.<sup>58</sup> Responding to Meyer, Derrida argues that the metaphoric connection between thinking and architecture remains simply a rhetorical tool that is more critical to the former than architecture. However, what brings the two together is the spatiality and movement of both language and writing:

<sup>52</sup> Martin Heidegger, *An Introduction to Metaphysics*, trans. John Macquarrie and Edward Robinson (New York: Harper and Row, 1962), p. 2.

<sup>53</sup> Wigley, ‘Deconstructivist Architecture’, p. 11.

<sup>54</sup> Jacques Derrida, *Of Grammatology* (1967) (Baltimore: Johns Hopkins University Press, 1997).

<sup>55</sup> Derrida, Jacques, ‘Writing Before the Letter’, in *Of Grammatology* (1967), trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1997), pp. 75-149.

<sup>56</sup> A reading that produces rather than protects. In *Margins of Philosophy* – referring to Polyphilos’ critique on the language of metaphysics in Anatole France’s *The Garden of Epicurus* (1923) – Derrida offers yet another description of deconstruction: “[the issue] is rather to deconstruct the metaphysical and rhetorical structures which are at work in [the text], not in order to reject or discard them, but to reinscribe them otherwise”. Jacques Derrida, ‘White Mythology’, in *Margins of Philosophy*, trans. Alan Bass (London and New York: Harvester Press, 1982), pp. p. 215.

<sup>57</sup> Derrida, *Of Grammatology*, p. 20.

<sup>58</sup> Jacques Derrida, ‘Architecture, Where the Desire May Live’, in Neil Leach (ed), *Rethinking Architecture: A Reader in Cultural Theory* (London and New York: Routledge, 1997) pp. 319-323.

Architectural thinking can only be deconstructive in the following sense: as an attempt to visualize that which establishes the authority of architectural concatenation in philosophy. From this point we can go back to what connects deconstruction with writing: its spatiality, thinking in terms of a path, of the opening up of a way which – without knowing where it will lead – inscribes its traces. [...] This writing is truly like a labyrinth, it has neither beginning nor end. One is always on the move. The opposition between time and space, between the time of speech and the space of the temple or the house has no longer any sense. One lives in writing. Writing is a way of living.<sup>59</sup>

Derrida points out that despite its historical theocentric and anthropocentric attachments, architecture is not in its essence a representational art. To support this point Derrida introduces Heidegger's idea of the *Riss* (from German: 1 - sketch, design, outline, or 2 - tear, crack, cleft, breach), a concept that appears itself to be clearly deconstructive. In Heidegger, the *Riss* represents a tear, the instantiation of a conflict between earth and the world, but it is also the limit condition where they come together into a common ground. As such, it can be understood as a point of poiesis out of an act of difference and deferral,<sup>60</sup> an act of construction out of deconstruction.<sup>61</sup> *Riss* however, carries also the meaning of sketch or drawing, which transfers the idea of this liminal destructive condition of the fissure into the complexity of drawing. Drawing is therefore described as a field of conflict as well as a bridging between the measurable, intelligible world and the immeasurable earth.<sup>62</sup> According to Heidegger, drawing represents a process of knowledge that is not an act of conquest but always of poiesis.<sup>63</sup> In a similar manner, for Derrida, deconstruction suggests a reading that rather produces than maintains. Both propositions suggest the idea of knowledge as a form of inhabitation and of acting from within.

As Derrida remarks, there is in architecture an imitation of the *Riss* as a deconstructive bridging between concept and matter that takes place between drawing and architecture.<sup>64</sup> It appears then that what is tormenting architecture is not a crisis of representation, but a crisis of the *how* of representation: a crisis of convention. If we seek meaning in architecture, that is, in architectural space as form, we cannot anymore consider this form independently from the processes and media that 'produce' it. For these processes constitute the passage, the way, through which the multitude of spatial dimensions enter architectural design. This passage, which unfolds through a series of phenomenological actions such as experience, observation, memory and recollection, is found in the translation from reality to concept rather than from concept to reality, namely, in architectural drawing. Deconstruction therefore does not regard the structural 'integrity' of form as an architectural object but of form as process and medium: it concerns a destabilisation which is inherent in representation, which can occur not only in the disturbance of its signifiers – such as the introduction of new media and semiotic operations – but also in the reconsideration of its signifieds: of presence itself. Tschumi's grid of La Villette for instance, the abstract mediator between site and concept is a geometric abstraction, one that despite its materialisation as matter and program in the Folies, is born out of the language of geometry and through representation. It is also in representation that it becomes Folie, before building. For Derrida, writing, before enunciation, is the field of operation. Architectural drawing can therefore be understood as a process of creation, which takes place prior to 'representation' as the instruction of a physical experience of building.

What deconstruction ultimately offers to architecture, is a new approach to the understanding of the modes and capabilities of architectural representation as a means and a site of architectural design.

<sup>59</sup> Derrida, 'Where the Desire May Live', p. 321.

<sup>60</sup> Explain Difference (Derrida)

<sup>61</sup> Besides, deconstruction was claimed by Derrida as a term in between Heidegger's concepts of *Destruktion* and *Abbau* deconstruction, to suggest an inquisitional destructuring and dismantling. "I wished to translate and adapt to my own ends the Heideggerean words *Destruktion* or *Abbau*. Both words signified in this context an operation bearing on the structure or traditional architecture of the fundamental concepts of ontology or of Western metaphysics". Jacques Derrida, 'Letter to a Japanese Friend (Prof. Izutsu)', in David Wood and Robert Bernasconi (eds.), *Derrida and Difference* (Warwick: Parousia Press, 1985), pp. 1-5.

<sup>62</sup> Derrida, 'Where the Desire May Live', p. 323.

<sup>63</sup> *Ibid.*, p. 322.

<sup>64</sup> *Ibid.*, p. 322.

To sum up, what is distinctive in the work of architects such as Bernard Tschumi, Peter Eisenman or Daniel Libeskind, appears to be found not in the revisiting of form as built structure, but rather in the way that this form is informed and worked through in the context of another structure: architectural drawing as a form of *writing*. The hierarchy, 'harmony', and order of classicism and modernism is substituted for the disjunctions that nestle in the textuality of space as a web of relations, which, as Lefebvre shows, are both real and representational. The deconstruction produced out of these disjunctions is not to do with an order found within the structure of built form, as Johnson and Wigley suggested, but an order that lies in the structural relations that govern occupation: the occupation of the pursued architectural space as expressed through program and event and, at the same time, the occupation and inhabitation of the intermediary and enabling structure of architectural drawing. If as Robin Evans suggests, architecture always exceeds its representations, we must also consider that representations always exceed their 'origins' – the reality and convention upon which it is grounded, the conceptual idea that they come to signify and perhaps even the centrality of the human subject as an 'originating agent'.<sup>65</sup> This is owed to the 'application' of deconstruction: the translation involved in the wayfaring of representation.

### III HOW TO REACH THE STARS

Philip Johnson wrote, in his introduction to the MoMA exhibition publication that Deconstructivism was not an architectural style, it did not "represent a movement".<sup>66</sup> It was not a style – or perhaps is still not one, if the understanding of style is still considered to be about form, 'aesthetics', structures and, overall, about architecture as object rather than architecture as a mode of production. In that sense 'Deconstructivist' architecture – as in an architecture that takes into account the representational debates emerging from deconstruction – could then be considered as confirming the 'end of styles', suggested again by Philip Johnson, along with Henry-Russell Hitchcock, and their declaration of the 'International Style' in the earlier, 1932 MoMA exhibition on modernism.<sup>67</sup> According to Hitchcock and Johnson, the high modernist architecture celebrated in the 1932 exhibition *Modern Architecture: International Exhibition*, 'solved' the problem of style by proposing "a unified and inclusive style".<sup>68</sup> However, the architecture presented in, and foreshadowed by, the 1988 exhibition would point towards another direction, not of unity and formal similarity but of multiplicity and multivocality: an architectural production oriented towards, and understood through processes rather than form, and the movement of relations rather than the fixity of objects.

As Fredric Jameson writes, the postmodern is characterized by the loss of historicity, a weakening of periodization, and of the abolition of the distinctions between high and low cultures that emerges from the fusing of aesthetic and commercial values.<sup>69</sup> The emergence of textuality, of the openness and density of the weave of the written, ironically coincides with the domination of the image and the consequent crisis of representation that evolves to a crisis of language. To return to Godard's *Goodbye*, this crisis concerns more than a language of words: the concept of language in the wider sense of a defined system of representation as it is formed out of the dispersal of textuality, the dissemination of deconstruction as a mode of interpretation and the 'flirtation' with the new visual sensibility that emerges from the domination of visuality and the recourse to the virtual it implies. This is exactly what works such as Godard's *Goodbye to Language* illustrate: language and

<sup>65</sup> Eisenman, Peter, 'Post-Functionalism' (1976), in Michael Hayes (ed.), *Oppositions Reader: Selected Readings from a Journal* (New York: Princeton Architectural Press, 1976), pp. 9-12; p. 11.

<sup>66</sup> Philip Johnson, 'Preface' in Philip Johnson and Mark Wigley (eds.), *Deconstructivist Architecture* (New York: MoMA, 1988), pp. 7-9; p. 7.

<sup>67</sup> Henry-Russell Hitchcock and Philip Johnson, 'The Idea of Style' (1935), in *The International Style* (New York and London: W. W. Norton and Company 1997), pp. 33-37.

<sup>68</sup> The statement that follows summarizes their perception of style: "This contemporary style [architecture since 1922], which exists throughout the world, is unified and inclusive, not fragmentary and contradictory like so much of the production of the first generation of modern architects. In the last decade it has produced sufficient monuments of distinction to display its validity and its vitality. It may fairly be compared in significance with the styles of the past. In the handling of the problems of structure it is related to the Gothic, in the handling of the problems of design it is more akin to the Classical". Ibid., p. 35-36.

<sup>69</sup> Fredric Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (New York: Verso, 1991), p. 58.

image unable to anymore stand opposite one another as representatives of the rise and decline of representational thinking. The breaking of the frontier between high and low culture has challenged the institutionalization of aesthetics and representation,<sup>70</sup> and opened the way for the contamination of the structural integrity of convention.

A hybrid, a “curious mixture” in Nelson Goodman’s words,<sup>71</sup> architectural drawing stands between the worlds of notation and figuration, of the symbolic and the iconic. The problematization of representation can be mapped out in the last thirty-five years of our so-defined ‘postmodernity’,<sup>72</sup> through a series of divergences of the passage of architectural representation towards new ‘contaminations’ of its modes and perspectives. In the essay ‘Architecture’s Cartographic Turn’, Mark Dorrian develops a genealogy of the beginnings of these diversions – these deconstructions of architectural representation, through the thematic of the ‘Cartographic Turn’, which refers to the increasing implementation of cartographic strategies as generative tools in architectural design.<sup>73</sup> The productivist ethos characteristic of the Cartographic Turn, Dorrian traces in the close entanglement of the map with the diagram as presented in the writings of Gilles Deleuze and Felix Guattari:

[...] an important aspect of the ‘cartographic turn’ is the emergence, more recently, of a new ‘productivist’ ethos informed, in particular, by the work of Gilles Deleuze and Félix Guattari. The emphasis here falls upon what the architectural strategy/representation does rather than what it means: what is valued is the maximisation of effects rather than any single determination. This valorisation is cognate with a politicoaesthetics of mobility deployed in the face of processes of ‘subjectification’ [...] and it is one of the peculiarities of the situation that the map, complicit with these very processes, is drawn upon in their refusal.<sup>74</sup>

Dorrian points out that – although according to Peirce’s semiology architectural drawings are classified as diagrams, that is, icons that express in relation to the referent a “similitude through analogous internal relations” (as Dorrian clarifies, through measured and proportional relations) – there is a tendency that stems from Deleuze and Guattari’s appropriation of Pierce’s terms to distinguish between the two.<sup>75</sup> The opposition is based on the understanding of drawing as tending more towards a figural, formal semblance, which relates to the architectural object, instead of one that would suggest a procedural association to the content. On setting out a series of propositions on “architecture and its representational forms”, Dorrian challenges the idea of representation as a direct transcription of a mental image in the process of design – arguing that, as representational forms affect the cognition of the architectural object, the architectural image is constructed at the intersection of the conceptual intentions of an authority and a series of mental, material and performative modes and media.<sup>76</sup> These ‘interferences’ between the author/designer and the image produce, according to Dorrian, alienation effects that mark the failure of representation as a direct projection of the mental to the material, yet evoke acts of interpretation and thus open up room for speculation and creation.<sup>77</sup> Representation here shifts from reterritorialization to deterritorialization.<sup>78</sup> As Dorrian remarks, this is not in fact a moment of failure but an inevitable condition of representation, the acknowledgment of which leads to a narrative mode of legitimization of the work involving a shift of focus from object to operation and process – that is in Dorrian’s words, to the “‘thick’ culture”, that accumulates and reveals the intertextual nature of the work of architectural design.<sup>79</sup> The Cartographic thus pursues a representation that is not effective in rationally re-presenting but in discovering, accumulating and excavating a density of knowledge that produces meaning and gains

<sup>70</sup> Jameson offers the example of Robert Venturi and Denise Scott-Brown’s ‘Learning from Las Vegas’ project. Ibid. p. 54

<sup>71</sup> Goodman, *Languages of Art*, p. 218.

<sup>72</sup> The term ‘Postmodern’ came into prominence in Jean-François Lyotard’s book *The Postmodern Condition: A Report on Knowledge*. Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Manchester: Manchester University Press, 1979).

<sup>73</sup> Mark Dorrian, ‘Architecture’s Cartographic Turn’, in Frederic Pousin (ed.), *Figures de la Ville et Construction des Savoirs* (Paris : CNRS Editions, 2005), pp. 61-72.

<sup>74</sup> Ibid. p. 61.

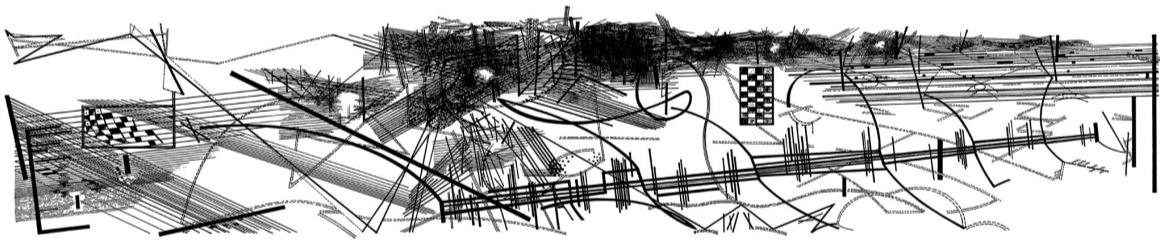
<sup>75</sup> Dorrian’s ‘propositions’ 1 and 2. Ibid. p. 62.

<sup>76</sup> Proposition 2 and 3. Ibid. p. 62.

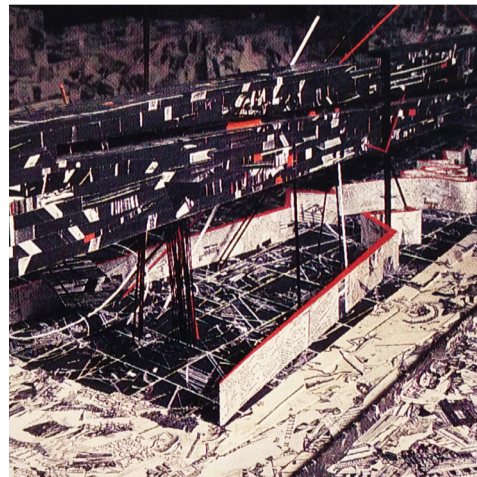
<sup>77</sup> Proposition 3 and 4. Ibid. p. 62-63.

<sup>78</sup> Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis and London: University of Minnesota Press, 1987).

<sup>79</sup> Dorrian, ‘The Cartographic Turn’, p. 63.



- [34] *Micromegas*, 'Vertical Horizon', Daniel Libeskind (1979)
- [35] *Chamber Works*, Daniel Libeskind (1983)
- [36] *City Edge Competition*, Daniel Libeskind (1987)



momentum from its origins as well as its ‘travels’ and processes of transformation.

In the Cartographic Dorrian identifies two strands: the first evolves through seriality and logical transformation whereas the other builds from “pre-existents”, from origins such as context, images or even social and representational practices.<sup>80</sup> Of course, while discussing representation, form is inevitably at stake, yet this is a form that is not a predefined end but one that is, according to Dorrian, derived as an effect of the multiple agents and practices involved in its making. Media and techniques thus become crucial generative tools in the process of design, as well as a way of opening up the scope of representation, through a closer looking at reality that will uncover the ‘hidden’ by means of the legibility provided by cartographic convention:

The success of cartographic procedures within architecture derives, at least in part, from the strategic immediacy of their contact with conventional projective architectural representation: this allows direct transfer of the full disruptive force of these alternative cartographies while bypassing the need for any accommodating transformation.<sup>81</sup>

The formative capabilities of representation as technique have of course been prominent in earlier times. One can trace them in the orders of the architectural canons, in the application of geometric rules of proportion from the churches and villas of High Renaissance to Le Corbusier’s facades, orders that derived from the welding of geometry and orthographic projection to the language and image of architecture, and established a clearly figurative generative association between drawing and building. Nevertheless, mapping expands the effect of technique from figuration to the abstraction of the diagrammatic by disturbing and subverting normative attitudes of representation, and allowing in the end for the contamination of not simply the language of representation but of architectural thinking. This tendency of mapping Dorrian explores further in the work of Daniel Libeskind and Peter Eisenman as representative of the two approaches to the Cartographic. Like Tschumi, his contemporaries Libeskind and Eisenman begin with confronting the exhaustion of functionalism in the context of a post-structuralist refusal of “subjectification”.<sup>82</sup> They use cartographic strategies to unground architecture from the ideas of site and origin as they are understood in traditional architectural discourse.

What Libeskind finds in functionalism is the beginning of the end; the end of architecture within the “victory of the invisible” as the denigration of the visual, the loss of craft and the disengagement from the everyday.<sup>83</sup> This loss is very much a loss that is once again attributed to a failure of language, which overlooks the ineffable instability of the “shape of space”; that for which no language has been agreed.<sup>84</sup> Libeskind directly questions the outdated stillness and historicity of an architectural language, by evoking the idea of the Derridean difference<sup>85</sup> but also more explicitly through his essay ‘Versus the Old-established “Language of Architecture”’.<sup>86</sup> Through the phenomenology of Husserl and Heidegger, Libeskind draws attention to the objectification of geometry, which conceals the transformation and operations entailed in presentation.<sup>87</sup> Representation in this sense functions as an apparatus of concealment rather than recovery and of bringing things into visibility. This observation is reflected in his earlier works, such as *Micromegas*, where Libeskind moves from the formative powers of geometric orders, to the “intuition of geometric structure” as a pre-objective experience [fig. 34].

<sup>80</sup> Ibid. p. 63.

<sup>81</sup> Ibid. p. 63.

<sup>82</sup> Ibid., p. 61.

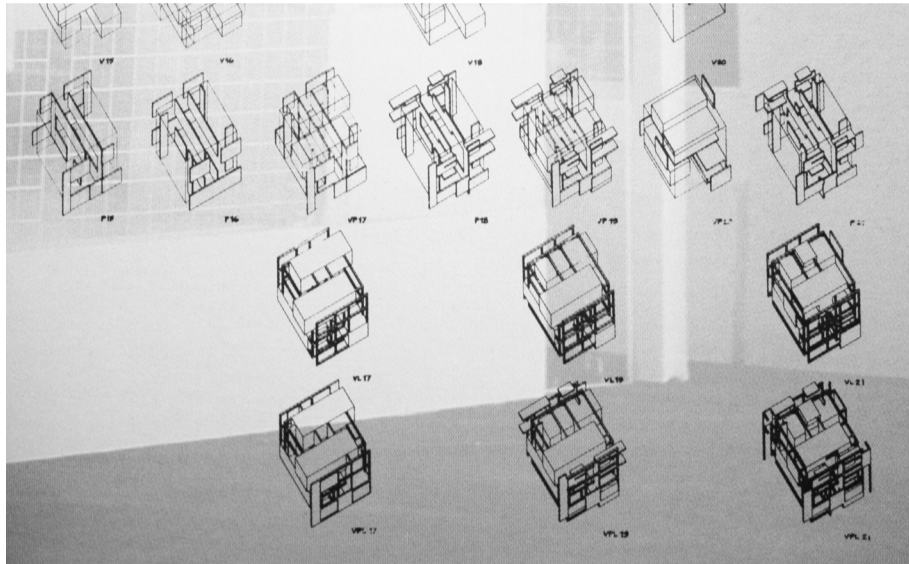
<sup>83</sup> Daniel Libeskind, ‘Upside Down X’, in *Countersign* (New York: Rizzoli, 1991), p. 9.

<sup>84</sup> Libeskind, Daniel, ‘The Pilgrimage of Absolute Architecture (A Conversational Explanation)’, in *Countersign* (New York: Rizzoli, 1991), pp. 37-45, p. 38.

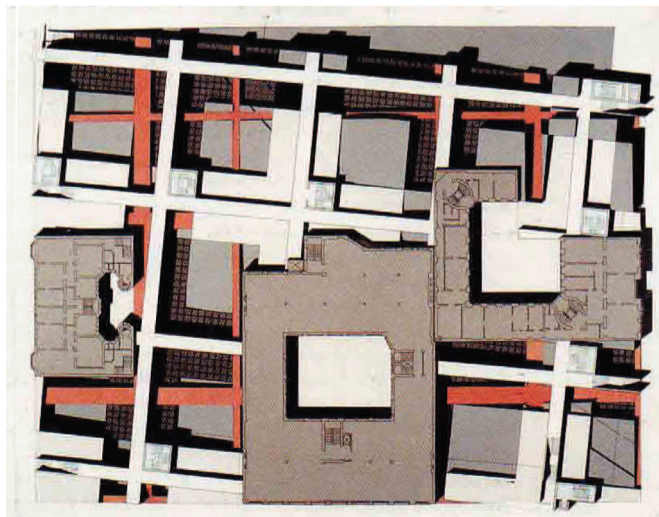
<sup>85</sup> Ibid. p. 38.

<sup>86</sup> “My drawings are a critique of the venerable, and now exhausted ‘language of Architecture’. For me this system of codes, appears in the light of empty legalisms and imitative sophisms. It has become a false -albeit well informed- rhetorical device which obscures the ‘case’ of architecture by its cult of form and a frenzied demand for a form-demanding market. The unaffected idealism of early modernity, the stormy attacks of youthful rebels against outworn meanings, have sunk to the level of intellectual libertinism and to a new academicism. We seem to have exchanged the heritage of the avant-garde for the outworn coin of historicism and its parochial train of memories”. Libeskind, ‘Versus the Old-established Language’, p. 97.

<sup>87</sup> Libeskind writes of Husserl’s *Origin of Geometry*, but his discussion of “the invisible ground from which it is possible to scaffold moving layers of construction” with regard to the negotiations of signification and objectification, clearly refers to Heidegger’s notion of ground and structure as appropriated in Derrida’s writings on deconstruction. Daniel Libeskind, ‘End Space’, in *Countersign* (New York: Rizzoli, 1991), pp. 14-15.



[37] House IV, 'Axonometrics', Peter Eisenman (1975)  
 [38] *Moving Arrows, Eros and Other Errors*, Peter Eisenman (1985)  
 [39] *Cities of Artificial Excavation*, Model, Office of Eisenman/ Robertson (1981)



Libeskind seeks to reclaim the “intuition of geometric structure”. His way to transcendence can only be found in language, that is, in architectural drawing as a kind of text, and in the ability of representation to bring the architect closer to an understanding of reality by disengaging from representation’s conventional instrumentalisation. He claims the metaphorical as capable of revealing the “truth of reality” through a fundamental mutation of the context. In Libeskind’s terms, both architecture and its representations demand a “participatory experience”;<sup>88</sup> the dedication and faith in the craft of making, in the transcendence of the text which is through an “authentic abstraction” capable of creating an experience of transgressing into the spiritual:

These “plans”, the intention of making visible the abolished distance of architecture’s reality, bring me no closer to building, yet nearer to dwelling. They show me that in abolishing distance and space, the realm between representation and participation – the awesome and unsettling nature of architecture comes into focus.<sup>89</sup>

Of Libeskind’s work, Dorrian concludes that it has been not so much “a break with modernism than the afterimage of the powerful [...] mystical and visionary traditions within it”.<sup>90</sup> But what he also finds critical for the grounding of Libeskind’s work is the role of the line as the central geometric element. From his earlier drawings, Libeskind’s frantic landscapes of linearity move from an architecture of the ideal of an “end-space” in *Micromegas* or, in Eisenman’s understanding of his work, from the “not-architectural” in *Chamber Works*, to the space of the city,<sup>91</sup> where they shift from figure to “support”, so much so that they begin to dominate and dictate surface, through recursive repetitions across scales [fig. 35-36].<sup>92</sup> From notation to figure, Libeskind’s treatment of the line is never disengaged from signification, as Robin Evans sustains of *Chamber Works*.<sup>93</sup> Rather, as Dorrian counters, even these “not-architectural” lines are always attached to clear material conditions.<sup>94</sup> Libeskind’s lines then do not renounce as Evans suggests, they do not detach things from “the word”.<sup>95</sup> Rather, by attempting an act of “authentic abstraction” they include, they make visible the word, the written sign of representation as the point of departure for the uncovering of reality. By ‘reclaiming’ the self-referential nature of representation through metaphor, Libeskind reveals drawing as a kind of experience. Architecture is for Libeskind at its end because it is its own end, and this is both reflected and originating from drawing as its language, its written articulation. Drawing, and through it design, emerge as not so much a mechanistic process of transcription but an experience of participation, an act of dwelling in the real from within the virtual.

Respectively, Eisenman’s departure from functionalism is, as Dorrian writes, similarly inspired by an end.<sup>96</sup> A clear statement of his theoretic ‘lineage’, in the anti-humanism of Lévi-Strauss and Michel Foucault, can be found in his 1976 editorial for *Oppositions*, published under the title ‘Post-Functionalism’, which intended to perform a *prima facie* theorization of the reactions to the positivism of so-called modernist architecture and the International Style.<sup>97</sup> There, functionalism is criticised as maintaining an anthropocentrism, the consistent privileging of function (a utility which always refers to a human subject) over form.<sup>98</sup> From his early more volumetric and ‘less cartographic’ works,<sup>99</sup> Eisenman’s drawings depict a supposedly “self-generating”, self-referential and a-functional architecture through sequences of transformation, which results in the detachment of both the architect as author and the user, albeit it remains concerned with the occupation of form [fig. 37].<sup>100</sup> Eisenman’s later cartographic projects are defined, according to Dorrian, by the transition from the volumetric to the surface, the further development of a series of operational strategies of

<sup>88</sup> His series of installation *Three Lessons in Architecture* illustrate this idea of participatory experience through a combination of acts of reading, remembering, and writing architecture. Libeskind, ‘The Pilgrimage’.

<sup>89</sup> Libeskind, ‘Versus the Old-established Language’, p. 98-99.

<sup>90</sup> Dorrian, ‘The Cartographic Turn’, p. 65.

<sup>91</sup> Eisenman, Peter, ‘Representation of the Limit: Writing a ‘not-architecture’’, in *Chamber Works: Architectural Meditations on Themes from Heraclitus*. London: AA Publications, 1983), pp. 5-8.

<sup>92</sup> Dorrian exemplifies this playing out of the line upon the surface through the three-dimensional models of the project ‘City Edge, Urban Competition, Berlin, 1987’. See Dorrian, ‘The Cartographic Turn’, p. 66.

<sup>93</sup> Robin Evans, ‘In Front of Lines that Leave Nothing Behind’ (1984), in Neil Leach (ed.), *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge, 1997), pp. 482-489; p. 488.

<sup>94</sup> Dorrian, ‘The Cartographic turn’, p. 66.

<sup>95</sup> Evans, ‘In Front of Lines’, p. 488.

<sup>96</sup> Dorrian, ‘The Cartographic Turn’, p. 64.

<sup>97</sup> Peter Eisenman, Peter, ‘Post-Functionalism’.

<sup>98</sup> *Ibid.* p. 9.

<sup>99</sup> Dorrian refers to the series of Houses and specifically introduces the example of *House IV*. Dorrian places these works outside Eisenman’s ‘cartographic period’, which he considers starting from 1978 onwards. Yet he marks their importance as illustrating a certain ‘cartographic’ quality as “*arising from a composited mapping of the serial states of the object*”. Dorrian, ‘The Cartographic Turn’. p. 68.

intervention that are inventive, yet native to representation (to name a few: superposition, repetition, scaling, nesting etc.),<sup>101</sup> and the situation of the work through these operations within a dense field of pre-existing texts, such as maps, drawings, images and narratives [fig. 38-39].<sup>102</sup> The diversification of agencies is achieved from without, in what Eisenman will later describe as architecture's exteriority, as opposed to the interiority of the earlier volumetric projects.<sup>103</sup> Dorrian points out the proliferating potential of the productivism emerging from the dispersal of the subject through sequential effects of alienation, which eventually lead to the "unmotivation of the sign",<sup>104</sup> and an architecture liberated from any teleology.<sup>105</sup>

This subversion of the subject through the privileging of representation and its modes, suggests an autonomous architecture that, however, does not seem to exclude the architect, but instead allows him to strategically inhabit a space of their own. This is an architecture concerned not with origins but with destinations, relying on what Libeskind referred to as "the dynamic transmutation of movements",<sup>106</sup> The introduction of maps, images and narratives – that is, of abstract, narrative, and figurative pre-existents, which are already representational – endows the projects with a complex intertextuality that problematizes the notion of origin, but at the same time reveals the dynamic textual nature of the architectural drawing as a place of representation capable of gathering and bridging the differences (and at times even feeding off and growing out of these differences) in a common space of signification. This space of signification is now purely architectural and inevitably figurative. Representation becomes in a sense tautological: as Neil Leach writes, it becomes a sign of immanent meaning that simply represents the architectural logic itself.<sup>107</sup>

Cartographic strategies can be thought of as moving drawing further from the idea of a transcription of the mental, while bringing it closer to the notion of the map as a tool of discovery again through transcription. Yet, this is a transcription that regards a wider territory, which departs from the authority of the architect and architectural form to a multiplicity of spatial discourses and experiences. The abstraction of representation as mere technique brings centre-stage the operations of architectural design, merging the real and the virtual and, in this way, expanding both. As a place of action, a place of dwelling and transcendence, drawing emerges from the post-functionalist cartographic practices as a space of equal importance to the built space of architecture. Thus, classical and modernist rationalism, in a sense, are made away with, for the sake of another kind of 'functionalism', which serves nothing else but the function of architecture as a field of action, where function is not about the utility of an external space but about the 'utility' of signification. This suggests that in the Cartographic emerges a centrality of the architectural sign that allows for the possibility of a varying engagement (or disengagement) with what Eisenman describes as architecture's 'exteriority'. In this way, the centrality of the architectural sign does not suggest an automatic, self-generating discipline nor the exclusion of the architect, or the user. On the contrary, it involves participation and inclusiveness: the ability of the architect to engage in an intertextual co-habitation of spaces. The production of meaning is there derived by a collective subjectivity that is only possible through the translation to the "stellar",<sup>108</sup> which is fulfilled by the transcendence into the 'otherworldliness' provided by the virtuality of representation. The 'functionality' of architecture as opposed to the centrality of the human subject does not suggest a single, but the possibility of multiple 'centres' as representation forms the common ground for the multiplicity of texts that relate to its intentions.

The architecture that emerges from this cartographic practice, at the same time merges and is

<sup>100</sup> Ibid., p. 68.

<sup>101</sup> It is interesting to note the procedural categorization of Eisenman's project with regard to the application of these operations in the last pages of *Diagram Diaries*. As opposed to the open-ended character of Eisenman's a-teleological architecture, the operations of transformation appear there as a predetermined mechanistic toolkit for invention. Peter Eisenman, *Diagram Diaries* (London: Thames & Hudson, 2001), pp. 238-293.

<sup>102</sup> Dorrian, p. 69.

<sup>103</sup> Eisenman, *Diagram Diaries*.

<sup>104</sup> "The critical, in my terms, begins with the becoming unmotivated of the sign, the potential reduction of the culturally sedimented meaning of signs, so that the message itself becomes the interference. It is interference as fore-ground and not background that begins to define a fundamental characteristic of the processes of what is, for me, a necessarily existent critical project in architecture". Peter Eisenman, 'Autonomy and the Will to the Critical', in *Assemblage* 41 (April 2000), p. 90.

<sup>105</sup> Dorrian, 'The Cartographic Turn', p. 67.

<sup>106</sup> Libeskind, 'End Space', p. 15.

<sup>107</sup> Neil Leach, 'Peter Eisenman: "Post-functionalism"', Neil Leach (ed.), *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge, 1997), pp. 234-235, p. 234.

separated from its object, or rather it is through separation and difference that it assimilates and represents. According to Dorrian, what both tendencies represented in the work of Libeskind and Eisenman effect is not the abandonment, but rather the establishment of a new understanding of figuration. The apparent initial detachment from the image offered by the abstraction of the diagram is through mapping transformed into a new kind of image,<sup>109</sup> a kind of form, which stands as a kind of 'objectified process'.<sup>110</sup> As Dorrian writes, responding to Daniel Libeskind's pursuit of the "stellar dimension" of architecture, what we find at the 'stars', at the constellations of the virtual which are formed out of representation, is once more the earth: "repeated, but with a difference".<sup>111</sup> But it is this difference that constitutes the reading that takes place through the writing of drawing. The understanding of drawing as a purely formal language, which at the same time suggests the loosening of its attachment to a referent,<sup>112</sup> is what allows for the amplification of a knowledge by bringing together the textuality of space and the spatiality of drawing. Upon entering the realm of representation, the diagrammatic-relational can be seen for what it can be: figural but with a difference. Drawing then acts as a kind of displacement, a translation that does not simply entail the shift into language but that rather aims to attain a reciprocal relation of signification with its referent, by uncovering the meta-narrative of its own language. This is a doubling effect that is not uncommon to architecture: drawing can be at once the same, as process, and other, as form.

The instrumentality of the representational metanarrative can be respectively found in Dorrian's own cartographic practices along with Adrian Hawker, in the context of their research design atelier Metis. The very word metis from the Greek deity of wisdom but also cunning *Μήτις*, suggests a state of extreme resourcefulness and alertness. Respectively, the architecture of Metis can be considered as one of uncovering latent potentials, of fluid conditions and 'opportunistic' craftsmanship.<sup>113</sup> Metis consciously aim at unhinging certitude in design and representation by taking on architecture as a negotiation of possibility, smouldering in the nooks and crannies of their own architectural tools: the codes, media and techniques of representing the city, which are ubiquitous within and without architecture. In other words, Metis announce, without hesitation, representation as the "true-site of the architectural project".<sup>114</sup> Like Eisenman, they acquire an archival approach to reality. But rather than seeking the real in representation, in the normative ways in which the city has been encoded and imagined, they seem to seek the representational within the real. While investigating the hidden potential of the real, they survey with equal rigour the possibilities of representation [fig. 40]. Such attentiveness, challenges the hierarchy between the real and the drawing, while making prominent the intentionality of the latter as a communicative practice central to architectural production. As Metis write, representational codes are not neutral but value-laden.<sup>115</sup> They are both a means to selection as well as infused with the condition of their intentionality.

Engaging with a cartographic approach of the city, which always stands as the larger referent in an architecture that aims at uncovering the associations between the scale of the urban and the detail of a single line, Metis apply their 'cunning' on creating opportunities out of the biases and limitations of the "representational archives" of their projects. They re-appropriate cartography in order to make use of the difference produced by the unsettling of pre-existing urban imaginaries, which they inhabit by re-performing. The unsettling relies on strategies of repetition that entertain the pathologies of the image: the interferences of the reproduction are made present and operative through processes of both remapping and "cacography":<sup>116</sup>

<sup>108</sup> Libeskind on the *Three Lessons in Architecture* project in Venice: "What I tried to do with the problem of architecture in the earth, [...] was to disengage the problem of architecture from its position on the earth. [...] to send it into its stellar source". 'The Pilgrimage', p. 42.

<sup>109</sup> One of the propositions that Dorrian sets in the beginning of the paper is whether "... with the so-called instrumentalisation of the diagram in architectural production conversely have a practice that as it departs from the image, formalizes the diagram and so turns out to have never left?". This seems to respond to Libeskind's commentary mentioned on the note above. See note 108.

<sup>110</sup> Bergson, Henri, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (1889), trans. F.L. Pogson (New York: Dover Publications, 2001).

<sup>111</sup> Dorrian, 'The Cartographic Turn', p. 64.

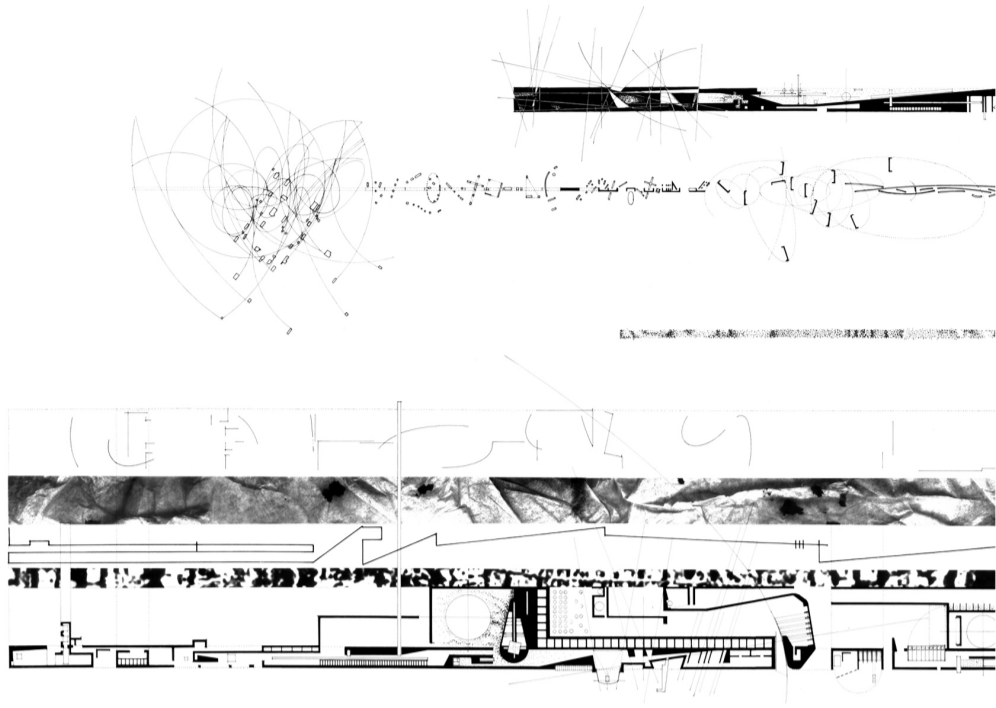
<sup>112</sup> The drawing emerges as an unstable text. Libeskind writes of this negotiation between sign and referent in drawing: "the reduction of representation to a formal system - seeming at first void and useless - begins to appear as an extension of reality which is which is quite natural". Libeskind, 'End Space', p. 14.

<sup>113</sup> "Metis" is a Greek term, analysed in a classic study by Jean-Pierre Vernant and Marcel Detienne, who defined its field of application as "the world of movement, of multiplicity and ambiguity. It bears on fluid situations which are constantly changing and which at every moment combine contrary features and forces that are opposed to each other". Dorrian, Mark and Adrian Hawker, 'Postscript as Pretext', in *Metis: Urban Cartographies* (London: Black Dog Publishing, 2002), pp 8-11; p. 8.

<sup>114</sup> *Ibid.*, p. 9.

<sup>115</sup> *Ibid.*, p. 9.

<sup>116</sup> These strategies Metis associate respectively to the fox and the octopus as symbolic in Greek mythology of a practice of metis. The Fox represents a tactic of reversal whereas the octopus stands for polymorphy and polysemy. *Ibid.*, p. 9.



[40] *Micro-urbanism: Project for the edge of the Parliament Hill, Ottawa, Metis (2001)*

[...] stammerings, mispronunciations, dysphonics, background noise, jamming, statics, cutoffs, hysteresis and interruptions in the communication. Everything, that is, where representation thought as identity fails in the face of its material, empirical instantiation [...]<sup>117</sup>

Representational imaginaries thus become their site of action, their site of performance and space of navigation. The architect emerges as a metis-man, a traveller, (in their performative unravelling of space and its possibilities, and in their misuse and misinterpretation of maps) and a collector (in their probing of memory and recollection through the object). In a sense the practice of Metis expands architectural space into drawing by revealing the latter as a site of exploratory action rather than a static prescriptive object. The inhabitation of this space occurs over the processes of making as well as reading – they aim to “resist immediate consumption”,<sup>118</sup> suggesting the performativity of representation. At the same time thus, they expand drawing into the physical space of the architect/performer: the materials employed, the tools of craftsmanship, the modalities of the language of representation and even the extended physical space of the architect, from the drawing board to the studio.<sup>119</sup> Like Libeskind then, their travels are aiming for the stars, however, only to get a better view of the earth by dwelling in true abstraction: the stripping off of the sign of its dominant meanings in order to make it mean more.

Cartographic attitudes towards representation rely on the fecundity of mapping, on the dynamics of symbolic signification and the performativity entailed in drawing as a creative practice rather than a mere transcription or projection. In the essay ‘The Agency of Mapping’, on offering an extensive analysis of the expressions and capabilities of cartographic strategies of representation James Corner describes mapping as a “productive and liberating instrument” capable of re-making rather than simply re-presenting territory.<sup>120</sup> Drawing on Deleuze and Guattari, Corner points out the difference between the map and the tracing – while tracings constitute mere reproductions of the already known, mapping entails the idea of discovery and revelation. In Deleuze and Guattari’s words:

What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. The map does not reproduce an unconscious closed in upon itself; it constructs the unconscious. [...] The map has to do with performance~ whereas the tracing always involves an ‘alleged competence’.<sup>121</sup>

In the cartographic drawing, ‘competence’ is overtaken by the ‘trickery’ of invention. Yet, this trickery is only possible due to the reliability of its coding within an architectural, that is, a spatial (un)consciousness. By bringing things into visibility, architectural drawing brings things into architectural space. Still, the representational tactics described by Dorrian can be also considered as cartographic for one more reason: their engagement with mapping is not only limited in their performative and notational qualities but also in their use of mappings as pre-existing sites of knowledge. Especially in the cases of Eisenman and later Metis, the cartographic often engages with images as being equally textual to mappings. The result is indeed, as Dorrian points out, a return to figuration through the formalisation of the diagram,<sup>122</sup> but it is also the arrival to a kind of form that within the intentionality of representation constitutes itself a kind of text. This textual culture, or at least its understanding as being textual, is what makes the transcription, and the assignment to form valid and possible through the emancipation of the signifier from the signified.

<sup>117</sup> Ibid., p. 9

<sup>118</sup> Mark Dorrian and Adrian Hawker, ‘Metis’. <http://www.scotmark.eca.ac.uk/research/9.pdf> [Accessed 5 September 2015]

<sup>119</sup> Dorrian and Hawker, ‘Postscript’, p. 10. This idea of the space of drawing as ‘expanding’ into the physical space of the studio – or perhaps even of the studio as infiltrating the drawing – was also proposed in one of the architectural studios run by Mark Dorrian, Dorrian, Mark, ‘Architectural Design Opening A: Architectural Forensics’ [unpublished studio brief], M.Arch. Year 1, 2007-2009 (Edinburgh: School of Architecture, University of Edinburgh, 2007).

<sup>120</sup> Corner, ‘The Agency of Mapping’, in Dennis Cosgrove (ed.), *Mappings* (London: Reaktion Books, 1999), pp. 213-152.

<sup>121</sup> Deleuze-Guattari quoted in: Corner, ‘The Agency of Mapping’, p. 214.

<sup>122</sup> Dorrian, ‘The Cartographic Turn’, p. 62.

#### IV HOW TO HOLD THE EARTH

In his 2008 essay “The Geographic Turns of Architecture”, rather than the practice of cartography, David Gissen looks into the influence of the discipline of geography on architecture.<sup>123</sup> He traces the close connection between architecture and geography back to the 16<sup>th</sup> century publications of Vitruvius’ texts, most notably in the Italian translation by Cesare Cesariano and his depiction of the architect using the geographer’s cross-staff [fig. 41].<sup>124</sup> This tie was certainly made prominent during the colonial excursions of European nations and the population of the new lands, as well through the eighteenth century cartographic projects of, among other, Pierre Patte and Nicolas Ledoux.<sup>125</sup> Similarly to Dorrian’s proposition, Gissen’s idea of the geographic also involves the notion of the cartographic itinerary as an exploration of the world through representation. However, the geographic maintains from the cartographic one significant difference, which is most accurately illustrated in Gissen’s choice of words: the former appears to present against the latter a consciousness of representation, of writing the *map* rather than the *land*. The cartographic is capable of acknowledging the *writing* involved within architectural practice, in its limitations and possibilities. On the other hand, the Geographic attitude towards architecture as presented by Gissen seems to be persistently ‘grounded’. Its point of reference is the indisputability of the earth (the *gaia*, from Greek γαῖα), as opposed to the map (*la carta* in Italian and Latin, from Greek χάρτης) which there only gains value as a means of measuring, fixing and legitimizing an image of a quantifiable territory.

Gissen’s engagement with the multiple geographic “turns” in architecture is wide and varied, as indeed is the long-standing relation between architecture and geography. As a result, its definition raises certain contradictions. On the one hand, it appears to refer to an architecture that consciously makes use of the performative aspects of mapping, and in this way it is possible to relate it to Mark Dorrian’s notion of the Cartographic Turn. On the other hand however, it appears to rely on a quasi-realism revealed in concepts such as ‘datascape’ and the more ambiguous term of ‘research architecture’, suggesting a kind of research that appears to be limited within strictly quantitative processes of enquiry.<sup>126</sup> In this sense it is easier to locate it in the work of architects such as the Dutch practices OMA, MVRDV and UN Studio and their engagement particularly with visualisations of elements of program and inhabitation, as well as practices such as Foreign Office Architecture and their ‘new pragmatist’ studies of natural phenomena,<sup>127</sup> elements of atmosphere and other so-called ‘fields of forces’. The issue at question here is not so much the specificities of the architecture of certain architects, as much as the attempt at a theorization of those under the umbrella term of the Geographic Turn or ‘research architecture’, What is involved in research? What is involved in geography? OMA and MVRDV are seen by Gissen as representatives of this idea of an architecture that engages with research for the sake of architectural design in a geographical manner. Nevertheless, although representation becomes once again crucial to the workings of their architectural projects, the geographic concern does not seem to regard the representational practices it historically suggests, namely cartography, but a form of positivist and statistical research that aims at legitimizing architectural design by ‘tying’ it to the earth as data, and therefore as a solid ground of reason [fig. 42].

According to Gissen the primary link between architecture and geography has been traditionally found not so much in concepts of quantification, neither even in concepts of representation, but particularly in *territory* as their actual common ground and the concept of territorialisation.<sup>128</sup> As he

<sup>123</sup> David Gissen, ‘Architecture’s Geographic Turns’. In *Log 12* (2008), pp. 59-67.

<sup>124</sup> *Ibid.*, p. 59-60.

<sup>125</sup> *Ibid.* p. 60.

<sup>126</sup> On *datascape* see James Corner, ‘Eidetic Operations and New Landscapes’, in James Corner (ed.), *Recovering Landscape: Essays in Contemporary Landscape Theory* (New York: Princeton Architectural Press, 1999), pp. 152-169; p. 165.

<sup>127</sup> On the concept of ‘new pragmatism’ see William S. Saunders, *The New Architectural Pragmatism: A Harvard Design Magazine Reader* (Minneapolis: University of Minnesota Press, 2007).

<sup>128</sup> Gissen, ‘The Geographic Turns’, p. 67.

<sup>129</sup> *Ibid.*, p. 67.

<sup>130</sup> William Rankin also discusses the idea of data as ground for reason in architectural design. As he remarks, data are themselves largely constructed and manipulated. Like any other form of representation they are not neutral, but involve too technique, construction and intentionality. William Rankin, ‘Noise, Mapping, and the Architecture of Statistics’, in Renata Hejduk & Harry Van Oudenallen (eds.), *The Art of Architecture/The Science of Architecture: 93rd ACSA Annual Meeting Proceedings* (Washington DC: ACSA Press, 2005) pp. 371-381. <http://www.acsa-arch.org/search-page/?keyword=RANKIN&section=Conferences&showDesc=True> [Accessed 20 September 2015].

<sup>131</sup> UNStudio’s understanding of the diagram relied on the writings of Gilles Deleuze.

writes:

This particular geographic project is less about architects drawing on maps, or making them, or geographically oriented tables; it is more about architects considering how the architect and the architect's creations tie concepts to the earth, produce difference on the earth, and foster an earthen political subjectivity.<sup>129</sup>

This subjectivity is however still grounded through *data* on an earth that is considered as a given, stable ground, and therefore implies the concept of space as being not only beyond interpretation but in fact overdetermined by a dense landscape of information.<sup>130</sup> Architecture then emerges as a kind of problem-solving through the manipulation of information as knowledge, which is presented as the epitome of process against objectification despite often resulting in extremely formalist, as in form-driven, architectures. What Gissen postulates is that the territorial nature of cartography seems to replace plans presenting the building as a territorial process. Yet this does not seem to occur through processes of mapping but imaging. If the cartographic then spreads the subject from the author/architect by introducing through mapping the agency of context – both physical and conceptual, the idea of the geographic can be considered as removing it altogether.

The potential that arises from the geographic for Gissen is an architecture that by holding on to the ground of reality and reason would offer the possibility of a new “cartographic reality”. What is at stake then, is once more a departure that involves a revisiting of representation. But rather than resolving to a proliferation of signification, the attention this time seems to be shifting from representation as articulation, to a fixing simulation. An example of this can be found in the work of UN Studio, where the diagram was initially a key tool for what was meant to be a widely inclusive form of architecture.<sup>131, 132</sup> Nevertheless, their representations, as is becoming the dominant trend, were initially enhanced by and later increasingly based on digital technologies, and their capabilities of modelling with regard to visualisation and surveying. This resulted to the production of formally compelling imagery, which were completely distanced however from the symbolic abstraction of mapping and normative architectural representations [fig. 43].<sup>133</sup> What Gissen defines as the Geographic Turn can be therefore considered to relate more to the digital or the computational turn, which have also emerged in recent theory,<sup>134</sup> or even the most recent -ism of parametricism, than the cartographic. But if Dorrian was to expand his genealogy of cartographic architecture, where would these works sit in relation to it? And beyond this, can they offer an expansion of the capabilities of architectural representation in view of the crisis of representation?

The mismatch between the cartographic and the geographic and the ambiguity of the latter are also made evident in Mark Foster Gage's response to Gissen's essay.<sup>135</sup> Gage writes “in defence of design” making the point that on consistently seeking the phenomenal rationalisation that such practices suggest, what is questioned and unhinged is the symbolic and conceptual autonomy of architectural design which is marked by a loss of the critical in favour of a deterministic architecture of problem-solving.<sup>136</sup> Gage goes as far as suggesting that ‘research architecture’ as defined by Gissen, in fact bypasses design rather than addressing it. Clearly, what Gage protests is the lack of invention and intuition: the lack of difference.<sup>137</sup> In his view, ‘research architecture’ proposes post-structuralism as a kind of a pseudo-scientific neo-rationalism. But Gage's disregard of

“A diagram is a map, or rather several superimposed maps”. (Gilles Deleuze, *Foucault*, p.44) the “diagram or abstract machine... the map of relations between forces, a map of destiny, or intensity, which... acts as a non-unifying immanent cause which is coextensive with the whole social field. The abstract machine is like the cause of the concrete assemblages that execute its relations; and these relations take place ‘not above’ but within the very tissue of the assemblages they produce”. (Deleuze, *Foucault*, p. 37). See Foucault, Michel, ‘Of Other Spaces: Utopias and Heterotopias’, in Neil Leach (ed.), *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge, 1997), pp. 330-336.

<sup>132</sup> Ben Van Berkel and Caroline Bos, ‘Diagrams’, in *MOVE, Vol. 2: Techniques* (Amsterdam: Goose Press, 1999), pp. 19-22.

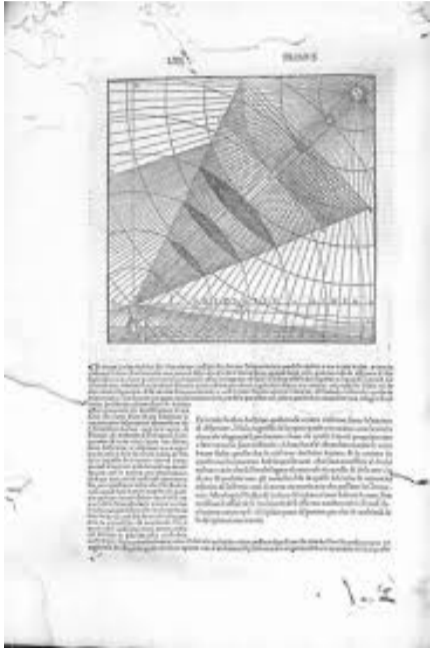
<sup>133</sup> “At UNStudio we see design models as packages of organizational or compositional principles. The thinking underlying our design process is now enabled by advancements in software, allowing a parametric thinking process to evolve into a computational working process. [...] At the inception of a design process computation does not replace the inspiration of ideas, nor the operation of diagrams and design models. It is moreover a further projection of what these enabling concepts could not have been on their own. As it spans the design process, computation provides control of increasingly actual parameters. [...]”. Abstract for Ben Van Berkel's ‘Navigating the Computational Turn’, in Xavier De Kestelier, Brady Peters (eds.), *AD Computation Works: The Building of Algorithmic Thought* (London: Wiley, 2013), pp. 82-95. See ‘Navigating the Computational Turn’, *UNstudio.com*. <http://www.unstudio.com/research/spp/an-essay-about-parametric> [Accessed at 13 September 2015]

<sup>134</sup> See Xavier De Kestelier, Brady Peters (eds.), *AD Computation Works: The Building of Algorithmic Thought* (London: Wiley, 2013), pp. 82-95.

<sup>135</sup> Mark Foster Gage, ‘In Defence of Design’. In *Log 16* (2009), pp. 39-45.

<sup>136</sup> “A line is no longer allowed to be a thing but must now connect things- things larger and more important than itself. The architectural line is now defensible only if it is the direct result of an act of analysis, of a process, a mapping exercise, or just about any manipulation of data emerging from any body of factors”. *Ibid.* p. 39.

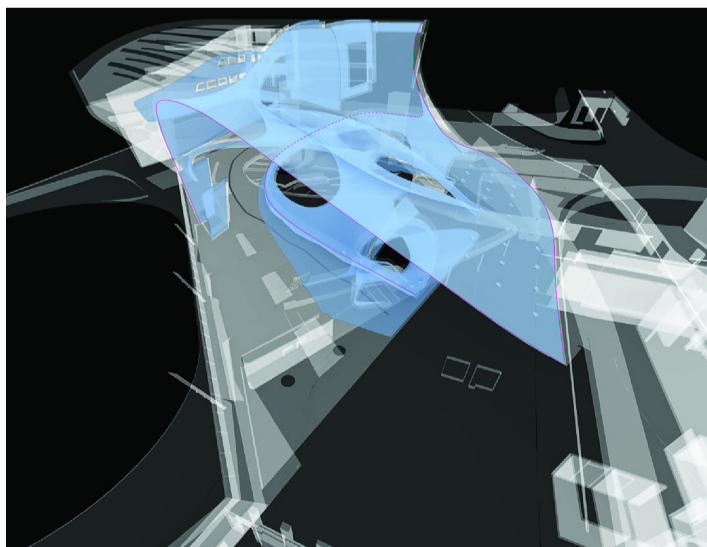
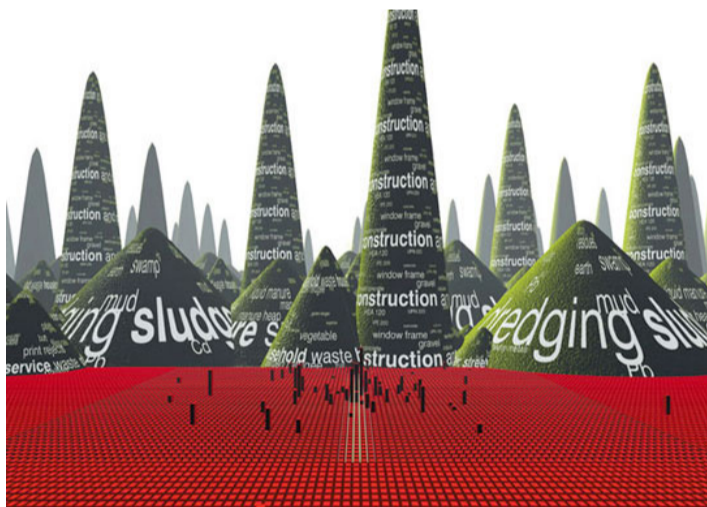
<sup>137</sup> “Since the practice of “research architecture” assumes intellection as a basis for formal production, it naturally dis-credits intuition and instinct as forms of intelligence, despite the historical position they have held for the discipline”. *Ibid.* p. 44.



[41] *Architect with Cross-staff*, Cesare Cesariano (1521)

[42] *Datatown*, MVRDV (1998-1999)

[43] Arnhem Central, Transfer Terminal, 'Diagram 2', UN Studio (2015)



mapping as inoperative to design is misplaced and completely overlooks the open-endedness and productivist invention involved in the cartographic architecture of subjectification, as it is sketched out in Dorrian's analysis of the Cartographic or even in the disjunctive strategies of Tschumi. Gage's interpretation suggests a saturation of information that although is aimed at solidifying architectural projects, by attaching architecture's concern with the social to processes of quantitative analysis as validation for architectural form results in a substitution of the speculative spatiality of architectural representation for the stability of iconic imagery.

As Gissen points out, the 'suspended empiricism' that the quasi-scientific approaches of the geographic propose, is at once taking advantage of and mocking the idea of a design practice that is justified by accurate geographical information and imagery.<sup>138</sup> But at the same time, and particularly in its digitized instantiations, this approach still reflects an architecture which, on relying on such 'earthen' positivist representations as the basis of its value, dismisses the abstraction of its own symbolic order for visualisations that are no more maps, but models of the territory and therefore rather fix than *re-make* it.<sup>139</sup> The imagery involved is still instrumental, nevertheless, it is treated as the image of a territory rather than a deterritorializing image. The abstraction that emerges from such quantitative representations, where 'measuring' is not the measuring of the earth suggested by geometry but that of science and statistics, stabilises and therefore disarms the potentiality of the architectural image. What is lost is the dual register of the drawing as the representation of a territory and a territory in its own right: as symbol and icon. This separation of the spatiality of the real from the spatiality of representation occurs by either removing the notational function on removing the attachment to a referent spatiality for the sake of a purely virtual imaginary (for instance in the case of digital modelling) or by removing the figure function of the drawing on reducing spatial relations to forms of notation that remain extra-spatial (such as non-narrative text, statistical charts etc.). The architect/reader is dis-placed, detached from place, rather than displaced on the course of an itinerary towards a re-made territory.

The fixation on the terrestrial therefore seems to subvert the territory of representation as the common place between reality and fantasy. A misdirection that can perhaps be traced to the common misconception that the Atlas, the titan of Greek myth who in our contemporary world guides the practice of cartography, endures the weight of the earth rather than that of the stellar globe. In its persistent holding onto the grounds of a standard reality and a solid structure of representation, the geographic misses the anterior capabilities of mapping and drawing. Instead of spatializing information, the simulative representation becomes a way of stabilizing, and so dis-placing, the intangible fluidity of space. This removal of temporality entails the removal of spatiality. The loss of invention is the loss of language as a path to signification; is the loss of the dwelling in the drawing as space and as event, and at the same time of an architectural knowledge of the earth. The image is no longer a territory – at least not for the sake of architecture – and it has no use when it poses as its simulation.<sup>140</sup> If then the transition from mapping to modelling, and therefore from representation to simulation, signifies through the fixing of meaning a loss of spatiality, how is this spatiality expressed in architectural drawing as a language of representation?

Louis Marin points out this close association between language and space through the idea of the *utopian text*.<sup>141</sup> Similarly to Derrida, Marin is concerned with the production of meaning within language, as opposed to the understanding of texts as purely referential and mimetic representations.<sup>142</sup> Marin

<sup>138</sup> Gissen makes this point by reflecting on a commentary on datascares by James Corner. See Gissen, 'The Geographic Turns', p. 63.

<sup>139</sup> Corner, 'The Agency of Mapping', p. 213.

<sup>140</sup> This is often discussed - as it is also done in Marin - through the paradigm of Jorge Luis Borges' fable 'Of Exactitude in Science'. See Louis Marin, 'Utopia of the Map', in *Utopics: Spatial Play* (New Jersey: Humanities Press, 1983), pp. 233-238.

<sup>141</sup> Louis Marin, 'Narrative and Description', in *Utopics: Spatial Play* (New Jersey: Humanities Press, 1983), pp. 33-60; p. 57.

<sup>142</sup> Eugene D. Hill sheds some further clarity in the influences and references of Marin's text, pointing out Marin's deconstructive approach in relation to Jean-Francois Lyotard and Roland Barthes. Eugene D. Hill, 'The Place of Future: Louis Marin and his Utopiques', *Science Fiction Studies* 9(27) (1982). <http://www.depauw.edu/sfs/backissues/27/hill.html> [Accessed 21 September 2015]

draws from the notion of Utopia as it emerges in the 1516 book by Thomas More.<sup>143</sup> Expanding from this fictional no-place, Marin approaches the utopic as a signifying practice of spaces, where meaning is produced within the text at the interplay of a multiplicity of spaces. Despite being multiple these spaces are engendered in the unity of the narrative as a form of representation, thus understood as a “plural organization of spatiality”.<sup>144</sup> Rather than a re-presentation, the utopic text is the negation of both, reality and mimesis:

Within this discourse, which has been closed off by the synopsis of a totalizing (or totalitarian) gaze, this multiple production is signified by the incongruity of the produced spaces. This is a spatial play that can be defined as both imaginary (a productive figurative schema) and nonsuperimposable (multiple spaces), all within the most rigid coherence of a totalizing discourse.<sup>145</sup>

Writing of Marin's *Utopics*, Eugene D. Hill follows Marin's idea of the play of meaning as a spatial play (jeux d'espaces) in his earlier works such as his writings on Pascal's *Pensées* or the paintings of Paul Klee. Neither reality nor mimesis, the spatial play takes place in these works for Hill as a rearticulation of incongruous spaces, which is perpetually re-performed and negated, therefore evading the fixing of a determinate meaning.<sup>146</sup> As Hill writes, the notion of space here can refer to literal spaces that acquire figurative significance as in the space of the page, or the canvas, or can be rhetorical spaces in the sense of a positions within discourse, what describes Marin's idea of the “space of the text”.<sup>147</sup> In other words, Marin's idea of the utopic brings into play the diverse concepts of spatiality that are derived by what Fredric Jameson describes as a “duality of registers”:<sup>148</sup> an internal discontinuity that emerges from the clash of the figural (physical and imaginary) and the textual (symbolic). Marin then finds that space and textuality come together in the utopic text through modes of description and narrative,<sup>149</sup> in a combined process of poiesis and projection, which is produced not only upon writing but also upon reading as a form of dwelling in space:

Utopia is first and foremost a spatial organization designed for complete human dwelling, an activation of a sort of dwelling fantasy. [...] it is mainly an architecture of places inscribed in space [...]<sup>150</sup>

What is of further interest in Marin's concept of the utopic text and its ‘activation’ through a kind of spatial experience is his particular attention to maps as instantiations of such a dual register, which creates the conditions for the production of meaning through a heterogeneous yet unified spatiality. Marin becomes concerned with the duality of the map as a negotiation between figure and deep structure. In the map, narrative emerges from the concept of the itinerary or the route as an enunciated expression, as a form of spatialized discourse:<sup>151</sup>

The travel narrative would be a tracing of an unknown space with new routes; it would be a mapping by the inscription of lines on the blank page, on the virgin soil of a terra incognita. These notions would also apply for the geographic city map. First, the map is an itinerary with successive stages – i.e. a narrative's enunciated expression with the scansion of its various narrative segments and sequences of rest areas, cities, and points of recuperation, by obstacles such as mountains and rivers to be crossed, by places where the traveller is awarded certain heroic and religious qualifications, famous sanctuaries etc.<sup>152</sup>

<sup>143</sup> Thomas More, *Utopia* (1684) (Cambridge: Cambridge University Press, 2002).

<sup>144</sup> Marin, ‘Utopia of the Map’.

<sup>145</sup> *Ibid.*, p. xiv.

<sup>146</sup> Hill, ‘The Place of Future’.

<sup>147</sup> “[they can be of figurative significance]; or they can be spaces in the ancient rhetorical sense of *topoi* (or: topics, positions, loci) of argument. In this last case, the *topoi* are positions in a space or field of discourse (which Marin calls the ‘space of the text’[...]).” *Ibid.*

<sup>148</sup> “the peculiar duality of registers observable in such visual objects guarantees them against any temptation to collapse one of them back into the other, to see the text as a mere pretext, or on the other hand to reduce the visual register to the merely fictional or illustrative”. Louis Marin quoted by Eugene D. Hill. *Ibid.*

<sup>149</sup> “Narrative is discovery in the form of speech, which announces it, and of listening, which gathers it. [...] its discursive development, seized, as it were, in the very dynamics of its utterance, is brought about through a play between ‘showing’ and ‘concealing’”. Marin, ‘The City's Portrait in its Utopics’, p. 202.

<sup>150</sup> *Ibid.*, p. 203.

<sup>151</sup> Marin, ‘The City's Portrait in its Utopics’, p. 204.

<sup>152</sup> *Ibid.*, p. 204

The incongruity of the utopic, the spatial play of difference, takes place within this textual milieu at the occurrence of a moment of alienation or interference, which signifies the negation of place as a failure of utterance, a failure of the syntagmatic convention where space and text become interchangeable. This negation of place therefore can be considered as establishing the space of the map, or the drawing, and therefore marking this lack as the triumph rather than the failure of language. It is a triumph because at this point, the lack of the syntax becomes, by turning back to the syntax as figure, the point of transgression to utopia as the place that is neither real nor imaginary, and in that sense equally real and imaginary.

In Godard's *Goodbye to Language*, the Professor announces: "Interior experience is now forbidden by society in general and spectacle in particular",<sup>153</sup> and a little later: "what they call images are becoming the murder of the present".<sup>154</sup> Yet, the failure of language and representation as form, which these statements declare by relating the domination of the iconic to the loss of interiority, is quickly upended by the film itself. As Roxy, Godard's unruly dog, turns her animalistic purity of perception towards the colourful wilderness of nature, Godard calls the viewer to turn to metaphor as nature, to observe language and form with the pre-objective gaze of the animal.<sup>155</sup> As the man is "blinded by conscience",<sup>156</sup> in the Professor's words, he is blinded by the obsession of reason to hold on to the ground. Rather than its abandonment, the crisis of language becomes its proliferation through the discovery of its interiority: a metanarrative of its own formalisations. After all, the real loss is not of language per se, but of language as the guide to a stable ground, but it is this loss that leads to the reinvention of language as a flowing milieu in its own right. In the same way the map becomes territory and the drawing becomes space by acquiring a certain semiotic autonomy, such as found in the geometric intuition of Libeskind or the cunning excursions in representation of Metis. According to Marin the utopic text is placeless, yet it is not a-spatial but multi-spatial. Considered as such, the crisis of representation does not concern its redundancy but the anxiety that attends its detachment from its referents. This, in turn, may entail the conquering of its new-found 'validity', through the acknowledgement of a new-found spatiality.

<sup>153</sup> *Adieu au Langage*, dir. by Jean-Luc Godard (StudioCanal, 2014), 00:13:54. [Amazon Video].

<sup>154</sup> *Ibid.*, 00:14:10.

<sup>155</sup> Godard dubs Roxy's views with an expert of Rainer Maria Rilke's *Eighth Duino Elegy* (1923): "It is not animals who are blind/ Man, blinded by conscience is incapable of seeing the world/ What is outside, wrote Rilke, can only be known by the gaze of the animal". *Ibid.*, 00: 27:14.

<sup>156</sup> *Ibid.*

*Imagine someone [...] who abolishes within himself all barriers, all classes, all exclusions, not by syncretism but by simple discard of that old specter: logical contradiction; who mixes every language, even those said to be incompatible; who silently accepts every charge of illogicality, of incongruity; who remains passive in the face of Socratic irony [...] and legal terrorism (how much penal evidence is based on a psychology of consistency!). Such a man would be the mockery of our society: court, school, asylum, polite conversation would cast him out: who endures contradiction without shame? Now this anti-hero exists: he is the reader of the text at the moment he takes his pleasure.*

Since the eighteenth century, the city has been the primary ground and mirror of the productive, economic, social and epistemological breaks and turns that have marked the passage to modernity. These turns have been consistently characterized by an ongoing friction between the fixity of an imposed structural order (at times social, political, economic or ideological) and the spontaneity and unpredictability of the individual experience of the city. As a result, the latter has respectively undergone a radical transformation due the changes in the city's form and structure, but perhaps more importantly due to the changing of the ways in which the city is experienced. In this context, what commonly arises as a pressing issue is the question of the *legibility* of the city, a question that entails the idea of urban experience as an act of reading and, indeed, the idea of the city as a kind of textual representation itself. As the experience of the city has been expanded, or perhaps transposed, into an increasing virtuality, the inhabitation in and experience of the city tends to be fulfilled through acts of both representation and simulation.<sup>1</sup> This virtuality emerges from the proliferation of the image as an 'interface' between the city and its inhabitants. On one hand it is manifested in the displacement, or the mediation of social action and interaction through virtual or visually consumed 'spaces'. On the other, it is manifested in the attitudes of observation and place-making, which emerge from the habitual experience of such virtual 'spaces' (these range from digitally produced experiences of spaces to 'spaces' emerging in cinema, television and advertising), yet inform the experience of real space. These attitudes concern not only how the individual and the collective engages with the space of the city, but also how institutions of power also begin to treat and use it through acts of planning and surveillance. Architecture's turn to postmodernist symbolism,<sup>2</sup> and the digitally-produced iconic, present examples of visual processes of representation and simulation respectively. If the production and experience of urban space is by now so closely entangled in conditions of representation, where does the discrepancy that leads to illegibility occur? And moreover, how can architectural representation, as a tool for 'reading' and 'writing' space, respond to this inadequacy, considering its transmutations through the cartographic and geographic turns of architecture?

## I TEXTUAL CITIES

The idea of urban legibility, with its linguistic connotations, is predicated upon the idea that the space of the city is shaped by relations of representation whereby reading emerges as a mode of inhabitation. Indeed, in theory and criticism, it is common to come across the simile that the city is like a text. A celebrated instance of this can be found in French theorist Michel De Certeau's essay 'Walking in the City'. Through the abstraction of the totalising aerial view, De Certeau points out the discrepancy between what *is*, as it derives from the direct experience of being in the city, and what *is perceived*, as it emerges from the "misunderstanding" of the city as a conceptual whole.<sup>3</sup> Gazing at Manhattan from the top of the World Trade Centre, De Certeau observes how people, the ordinary "practitioners" of the city, weave a 'curious' text; one without an author and, more importantly, one that appears to resist reading:

... [they] live "down below", below the thresholds at which visibility begins. They walk an elementary form of this experience of the city; they are walkers... whose bodies follow the thicks and thins of the urban 'text' without being able to read it. These practitioners make use of spaces that cannot be seen... The paths that correspond in this intertwining, unrecognized poems in which each body

<sup>1</sup> Simulation is here used to refer to an imitation base on figural semblance as opposed to a reproduction that suggests a system of representation involving processes of signification.

<sup>2</sup> In *Learning From Las Vegas* this is illustrated beyond the iconic 'formal' into instances of Las Vegas' 'commercial vernacular' architecture. See Robert Venturi, Denise Scott Brown and Steven Izenour, *Learning From Las Vegas* (Cambridge, Mass.: MIT Press, 1977).

<sup>3</sup> Michel De Certeau, 'Walking in the City', in *The Practice of Everyday Life* (Berkeley: University of California Press, 1988), pp. 91-110, p. 93.

[44] *Penelope with Loom*, Attic red figure cup (ca. 440 BCE)



is an element signed by many others, elude legibility... The networks of these moving, intersecting writings compose a manifold story that has neither author nor spectator, shaped out of fragments of trajectories and alterations of spaces: in relation to representations, it remains daily and infinitely other.<sup>4</sup>

De Certeau argues that it is by means of walking that the infinite possibilities that smoulder within the order of the urban are activated and our spatial organizations constructed. Yet walking, that daily act which humans and animals practice almost instinctively, in the context of this weaving embodies more than a simple act of locomotion. Enhanced by the emergence of a “technological space-time”,<sup>5</sup> walking becomes a practice that, even if not consciously so, involves tactics and intentions that surpass the structure that is already given.

The textuality of the city therefore emerges in the intertwining of two contrasting and opposing conditions. As revealed at the distance of the panoptic view, the city is presented in De Certeau’s ‘eyes’ as a text of geometrical and geographic space, where buildings are seen as “the tallest letters in the world”. Based on a fictitious transparency, it purposefully forgoes the opaque spaces of the city towards the reading of the urban. The opening proposition is in De Certeau’s essay, that it is this distance afforded by abstraction that allows for the reading of the city as a whole, rendering the city transparent through the grounding of its knowledge upon visibility. Yet, this view is to De Certeau only a theoretical construction since it forgoes the ‘real’ experience of the city.<sup>6</sup> This experience emerges then as another text: the text that is woven in the opacity of the spatial practices that emerge from the potentially spontaneous, habitual – but also in De Certeau’s view at times strategic – interaction of this geometrically perceived order and its inhabitants. It is one that “contaminates” the former with its fluidity, through the movement of the bodies that enact it, thus resulting in the illegibility of the city as a whole which is formed at the intersection of the two.

It is perhaps pertinent to consider this duality of the city’s text by delving further into the idea of the weave as a ‘pre-textual’ condition. To apply to the city textual characteristics (from Latin *texere*: to weave)<sup>7</sup> is often considered as way of stabilising its form and meaning by making it available to a process of direct systematic interpretation that will render ‘common knowledge’. Yet, the weave of the city dwellers that De Certeau refers to is more of a factor of destabilisation for the urban ensemble, representing an immense complexity while affording operative agency to elements of the city that were previously omitted from the processes of its comprehension.<sup>8</sup> Despite being referred to through acts of writing and enunciation, it is closer to the idea of weave as a paradigm of skill, multiplicity and complexity rather than as a fixed and ordered structure. The urban experience is there sketched out as the negotiation between the systemic and the individual.

The figure of the weaver is ubiquitous in mythology. In Homer’s *Odyssey* we come across the weaver as a female character that stands out as a key operator of the story [fig. 44]. Circe and Calypso are weavers that create temporal and spatial detours in the main storyline, whilst Penelope, weaving by day and unravelling her cloth overnight, seems to keep the overall measure of time, binding herself to Odysseus’ travel. But Penelope’s weaving has another distinctive characteristic. It carries the ‘again and again’, the repetition of the weave as a recurring representation motivated by the persistence of holding on to her version of the story, that which only ends with her husband’s commonly unexpected return. Odysseus on the other hand, is the wanderer, whose path unfolds as a negotiation with these

<sup>4</sup> Ibid. p. 93.

<sup>5</sup> As Paul Virilio has pointed out “*the representation of the contemporary city is no longer determined by a ceremonial opening of gates, by a ritual of processions and parades, nor by a succession of streets and avenues. From now on architecture must deal with the advent of a ‘technological space-time’*, the establishment of which Virilio attaches to the development of the ‘vision machine’, a term that refers to the automation of perception. By automation of perception he means the loss of control and influence on how we perceive things. And of what we perceive in the first place. Paul Virilio, ‘The Vision Machine’, in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp. 59-77; p. 62.

<sup>6</sup> De Certeau, ‘Walking in the City’, p. 92-93.

<sup>7</sup> On a speculative connection between work, writing, weave and work see Brian Charles Clark, ‘A Tapestry of Metaphor’. [[http://www.wdog.com/brian/Scriptorium/writing\\_weaving.htm](http://www.wdog.com/brian/Scriptorium/writing_weaving.htm)] [Accessed 8 December 2015]

<sup>8</sup> In the introduction of *The Practice of Everyday Life*, part of which is the ‘Walking in the City’ chapter, De Certeau sets out his goal to make explicit the systems of operation and models of action of the users, which are “commonly assumed as passive and guided by established rules”. As he argues “each individual is a locus in which an incoherent (and often contradictory) plurality of such relational determinations interact”. Michel De Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1988), pp. xi-xxiv; p. xi.

weaving figures. Athena's protégé, he is also a figure of craft and cunning as described in the first verses of the myth (polymechanos or polymetis), at times able to stir the narrative himself:

Speak, Memory, of the cunning hero,  
The wanderer, blown off course time and again  
After he plundered Troy's sacred heights.<sup>9</sup>

These operative characters stand as 'vehicles' of the author within the narrative. But above all, it is Athena, the *deus ex machina*, who leads the narrative. Athena Ergane (Ἐργάνα, from Greek ἔργον: work), was the daughter of Zeus and Metis, and the goddess of wisdom, warfare, craft, and cunning. A deity analogous to the Roman Minerva, the Celtic Brigantia, or the Navajo Spider Woman weaving the blanket of the sky,<sup>10</sup> Athena is also the goddess of weaving, a 'divine' craft which is proposed as representative of the complexity and genius implied in the qualities that the deity stands for. The weaver is thus a maternal figure, not in a domestic manner, but in a way that nurtures craftsmanship and invention as creation.<sup>11</sup> Weaving is therefore a model for the spatial and temporal continuity of the narrative. But at the same time it stands for a structural complexity that regards a high degree of cunning and flexibility to master. As opposed to the idea of the text as an object of standardised knowledge, weaving represents a dynamic process of temporal discovery that demands the coordination of techne and poiein, of craft and invention; a temporal performance of movement and duration rather than a fixed instance. Essentially then, weaving is a form of dialectic composition that raises questions of process authorship, and authority.<sup>12</sup> It is a paradigm for both the city and discourse, as can be seen in the dialectics of Plato in *The Statesman*, a dialogue that is arguably concerned more with revealing the method of discourse than the skills of statemanship.<sup>13</sup> There, the ruler of the city is described as faced with the task of weaving the multiple elements that comprise the life of the city, a cunning operation of ingenious control.

Comparing Plato's weaver to De Certeau's, despite the discrepancy of status –from the ruling Statesman to the 'oppressed' city dweller – what emerges is the undoubted complexity of the city, to recall Maurice Merleau-Ponty's terms, as the intertwining of a (wishfully) 'objective' concept and subjective experience.<sup>14</sup> The projection of textual characteristics onto the urban milieu proposes an understanding of the city as a system of voluntary and involuntary signs, the systemization and comprehension of which would lead to the ultimate deciphering of the city, a legibility derived from the deterministic founding of the text's structure to a solid ground of knowledge. This 'theoretical' text of the city holds nothing of the spatiotemporal textuality, as emerging through Plato's weaving of dialectics, or the cunning works of Athena Ergane. Or rather, any work of trickery required has been already 'taken care of' for the observer/dweller by a remote authority. Spatial practices such as those described by De Certeau – or those reviewed in Chapter II – exert a critical pressure upon the fixing of the city's dynamic weave through conventions of representation. These latter, stabilise the image of the city not only through the ways they selectively perceive it (i.e. focusing on the built, the rational or the measurable/mathematical) but also due to the ways that they seek to confer upon it external structures of codification (such as language). Perhaps the interplay between space and text that emerges from the question of the textuality of the city can be therefore considered not with regard to how it can provide for the structural deciphering of urban space as a given script, but rather with regard to how it can provide for the unravelling of the urban through a comprehension of the spatiotemporal dimension of the text as an ongoing discourse. A performative act of construction

<sup>9</sup> Stanley Lombardo's translation. In the original: "ἄνδρα μοι ἔννεπε, μοῦσα, πολύτροπον, ὃς μάλα πολλά/ πλάγχθη, ἐπεὶ Τροίης ἱερὸν πτολίεθρον ἔπερσεν:/ πολλῶν δ' ἀνθρώπων ἴδεν ἄστεα καὶ νόον ἔγνω,/ πολλὰ δ' ὄγ' ἐν πόντῳ πάθεν ἄλγεα ὃν κατὰ θυμόν./ ἀρνύμενος ἦν τε ψυχὴν καὶ νόστον ἐταίρων". Homer, *Odyssey*, trans. Stanley Lombardo (Indianapolis: Hackett Publishing, 2000), p. 1.

<sup>10</sup> Athena respectively was considered to be responsible of weaving the fleece of clouds with the sunbeams.

<sup>11</sup> The concept of the maternal textile with regards to the text/infant, is also analysed by Kathryn Sullivan Kruger through Julia Kristeva's idea of the "Maternal Mother". Other primary weaving figures of folk myth were the three fates (in Greek, moirai): Clotho, Lahesis and Atropos, who respectively spin, measure and cut the thread of life. Respectively on the Brother's Grim stories spinning and weaving are commonly related to rituals of casting spells that divert the story. Sullivan Kruger, Kathryn, 'The Semiotics of Cloth and Thetic Production', in *Weaving the Word: The Metaphors of Weaving and Female Textual Production* (London: Associated University Press), pp. 34-45.

<sup>12</sup> Kenneth M. Sayre points out the "grooming" of weaving in the earlier conversations of *The Sophist* and *Theaetetus*. In *The Sophist*, discourse (logos) owes its existence in "the weaving together of forms with one another" («την ἀλλήλων των ειδών συμπλοκήν»). Kenneth M. Sayre, *Metaphysics and Method in Plato's Statesman* (Cambridge: Cambridge University Press, 2011), p. 94.

<sup>13</sup> Cornelius Castoriadis, *On Plato's Statesman* trans. David Ames Curtis, (Stanford: Stanford University Press, 2002), p. 42

and, occasionally, deconstruction, such an understanding of text as the weaving and unravelling of meaning through negotiations of structure and operations of authorship and signification is relevant to Jacques Derrida's idea of the text as a place of difference,<sup>15</sup> where meaning is not fixed but, while informed by the structure, susceptible to its negotiation and open to interpretation. It is also relevant to Louis Marin's concept of the city as a utopic text, one which is placeless by having no fixed place, yet not a-spatial, as a discourse which is produced as a unity, at the interplay of a multiplicity of spaces.<sup>16</sup> It is, finally, a continuous itinerary across the distance between actors and the spaces that they weave.

## II READING THE CITY

The weaving of the city by its inhabitants suggests a play, an oscillation and a movement between its operating parts. On the other hand, the 'text' of the totalizing aerial view suggests a one-way operation, in which the spatial practices of the city dwellers are abstracted. This one-way operation is described as a kind of reading that takes the text at its 'face-value'. It therefore suggests a stabilisation of the play between the static and kinetic expressions of the city in order to produce a condition of visibility. As Henri Bergson writes, we 'look' away from movement:

[...] from the mobility of the movement we turn away as much as we can; what interests us is [...] the unmovable plan of the movement rather than the movement itself. [...] we simply seek to represent the general plan of each of these complex movements, that is to say the motionless design that underlies them.<sup>17</sup>

In the abstracted 'text' of the aerial view that De Certeau describes in the opening of his essay, we are presented with a kind of text that similarly 'looks away' from the complexity of the urban:

To be lifted to the summit of the world Trade center is to be lifted out of the city's grasp [...] His elevation transforms him into a voyeur. It puts him at a distance. It transforms the bewitching world by which one was "possessed" in to a text that lies before one's eyes. It allows one to read it, to be a solar Eye, looking down like a god. The exaltation of a scopic and gnostic drive: the fiction of knowledge is related to this lust to be a viewpoint and nothing more.<sup>18</sup>

De Certeau compares this panorama to the panoptic views of architects and cartographers. The reading of this text then takes the form of dictated enunciation; of a strictly descriptive performance. The understanding of the city as text is thus only made apparent by means of its 'transcription', of its projection to another 'medium' or space that may be either virtual (in De Certeau's case the mental image of his visual perception) or physical (in the case of the architect/planner another kind of script). As in the totalising view legibility asserts presence in the urban through a criterion of constancy and visibility, within its 'text' De Certeau's urban practitioners, although active and while enacting the space of the city, remain obscure and elusive presences, while the places that they walk remain unseen. Respectively, in the architectural convention of the panoptic urban plan, these aspects of the city seem to be not only unreadable but overall untranscribable: by default impossible to represent. The city is textual to its walkers but only 'legible' in its detached theorization.

<sup>14</sup> See Maurice Merleau-Ponty, 'The Intertwining-The Chiasm', in *The Visible and the Invisible* (Evanston: Northwestern University Press, 1968) pp. 130-155.

<sup>15</sup> Jacques Derrida, 'Structure, Sign, Play in the Discourse of Social Sciences' (1967), in *Writing and Difference* (London and New York: Routledge, 2005).

<sup>16</sup> Louis Marin, 'The City's Portrait in its Utopics', in *Utopics: Spatial Play* (New Jersey: Humanities Press 1984), pp. 201-232.

<sup>17</sup> Bergson, Henri, *Creative Evolution*, trans. Arthur Mitchell (New York: Henry Holt, 1911), p. 303.

<sup>18</sup> De Certeau, 'Walking in the City', p. 92.

But what is really entailed in legibility? What does it mean to read a text and what does it mean to read a city? If the former denotes the extraction of meaning from a writing, to read the city should in turn mean to decipher, to 'conquer it' by means of stabilization – in other words to crystallize an *image* within one's consciousness that will render the city (semantically) coherent and, thus, manageable. Rather than stabilizing it, the linguistic paradigm has foregrounded the incoherence of the city as illegibility, since the supposed failure of its reading seems to derive directly from its understanding as a kind of text – that is, of the expectation that it can be perceived or understood, language-like in a clearly codified manner. This failure emerges in Kevin Lynch's attempt at addressing experience through a systematic signification in *The Image of the City*,<sup>19</sup> and even – despite his attention to the 'eroticism' of the city and the instability of the signifieds – in Roland Barthes' determination to discover the "language" of the city in *Semiology and the Urban*.<sup>20</sup> In these approaches, emerges a common intention to overcome the discrepancy between the "perceptual form of the city" as derived from its experience,<sup>21</sup> and the abstraction of the 'concept city'<sup>22</sup> of representation through a linguistic interpretation of the former that seeks to assert legibility. This is perhaps due to what De Certeau describes as "the pleasure of 'seeing the whole'",<sup>23</sup> which represents an intention for an 'all-encompassing' mode of description, an ideal absolute knowledge of the city. This intention also emerges, in Stan Allen's 'Mapping the Intangible', as a response to the expansion of the city in connections that are beyond the geographic and into a hyperlocal space of information:<sup>24</sup>

Traditional representations presume stable objects and fixed subjects. But the contemporary city is not reducible to an artefact. The city today is a place where visible and invisible streams of information, capital and subjects interact in complex formations. They form a dispersed field, a network of flows. In order to describe or to intervene in this new field architects need representational techniques that engage time and change, shifting scales, mobile points of view, and multiple programs. In order to map this complexity some measure of control may have to be relinquished.<sup>25</sup>

Nevertheless, what becomes constant in every one of these interpretations is the suggestion that within this fabric exist instantiations of the urban that seem to interfere with the semiotic coherence of the city as text. This incoherence is only confirmed by the failure not of experiencing – which in the textual analogy could be considered as kind of reading – but of assigning to the city some kind of representational function. There is always the search for a *language*, a "syntax", a "grammar", a "lexicon",<sup>26</sup> either within the city itself or with regards to its description. The problem of interpretation as deciphering therefore seems to always come down to the ability to represent. In their introduction to *Urban Space and Representation*, Maria Balshaw and Liam Kennedy point to Henri Lefebvre and Edward Soja's reservations that attempts to apply a direct analogy between language and the city tend to decontextualize and relativize the latter.<sup>27</sup> What seems problematic to them, in the linguistic model for the city, is the "material, visual and psychic forms and practices that cannot be reduced to textuality"<sup>28</sup> – only in Barthes this is anticipated, in the "erotic" dimension of the city. Lefebvre's reservations, of which Balshaw and Kennedy write, refer to the emerging equation between legibility and visibility. As Lefebvre comments, as a result of this predominance of the visual, "[interpretation] comes later, almost as an afterthought [...] 'reading' follows production in all cases except those in which space is produced especially in order to be read".<sup>29</sup> Semiology is thus reduced to mere description for the sake of an abstraction that – even when it turns its attention to the 'down below' – leaves behind not only the "material, visual and psychic" aspects of the city, but also as Balshaw

<sup>19</sup> Kevin Lynch, *The Image of the City* (Cambridge, Mass. And London: MIT Press, 1960).

<sup>20</sup> Barthes equates the 'erotic' dimension of the city as its "sociality", that is to say, he proposes that the city is semantically defined as the place of gathering and meeting with the 'other'. Roland Barthes, 'Semiology and the Urban', in Neil Leach (ed.), *Rethinking Architecture* (New York & London: Routledge, 1997), pp. 166-172, p. 171.

<sup>21</sup> This notion of "the perceptual form of the city" was the focus of the grant that Kevin Lynch and Gyorgy Kepes acquired to carry out the research that led to the writing of *The Image of the City*. See Kevin Lynch, 'Reconsidering the Image of the City', in Lloyd Rodwin and Robert M. Hollister (eds.), *Cities of the Mind: Images and Themes of the City in the Social Sciences* (New York: Plenum Press, 1984), pp. 151-161; p. 152.

<sup>22</sup> De Certeau, 'Walking in the City', p. 94.

<sup>23</sup> De Certeau, 'Walking in the City', p. 92.

<sup>24</sup> Stan Allen, 'Notations+Diagrams: Mapping the Intangible'. In *Practice: Architecture, Technique and Representation*, (London: Routledge, 2009), pp. 56-59; p. 37.

<sup>25</sup> Allen, 'Mapping the Intangible', p. 60.

<sup>26</sup> The notions of language and lexicon appear in Lynch's *The Image of the City*, and Barthes' 'Semiology and The Urban', respectively, while Michael Gardiner discusses

and Kennedy argue, the cultural effects of representations upon the production of space,<sup>30</sup> that is to say, the narrative, ideological, as well as material ways in which representations inform the 'practice' of the space of the city.

The text of the conceptual city as a universal object thus maintains the description at the loss of the narrative, projecting an (mis-)understanding of reading as primarily a kind of visual consumption. In this context, then, illegibility can be attributed to what Paul Virilio has termed a "visual dyslexia",<sup>31</sup> due to the conflation of illegibility with invisibility. Nevertheless, unlike Virilio's assertion, history as knowledge does not identify as a history of visibility<sup>32</sup> – at least not in the sense of visual perception, even though it is indeed defined by the beginnings of representation. Conventionally, the break between the prehistoric and the historic is defined by the formation not simply of language, but of the written word. History is in effect a history of the script as material record and knowledge of the event. Is this discrepancy between 'concept' and 'reality' really a matter of failure to read, or is the inconsistency between the city and its image occurring in the process of transcription? It is the very nature of the *script* of this text that needs to be addressed in order to define the shortcomings of the transcription. Normative architectural representations propose that it is found in the matter of buildings that outlines the insides and outsides of the city, in the 'light' as opposed to the 'dark' spaces<sup>33</sup>. Are the criteria of inclusion in this transcription of representation those of persistence, measurability and materiality: a solid-versus-void distinction that defines the city through the 'ink' of the figure against the 'white' of the ground? Or is the space of the city concluded in the weaving that emerges from the practices of the everyday? What does in the end define the warp and weft of the city?

In De Certeau's essay, walking poses as a form of enunciation of the city's text. It proceeds through *speech acts*, utterances within which the performativity of enunciation is added to the text as a pre-existing structure. Through walking, the city dwellers do not just write but they also 'speak' the text: they *enact* the space of the city, which is thus constantly rewritten. If these *speech acts* are not part of a writing but acts of enunciation, what then constitutes the *script* of this urban text,<sup>34</sup> the matter in which the city is written and through which it is enunciated? What is the form that is borne out of this conjunction of the given structure and the spontaneous event? In the text of the city the human body is interchangeably called to act as more than a 'writer' or a 'reader'. It is most importantly a central character in the narrative of space, and it is exactly the compilation of an *image* that is at stake. Bodies and their movements are inevitably part of the actual, physical image of the city as they alter its materiality. At the same time however, they contribute in shaping its virtual image(s), as they constantly reshape it by means of visual perception, as well as imagination. The textual city emerges at the weaving of these lines of movement: an interlacing that relies equally on the structure of an architectural language and the improvisations of experience and inhabitation.

Inquiring about the 'utopic visibility' of the legible city,<sup>35</sup> one might consider again the understanding of the city as a utopic text. When Louis Marin discusses the city as a placeless Utopia, he does so considering it as more than the physicality of topography or the physicality of the built. The city emerges in Marin's text as an ideological discourse, which is constructed and interpreted as "the representation of the imaginary relationship people have with their conditions of existence".<sup>36</sup> The weaving, or rather the *script* of dwelling – of which walking is only the most prominent instantiation and probably one that is still very high at the scale of 'legibility' – activates the city; in Lefebvre's

the notion of the "grammar of everyday practice". Michael E. Gardiner, *Critiques of Everyday Life* (London and New York: Routledge, 2000), p. 174-178.

<sup>27</sup> Maria Balshaw and Liam Kennedy, 'Introduction: Urban Space and Representation', in Maria Balshaw and Lima Kennedy (eds.), *Urban Space and Representation* (London: Pluto Press, 2000), pp. 1-21.

<sup>28</sup> *Ibid.*, p. 3-4.

<sup>29</sup> Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford and Cambridge, Mass.: Blackwell), p. 141-147.

<sup>30</sup> *Ibid.* p. 162. See also Balshaw and Kennedy, p. 4.

<sup>31</sup> "...It is a question of visual dyslexia. Teachers have been saying for a long time now that the last few generations have great difficulty understanding what they read because they are incapable of re-presenting it to themselves. [...] words have in the end lost their ability to come alive, since images, more rapidly perceived, were supposed to replace words according to the photographers, the silent film-makers, the propagandists and advertisers of the early twentieth century. Now there is no longer anything to replace, and the number of the visually dyslexic keeps multiplying". Paul Virilio, 'Topographic Amnesia', in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp. 1-18; p. 8.

<sup>32</sup> *Ibid.*, p. 8.

<sup>33</sup> This notion of light versus dark can be found in the work of James Donald. James Donald, 'The City, The Cinema: Modern Spaces', in *Visual Culture* (London: Routledge, 1995), pp. 77-95. The notion of the illegible 'dark' is also found in Paul Carter's concept of the 'dark writing'. Carter, Paul, *Dark Writing* (Honolulu: University of Hawai'i Press, 2009).

<sup>34</sup> The correct English word to be used here would be *scripture*. However, as this word has come to be most commonly associated with a specific type of religious texts, *script* has been preferred. As Susan Sontag writes, what best describes this is the French word *écriture* which, through Roland Barthes, she defines as 'personal utterance'. As Sontag writes *écriture* defines for Barthes not an object but the accumulative function of synergy among the elements of writing (language, tone etc.) that assigns to it the quality of a text rather than a

terms, it *produces space*. Yet, this reading of dwelling as such still remains on the level of description, foregoing the dwelling as “fantasy”. In the essay ‘The City, The Cinema: Modern Spaces’, reading De Certeau, James Donald tracks the dual “texture” of the city by bringing out not the static against the kinetic, or the conceptual against the real, but the concrete against the “fantastic”.<sup>37</sup> The *fantastic* involves the myths and legends, that is, the narratives and imaginaries that evolve in the obscurity of the everyday. Are these interactions with the urban not spatial practices? Do they not respond to and ‘divert’ the image of the city? Language is never concluded in the text. In addition to the lexicon, the grammar, the structure, reading involves the subjective and fugitive participation of the ‘reader’ in its ‘symbolic order’. This is for De Certeau, as well as Barthes where the linguistic paradigm lacks in accounting for the ‘oneiric’, the ‘erotic’, or the ‘fantastic’: that which is not strictly inherent in the text but is only produced out of its reading as a discursive process of discovery.<sup>38</sup>

In *Paris Invisible City*, sociologists Bruno Latour and Emilie Hermant also negate the image of the city by contrasting the totalising bird’s eye view of a map to the real experience of the city by its inhabitants. They maintain that the real image of the city is formed out of the interaction between two kinds of agent. On the one hand there are the humans, while on the other are the various urban artefacts that allow the experience and comprehension of the actual city: from the semantically charged signs and street furniture to everyday objects, as well as institutions and representations.<sup>39</sup> Thus there is involved in the spatial play, in the workings of the urban weave, a number of operators and agents that involve symbolic, conceptual, material, standardized and spontaneous practices. Latour and Hermant’s point shifts attention from the human body as encompassing the agency of space by introducing the importance of the non-human counterparts that facilitate this configuring of the urban. As drawn by the negotiations that take place between the animate and the inanimate, the city and its image therefore emerge as the result of an ever-evolving ‘discourse’ between its users, the architecture, and the secondary infrastructure that mediates between the two. On the one hand, this interaction unfolds through events such as the twist of a key, the crossing of a street, the flight of a bird – through the informal and the ephemeral that can only be anticipated, beyond the controls of architecture. Such manifestations find little trouble being accommodated by language. Nevertheless, they are lost when it comes to architectural representations. They constitute what Georges Perec calls the *infraordinary* of cities and, in turn, architectural representations:<sup>40</sup> the “banal”, which below the ordinary remains hidden, not due to illegibility, but due to inattention. It is then in the *infraordinary* layers of the city, which are not lost in translation but rather escape attention, that the elusive textuality of the city can be found. It is by means of this that bodies form the markers of *différance*<sup>41</sup> within the *text* of the city: a dynamic collective weave of the multiple, ever-evolving ‘cities’ it entails.

On the other hand, their systematised counterparts afford to the city a ‘mechanistic’ character of instruction. As Georg Simmel points out, the metropolis may be “often oppressive [...]. Yet, it provides the texture of our experience and the fabric of our liberty”.<sup>42</sup> The inhabitation of the everyday can be thus considered itself utopic. In its immobility it *lacks place*.<sup>43</sup> Its fleeing threads are placeless but, still material and present in a path that narrates upon writing. It is this weaving that makes and reveals the city as territory: the topological unity that is woven out of the (inter)textual multiplicity as a place of encounter between order and event.<sup>44</sup>

pure manifestation of language. Sontag, Susan, ‘Preface’, in Roland Barthes, *Writing Degree Zero* (New York: Hill and Young, 1995) pp. vii-xxi; p. xiii-xiv.

<sup>35</sup> “This is the utopian will to visibility that Dziga Vertov and Benjamin seem to share with the far less sympathetic figure of Le Corbusier”. Donald, ‘Modern Spaces’, p. 89.

<sup>36</sup> Louis Marin, ‘The City’s Portrait in its Utopics’, p. 214.

<sup>37</sup> Donald, ‘Modern Spaces’, p. 77.

<sup>38</sup> “More than a diachronic manifestation of events, narrative involves enunciation as a process of discovery [...] its discursive development, seized, as it were, in the very dynamics of its utterance, is brought about through a play between “showing” and “concealing””. Louis Marin, ‘The City’s Portrait in its Utopics’, p. 202.

<sup>39</sup> Bruno Latour and Emilie Hermant, *Paris: Invisible City* (Paris: La Découverte-Les Empêcheurs de penser en rond 2006). <http://www.bruno-latour.fr/sites/default/files/downloads/> [Accessed 7 December 2011]. The significance of urban furniture is also commented upon by David Frisby: “In a quite fundamental manner, the alignment of streets, the provisions for categories of traffic, the furniture of this street exterior all serve to condition not merely how we perceive the city and its streets but also our bodily movement within them”. David Frisby, ‘The Metropolis as Text: Otto Wagner and Vienna’s “Second Renaissance”’, In Neil Leach (ed.), *The Hieroglyphics of Space: Reading and Experiencing the Modern Metropolis* (New York and London: Routledge, 2002), pp. 15-30; p. 17.

<sup>40</sup> Georges Perec, *Species of Spaces and Other Pieces* (London: Penguin Books, 1997).

### III TRANSCRIPTIONS FROM CITY TO DRAWING

To return then to the moment of realization of this inconsistency between reality and representation, is to return to text not as reflecting the totality of the city, but as the script, that is, as the record of the encounter with the city. Among the various objects that take part in this encounter, architectural drawing constitutes one more text: a tangible transcription of the urban into a new writing. Taking into account the misconceptions that arise from the textual understanding of the urban, it is possible to consider the relevant preconceptions through which this transcription has been taking effect, traditionally omitting the parts of the 'writing' which previously escaped representation, not necessarily by being 'illegible' but mostly by being ephemeral, informal or 'immaterial'. Particularly with regards to architectural representations as a primary tool of 'knowing' the city, how could drawing become informed by such a realisation, by the consideration of an urban script that regards the being inside the city, rather than looking at the city from the outside? And beyond that, what are the implications of this textuality for the creative process of design?

Such a reconsideration could begin by questioning the various factors of representational bias common in architectural representations, such as scale, materiality and temporality. What becomes prominent through the textual city is the role of inhabitation, or experience, as a performative utterance of space that reveals the user as an equal agent in the narrative of the city. Moreover, as a transcription, representation should be expected to 'remain' a text in itself, and therefore by all means maintain the dynamic between structure and agency found in the original. De Certeau expresses his hesitation about the fixation of the script by pondering that to render the weave of inhabitation static by means of the graphic sign, could mean to forget the very dynamic that makes it operative to the city's ontology.<sup>45</sup> But what is the purpose of this transcription? Is architectural representation really in search of a duplication? Does the knowledge of the city through representation require a duplication? Or does it concern a transference of its reality to drawing: the expression of the city's text into the manageable spatiality defined by architectural notation? Lastly, in this light, how is then representation anything more than a mere survey, a documentary?

The story of the Empire's life-size map as invented and told by Jorge Luis Borges is well known and widely referred to in theory and criticism.<sup>46</sup> There, the map constantly lacking in relation to reality is repeatedly revisited until the moment that it becomes contiguous with, and indeed effaces, its referent. The satisfaction of the lack leads to a description by duplication, which renders the representation overwhelming and eventually condemns it to oblivion. The 1:1 map reveals nothing new in the experience of the territory. In his reading of Borges' story, Louis Marin remarks on the utopia of representation. According to Marin, the map is utopic because it always acts as a double. It is at once same and other since, despite the degree of its figurative reduction, its explicit syntax is forgotten upon its reading as a sign.<sup>47</sup> The utopia of the map therefore emerges in the "gap", the discrepancy, between the meaning and the sign. This process of (mis)recognition involves a process of forgetting, an oblivion of the difference produced out of the act of representation:

Standing before the map of the Empire, when its subjects said, "This is the Empire", they really meant, "This is the figure of it". And this is why they lived both in the Empire and in the map, as a representation [...] <sup>48</sup>

<sup>41</sup> Jacques Derrida, 'Différance', in *Margins of Philosophy*, trans. Alan Bass (London and New York: Harvester Press, 1982), pp. 1-28.

<sup>42</sup> Quoted in Donald, 'Modern Spaces', p. 81.

<sup>43</sup> "The moving about that the city multiplies and concentrates makes the city itself an immense social experience of lacking place - an experience that is, to be sure, broken up into countless tiny deportations (displacements and walks), compensated for by the relationships and intersections of these exoduses that intertwine and create an urban fabric, and placed under the sign of what ought to be, ultimately the place but is only a name, the city", De Certeau defines walking as "to lack place". De Certeau, 'Walking in the City', p. 103.

<sup>44</sup> Amin Ash and Nigel Thrift propose an 'ontology of encounter' - places are moments of encounter. Amin, Ash and Nigel Thrift, 'The Legibility of the Everyday', in Ash Amin and Nigel Thrift (eds.), *Cities: Reimagining the Urban* (London: Wiley, 2002) pp. 7-30; p. 28-30.

<sup>45</sup> De Certeau, 'Walking in the City', p. 97.

<sup>46</sup> Borges, Jorge Luis (1972). 'On Exactitude in Science'. In *A Universal History of Infamy*. New York: E.P. Dutton. Borge's fable from the fictive book *Viajes de Varones Prudentes*, has posed as an illustration the otherness of representation in Michel Foucault (*The Order of Things*, 1966), Louis Marin ('Utopia of the Map', 1983) and Jean Baudrillard (*Simulacra and Simulation*, 1981).

<sup>47</sup> Marin, Marin, Louis, 'Utopia of the Map', in *Utopics: Spatial Play* (New Jersey: Humanities Press 1984), pp. 233-238; p. 233-234.

<sup>48</sup> *Ibid*, p. 235

The two sides of the distance therefore operate reciprocally for one another. The map is meaningful only as a re-presentation, as a doubling, of the Empire, which in turn is only defined by the recognition of the difference of the map, what Marin calls its *neutralization*.<sup>49</sup> This transaction between the origin and the enunciation of representation always tends to the nought, the no-place of representation. On the one hand there is the *zero degree* of the identification of representation as same, that is, as having no figure of its own, whereas on the other, there is the *zero degree* of the recognition of the sign as figure, which is produced through an effect of alienation from the origin and intention of the representation.<sup>50</sup> These neutralizations seem paradoxical, but are in fact complementary on affirming the productive exchange of agency that takes place upon representation.

The degree zero of writing is, according to Roland Barthes, a strategy of absence, whereby any linguistic or authorial responsibility (any agency on behalf of representation) seems to vanish, to become transparent for the sake of revealing the reality of its pure content. A phenomenal denial of craftsmanship, zero degree writing is therefore a kind of articulation that attempts the 'pure experience' of the content/origin by removing the subjectivity of author and language. However leading, as Marin observes, to the double negation of the utopic representation, this removal of subjectivity can eventually be compared to the acceptance of its ubiquity. The neo-positivist 'geographic' approaches to architecture that have emerged in the last decades of the twentieth century, proposing an architecture that relies less and less on representation as an active form of discovery and increasingly on stimuli defined as data that are aimed to afford architectural design a validity external to architecture's own purpose, can be considered as an attempt to produce a degree-zero representation, essayed through the denial of language through simulation. As Barthes concludes however, even in the absence of representation as writing, what arises is the affirmation rather than the negation of the 'responsibility' of language. The only way to eliminate this responsibility is for Barthes the absolute lack of communication. The absolute denial of form is the denial of writing as creative craft, and of the cunning of invention: an *agraphia*.<sup>51</sup> On the contrary, the "journalistic" writing of authors such as Albert Camus proposes through its neutrality the zero degree of not absence but *innocence*:

The aim here is to go beyond Literature by entrusting one's fate to a sort of basic speech, equally far from literary language proper. [...] writing is then reduced to a sort of negative mood in which the social or the mythical characters of a language are abolished in favour of a neutral and inert state of form; thus thought remains wholly responsible, without being overlaid by a secondary commitment of form to a history that is not its own.<sup>52</sup>

Craft is thus required not for the mastery of form but for the overcoming of historicity as convention.

Preceding Marin, Barthes, and his response to Jean Paul-Sartre's "écriture blanche",<sup>53</sup> the idea of the stripping of representational preconceptions of form can be traced in the tactics of Salvador Dalí. Dalí proposes that there is hardly any objectivity or even connection to reality in discriminating between the various expressions of the real, towards an optimal realistic form. The very first element of formalism he questions is that of selection and inclusion. In his 1929 Documentaries, published in the Barcelona paper *La Publicitat*, Dalí reports on a series of spontaneous observations of Parisian life, aiming to provide his reader with a rigorous and objective documentary [fig. 45]:

<sup>49</sup> *Ibid.*, p. 234-236.

<sup>50</sup> 'Writing degree-zero' is a term that emerges in Roland Barthes' first book, of the same name. The degree zero of writing refers to a "colourless" that is, a formless writing, that attempts a neutrality of representation. This kind of writing can perhaps be traced in the work of authors such as Albert Camus, Raymond Quenau, or even Georges Perec. However, As Barthes argues, even in this zero degree the figure of representation, the style, operates upon the content. Roland Barthes, *Writing Degree Zero*, trans. Anette Lavers (New York: Farrar, Straus and Giroux, 1977), p. 5 and p. 76.

<sup>51</sup> *Ibid.*, p. 75.

<sup>52</sup> *Ibid.* p. 75.

<sup>53</sup> Barthes' Degree Zero Writing was proposed as a response to Sartre's *What is Writing?* However, as Susan Sontag remarks the term was originally introduced in Sartre's review of *L'Etranger (The Stranger)* by Albert Camus. Susan Sontag, 'Preface', p. xvii.

For five minutes at eleven in the morning in the Luxembourg garden I observe the things which cross over a surface of twenty square centimetres, traced with a stick in wet sand. In order of succession I see: the heel of a man's shoe, the tip of a woman's shoe - after an interval of four seconds- a little boy's or a little girl's hand, three little boys' or three little girls' hands [...] <sup>54</sup>

The writing of his observation is almost clinical at describing the mundane, that which is happening there and then, without any attempt to sublimate the real through mannerisms of language [fig. 2]. Is he denouncing creative initiative altogether? On the contrary, it appears that Dalí is rather seeking in the real a "lyricism" that is not deliberate and therefore subjective. He is relying on the peculiar powers of reality in the same manner that Robin Evans proposes reliance on the "peculiar powers" of drawing.<sup>55</sup> Dalí thus asserts that *lyricism* is already inherent in the everyday:

In effect, documentary and the surrealist text coincide from the outset in their essentially anti-artistic and more particularly anti-literary process, since not the slightest of intentions, be they aesthetic, emotional, sentimental, etc. – essential characteristics of the artistic phenomenon – enter into this process. The documentary notes things said of the objective world anti-literarily. In parallel fashion, the surrealist text transcribes with the same rigour and as anti-literarily as documentary, the REAL free functioning of thought, of events which occur in reality in our mind, thanks to psychic automatism and to other passive states (inspiration).<sup>56</sup>

It appears that there is therefore no need for any invention. The 'narrative' already exists and awaits to be found, to be excavated. For if our cities are textual, it should be expected that their representations would be textual also, able to excavate the surreal – that which is 'super-real' – out of the code of representation.

Unlike the processes dictated by architectural convention, which are concerned with dissecting space in the orthographic, ideally panoptic, objective manner of a plan or a section, Dalí's transcription relies on spontaneous visual observation, intuitively at times constituting the ephemeral visible and hence infusing the transcription with the memory of movement and change. Instead of expanding, the focus of the transcription is shifted to the transitory, setting aside the static manifestations of space traditionally found at the core of architectural representation. This representation is still partial,<sup>57</sup> however, it is charged with an attention to detail that expands the possibilities of both space and representation through its inclusiveness. It does not propose a fixed image but rather a collection of instances, traces related to space not merely by resemblance but also by causality and process. But is such a writing capable of satisfying the criteria of textuality? Projecting such a documentarist attempt into drawing, would the dynamics of the original text remain effectively active within the new field? Is this new condition kinetic as the city-text, or is it a static fixture that has drained its object from any latent possibility?

A prominent contributor to the Surrealist movement – despite the brevity of his participation – Dalí had a significant influence on the development of Surrealist thought, particularly as it was consolidated after the *Second Surrealist Manifesto* of 1929, moving away from automatism and towards more "active" methods of production.<sup>58</sup> The Surrealists, with André Breton as a leading figure, challenged conventional notions of reality by aiming to "deepen the foundations of the real" by blurring the

<sup>54</sup> Salvador Dalí, 'Documentary – Paris 1929 – IV (1929), in Robert Deschames (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, 1998), pp. 106-107; p. 106.

<sup>55</sup> Evans points out that the instrumentality of drawing lies not in its likeness to the subject of representation, but to its "unlikeness" and the agency that its role as a means of abstraction suggests. Robin Evans, 'Translations from Drawing to Building', in *Translations from Drawing to Building and Other Essays* (London: Architectural Association, 1997) pp. 153-193; p. 154.

<sup>56</sup> Salvador Dalí, 'Documentary – Paris 1929 – I' (1929), in R. Deschames (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, 1998), pp. 93-95; p. 93.

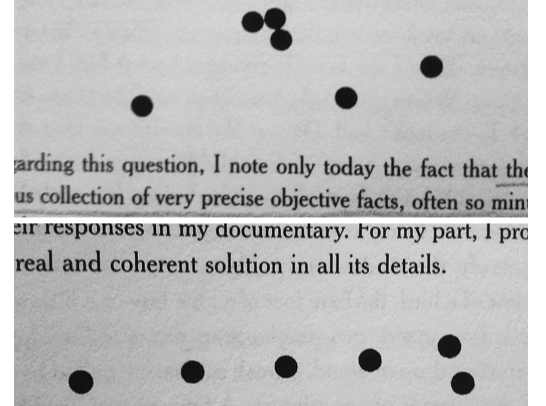
<sup>57</sup> Although Dalí's experiment primarily constitutes a verbal representation, his attempt included notational drawings.

<sup>58</sup> Dalí considered automatism a "genuinely passive state". Dalí, Salvador, 'Reality and Surreality', in Haim Finkelstein (ed.), *The Collected Writings of Salvador Dalí* (Cambridge: Cambridge University Press, 1998), p. 95.



[46] *The Hallucinogenic Toreador*, Salvador Dalí (1968-1970)  
 [45] *Documentaries*, Salvador Dalí (1929)

important body of antique riddles of different countries (leaving out the Catalan ones are particularly interesting).



Regarding this question, I note only today the fact that this is a vast collection of very precise objective facts, often so minute that their responses in my documentary. For my part, I prefer a real and coherent solution in all its details.

The exemplary character of the riddle often crosses my mind, and I am aware of the delicate poetic process by which usual things

boundaries between reality and imagination through a consideration of the desires and impulses of the unconscious.<sup>59</sup> Dream-state and other mental conditions considered forms of “psychic automatism”, were proposed as alternative ways towards gaining a “clearer view” of a previously unseen reality, which was uncovered through the bypassing of the “obstructions” of reason.<sup>60</sup> Dalí’s practice and writings evolved around the concept of what he coined *Paranoid-Critical Activity* (PCA), which proposed paranoid delirium as a hermeneutic paradigm.<sup>61</sup> In the PCA, through the obsessive ‘method’ of paranoid critical observation, the ego was proposed as a means to a systematizing of the experience of the world that was deemed no different than any other system of convention. Central to Dalí’s paranoiac practice become his double images [fig. 46]:

[...] that is to say, the representation of an object which, without the slightest figurative or anatomical modification, is at the same time the representation of another absolutely different object, itself also devoid of any kind of deformation or abnormality betraying some arrangement. – making use of skill and cunning of the requisite quantity of contexts pretexts, coincidences etc. – the second image replaces the obsessive idea.<sup>62</sup>

Dalí’s PCA corrodes realism as pure reason, by using it as a Trojan Horse for the validation of desire, foreshadowing the instability of meaning within processes of identification and representation as discussed by Jacques Lacan and, later, Roland Barthes and Jacques Derrida.<sup>63</sup> As Eugene de Klerk summarizes, Dalí essentially posits that perception is conditioned by an imaginary ‘vocabulary’.<sup>64</sup> In this sense, reality is considered to function symbolically for these unconscious ideals, shaking the hierarchy between the real and the imaginary, directly questioning materialist thought.<sup>65</sup> The revealing of this ‘reverse’ symbolic function reveals the structure of thinking, challenging not only normative notions of the real but also the very definition of the ego. As de Klerk further remarks, PCA presents for Dalí a way of “freezing” this transaction of meaning.<sup>66</sup> It poses therefore as an insight in the workings of perception and desire. De Klerk concludes that Dalí’s method essentially attempts to establish phenomenological experience as a dialectic taking place at the encounter with the world, which thus becomes formative of the ego (what Lacan later calls the ‘I’).<sup>67</sup> This encounter becomes operative due to the latter’s will of ‘ordering’ the self through the ‘ordering’ of the world. Dalí’s Paranoid Critical Method (PCM) suggests the denial of form as convention for the sake of a subjectivity, which, although intrinsically belonging to the “I” and the imaginary, is in effect bound to the real as defined by the encounter of perception. Through his not only paranoiac, but also actively controlled and deliberately cunning method, Dalí traces the material connections between the subject and the object by binding them together in a limitless circuitry of representations where the one begins to dissolve into the other.<sup>68</sup>

The proposition of paranoia as an alternative way of systematizing perception, which could reveal the associations between the mental and the physical by acknowledging the inevitably paranoid structures that guide the definition of the self, is developed in psychoanalytic theory by Jacques Lacan, almost contemporary to Dalí’s PCA. The acquaintance between the two men has been noted as definitive for the thinking of both, yet it is considered that Dalí’s influence on Lacan was significantly major.<sup>69</sup> The shattering of the object-subject relationship, and therefore the exchanges between the real and the imaginary that emerge in Dalí’s method can be understood further through Lacan’s concept of *méconnaissance*.<sup>70</sup> *Méconnaissance* emerges at the “Mirror Stage”, when the infant begins to perceive itself through the recognition of their image in the mirror. This recognition

<sup>59</sup> André Breton, ‘What is Surrealism?’, in Franklin Rosemont (ed.) *What is Surrealism?: Selected Writings* (New York: Pathfinder, 1978), pp. 112-141; p. 115.

<sup>60</sup> *Ibid.*, p. 120-122.

<sup>61</sup> Yvonne Shaffir, ‘Translator’s Preface’, in Robert Deschames (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, 1998), pp. vii-ix; p. viii.

<sup>62</sup> Salvador Dalí, ‘The Rotting Donkey’ (1930), in Robert Deschames (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, pp. 115-119; p. 115.

<sup>63</sup> As Gayatri Chakravorty Spivak summarises in his preface to *Of Grammatology* “Perhaps all texts are at least double, containing within themselves the seeds of their own destruction”. Translator’s Preface’, in Jacques Derrida, *Of Grammatology*, 1967), trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1997), p. ix- lxxxvii; p. liv.

<sup>64</sup> Eugene De Klerk, ‘Striptease in Pink Limelight: Removing the Veil between the Subjective and Objective’, *eSharp: Borders and Boundaries* 5 (2005), pp. 1-11; p. 3.

<sup>65</sup> In ‘The Rotting Donkey’ Dalí asks of the simulacra produced from the paranoid critical process: “Which of the images has a greater number of possibilities for existence if the intervention of desire is taken into consideration [...] whether these representations have any limit, or rather exist solely as a function of each individual’s paranoid capacity”. *Ibid.*, p. 116-117.

<sup>66</sup> De Klerk, ‘Striptease in Pink Limelight’, p. 4.

<sup>67</sup> *Ibid.*, p. 4.

<sup>68</sup> Dalí, ‘The Rotting Donkey’, p. 117.

<sup>69</sup> In 1932, years after his meeting with Dalí, Lacan’s doctoral thesis entitled *On Paranoid Psychosis and its Relation to Personality*

is a *méconnaissance*, that is, a misrecognition and a false knowledge of the self through the mirror image which constitutes an alienated identity along with the desire for the “ideal-I”. The illusive misrecognition that takes place through the image constitutes an expression of paranoid delusion, which is however, intrinsic to the process of knowledge.<sup>71</sup> Respectively, the systematic misrecognition involved in the PCA is similar to Derrida’s analysis of *différance*, as the crack that allows for the slippage of meaning through the metonymical play of the sign.<sup>72</sup> Dalí’s method draws out perception as driven by a critical desire formed in the movement of the gap between reality and representation. Misrecognition, although described as a slip from the real, becomes inevitable but also operative to the fulfilment of the encounter, which can be paralleled to a process of identification.<sup>73</sup> Knowledge thus occurs through the interchangeable doubling, between the real and the simulacrum. And the boundaries of the real are directly challenged:

Is there anything more absolutely equivocal than the concept attached to the words reality and realism? Let us analyse any extract of the most unanimously recognized realist author. He describes and speaks of a character and his surroundings. [...] What do his writings... have to do with reality? [...] they have to do with his intellectual system, with the complicated and very thick fabric of his prejudices and of aesthetic, moral and other conventions of all orders and types.<sup>74</sup>

The blurring of the boundary between ‘reality’ and reproduction can be also traced in the vocabulary emerging from the more ‘conventionally’ documentarist practices that evolved in the crossing from a rationalist modernity to the deconstruction of reality in the postmodern. Almost concurrently to Dalí’s “anti-artistic” methods, a general distrust in formalism was gaining momentum in modernist art, influenced by Freud’s theory of the unconscious, but primarily the visual culture emerging from the capabilities of new technologies such as cinema and photography. From Moholy-Nagy’s search for the equilibrium between the conscious and the unconscious in photography and film, to the LEF’s principle of “factography”, as Paul Virilio writes, emerged a ‘new objectivity’ that advocated the use of technologies towards a deeper knowledge of the real as opposed to the illusion of a subjective aestheticism. In this context, cinema became popularised as an analytic medium rather than a means of artistic creation.<sup>75</sup> In Britain, the genre of documentary flourished out of the British Documentary Movement, initiated by personalities such as Scot John Grierson, Walter Lippmann and Rudyard Kipling, meant to act as a way to “enable everyone to see better”.<sup>76</sup> On producing an “anthology of public vision”, through the (re)presentation of England, British documentary films of the time sought to provoke collective consciousness through the identification with the image.<sup>77</sup>

Attacking the idea of an absolute truth, the British documentarists opposed *innocence* to the idea of the objectivity of the camera. Instead of eliminating subjectivity they thus appear to divide it between the author and the medium. Although the productions of the British Documentarist Movement were far from the invention of fiction, one cannot overlook the intentionality of their work, which is declared through the reliance on the medium. Selection and montage were purposeful tools in the conveyance of their message for a socialist propaganda. Respectively Dziga Vertov’s kinocentric recomposition of the Soviet city, which was originally presented as a functionalist production of vision was later not only condemned for its formalism by Vertov’s contemporary Soviet film-makers but also characterised by Siegfried Kracauer as surrealist for its ability to “register the colloquy that the died-away, disintegrated life holds with the wakeful things”.<sup>78</sup> Despite the common concern with the reality of the objective, the engagement with the fact tends to evolve in these examples into the

employed the Freudian theory of paranoia, in order to approach paranoid delirium as a hermeneutic discourse – affected Lacan’s conception of the signifier. For a detailed analysis of the exchanges between the artist and the psychiatrist see Despina-Alexandra Constantinidou, ‘When Lacan Met Dalí: Lacan’s “Paranoid” Reading of Saussure’s Theory of the Sign’, *Gamma: Journal of Theory & Criticism* 20 (2012), pp. 237-256. The fullest account of Dalí’s Paranoid Critical Method is arguably found in the 1930 essay ‘The Rotting Donkey’, which precedes his reading of Lacan’s thesis which was published in 1932.

<sup>70</sup> Jacques Lacan, ‘The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience’ (1949), in *Écrits* (New York and London: W. W. Norton & Company, 2006), pp. 75-81; p. 80.

<sup>71</sup> *Ibid.*, p. 76.

<sup>72</sup> Jacques Derrida, ‘Structure, Sign, Play in the Discourse of Social Sciences’.

<sup>73</sup> See Lacan, ‘The Mirror Stage’, p. 76.

<sup>74</sup> Dalí, ‘Documentary I’, p. 94.

<sup>75</sup> As James Donald points out Walter Benjamin’s understanding of cinema in ‘The Work of Art in the Age of Mechanical Reproduction’, reveals “the labyrinthine constraints of the ordinary” and expands “the spectator’s field of possibilities”, what Benjamin in particular describes as the “field of testable”. James Donald, ‘Light in Dark Spaces’, in *Imagining the Modern City* (Minneapolis: University of Minnesota Press, 1999), pp. 73-85; p. 76, and Walter Benjamin, ‘The Work of Art in the Age of Mechanical Reproduction’, in Hannah Arendt (ed.), *Illuminations*, trans. Harry Zohn (London: Fontana Press, 1992), pp. 211-244, p. 239.

dissolution of the object in the 'gap' of representation. What becomes impossible to eliminate is the motivation of the subconscious towards the notion of an absolute representation of the 'real' that is only an ideal. In cinema it is montage, while in surrealism it is paranoia that produces the jolt and reveals the fissure that will allow for the rereading of reality. In both cases, object and subject are subverted by the appropriation of perception that emerges in the inhabitation of the ideal. The new mechanised objective illustrates how the modernist 'functionalism' of vision – and consequently representation – gradually evolved into a kind of 'radical realism', where the manipulation and juxtaposition of the image (such as in the cinematic montage, or in Moholy-Nagy's so-called 'faulty photographs') could claim to be more truthful to the fragmentary experience of modernity [fig. 47]. If in Dalí it was the 'documentation' of the workings of the mind that reach the sur-real, in modernist art it was the agency of the medium that adds to the perception and representation of the real. Although working in radically different modes and directions, both Dalí's surrealism and New Objectivity in effect aimed at a more inclusive understanding of the world as 'real', both by attempting a zero degree within representation, the former of a preconceived 'consciousness' and the latter of a technologically liberated 'objectivity'.

The acquisition of knowledge through absolute representation is thus revealed to be as utopic as the concept of an absolute reality: the reading of the map is as utopic as the reading of the territory. The conflict between the 'text' of the conceptual city and the active weave of its inhabitation reflects the move from object to process, and thus from the stability of meaning to the infinite movement of interpretation. For architectural representation it reflects respectively the controversy between the pseudo-scientific tendencies of a poststructuralism-turned-neopositivism and the dispersal of subjectivity proposed by cartographic approaches to design. The former pushes towards an objectification of the city through an absolute image. This is a kind of image that entails for both the city and the drawing a denial of that very multiple spatiality that theorists such as Lefebvre, Marin, and De Certeau – in different ways – have sought to assert. The object of its paranoid obsession is the 'truth' of the territory and the denial of the truth of misrecognition. The latter proposes also a paranoid enquiry, which, closer to Dalí, skillfully embraces the misrecognition as its only way of being. Its writing also tries to reach the nought: the abolition of the privileged subject, yet it does not do so by proclaiming its innocence, nor its impartiality. 'Purity' of form and meaning is pursued through a newly-conquered 'autonomy' of the drawing which is as well a surrender, to the multiplicity of the encounter between the real and the imaginary.

#### IV WORKING DRAWINGS

In the essay 'From Work to Text', literary theorist Roland Barthes makes the distinction between the *literary work* and the *text*.<sup>79</sup> In doing so, Barthes points out the characteristics of the text. According to Barthes works and texts do not differ materially, they intrinsically differ however in terms of content and, more importantly, function. Barthes describes the text as a writing open to, almost awaiting, an interpretative reading. As he writes, the text reaches the limits of enunciation; it is experienced only in an activity of production and it only exists in the dialectic existence of discourse. The text is kinetic while the work is static: the text is re-written through reading and is experienced in reaction to sign, as opposed to the work which constitutes itself a general sign. To sum up, the text is not a product for consumption, it is itself the site of the production of meanings. Like the city, the text is

<sup>76</sup> Paul Virilio, 'Less than an Image', in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp 19-32; p. 24-25.

<sup>77</sup> *Ibid.* 25.

<sup>78</sup> Siegfried Kracauer quoted in James Donald 'Light in Dark Spaces', p. 81.

<sup>79</sup> Roland Barthes, Roland 'From Work to Text', in Josue V. Harari, *Textual Strategies: Perspectives in Poststructuralist Criticism* (Ithaca, New York: Cornell University Press, 1979), pp. 73-81.



[47] 'Faulty photographs: the view from above, the view from below, the oblique view, which often disconcert people who take them as accidental shots'

*View from the Berlin Tower, László Moholy-Nagy (1928)*

then only activated through the act of reading. Its potential is relying not only within origin but in a destination which is only achieved through the reader. In this context, it appears that the authority of the writer is highly challenged with respect to the text's value. The writing acquires a power of its own through the return to the sign and its interaction with the reader. The author's intentions become liable not only to the intentions and interpretations of the reader but also to the autonomy of language and notation.

Barthes' work/text opposition makes it possible to revisit the contradiction between the objectified city of representation and the weave of inhabitation as sketched out in De Certeau's 'Walking in The City'. In the spirit of the inevitability of the agency of representation that Barthes remarks on in *Writing Degree Zero*, the issue of authority and agency within the textual expressions of the city emerges again. Considering thus the notion of the script through the transcription of the city into drawing, the question arises of how this shared authorship is enacted within architectural representation. To think of the architect as author would not traditionally allude to the script of a drawing, which is usually considered a secondary product: the mere "allographic" sign of a design to be built.<sup>80</sup> This kind of drawing is fixed and indisputable. Like the literary work, it is an end: the writing of a universal language of conventions that aims towards a precise, prescriptive communication. On the other hand, it is by means of writing that architects carry out their own passage from an existing experience of reality to what can be. This writing is not a fixed but a *working* drawing. It is not an end in itself, with regards to instructing or asserting knowledge. On the contrary, it is only through its operation as a constant rewriting, the repetition of difference through misrecognition, that design is fulfilled. The working drawing is the actual space of labour of the architect and cannot therefore be any less important than the space of a building, or city. As such, it inevitably works as a text, representing and instrumentalising the very textuality of its overlaps and disjunctions with real space.

Drawing, either as design or as documentary, is always a process of transcription. It is not concluded in a one-off process of writing and it therefore involves a series of 'readings'. The particularity of this process of consecutive significations lies in the fact that there is not only a doubling of representation involved but that this is enabled by the doubling of the architect as well. The architect is required to acquire the double role of being both the 'author' and the 'reader'. It is exactly by means of this suspension that occurs between writing and reading that the operative character of the working drawing is facilitated. Moreover, in the space of the drawing the architect does not work alone but among a series of agents that originate from both an external pre-existing spatial reality and the meaning and matter of the graphic: the animate and the inanimate. In the *working drawing* there can be no privileging of the static or the physical, no privileging of a certain scale or matter. It is a drawing open to all expressions of spatial experience, hence accumulating at once all parts of the process, from experience to sign, and back to experience again. An enduring repetitive encounter, akin to the obsessive weaving of Penelope rather than the authoritative workings of Athena Ergane, it still requires the application of a critical skill and cunning upon its paranoia, where convention is not understood as oppression but as an additional field of action.

The city and the drawing can hence be equally understood through the experience of an enduring encounter, as paradigms of the crossover between space and text. This encounter entails indeed the feeling of the unexpected confrontation, yet, in its chance it requires persistence and participation within, rather than confrontation between, its constituents.<sup>81</sup> This suggests a kind of experience that

<sup>80</sup> The allographic is used here to suggest a product that does not constitute a final work but is rather a mediative reference to an external value, such as architectural drawing or musical notation. This term is used by Stan Allen through Nelson Goodman to point out that the architect's direct engagement is with the drawing rather than the built space itself. See Allen, 'Mapping the Intangible', p.45.

<sup>81</sup> Encounter entails a 'counter', that is to say, an element of confrontation. Meaning "the meeting of adversaries, confrontation", through Old French *encontre* "meeting; fight; opportunity", from Late Latin *incontra* "in front of", composite of in- and *contra* (against).

is not only occurring in space but also in relation to place and time: a persistent inhabitation that involves the positioning of the perceiver as physical body and conscious individual, face to face with a defining, yet indefinite *other*. The crossover between space and text offers then not the grounding of interpretation through the fixing of legibility, but on the contrary, the mobilising of reading as a way of dispersing and, thus, questioning subjectivity and agency in the experience of both city and drawing as mutually dependent experiences of space.

## V FAREWELL

The proposition of drawing as a dependent but distinct spatiality can perhaps bring the so-called crisis of representation to its spatial dimension through the understanding of architectural drawing as a situated experience that involves the inhabitation of both the space of the city and the space of representation. The value of its *script* is not found in its material nature as inscription, but in its power to uncover the latent realities, which are manifested in the crossing between writing and reading, between the description of observation and the narrative of inhabitation. As the locus of reading is transposed from city to drawing the text becomes informed by the conventions of a new “regime of representation”.<sup>82</sup> This depth emerges in drawing beyond, or perhaps below, the limitations of figuration. It is not concluded in the formal duplication of a subject, nor in the notational description of a tangible reality, as it consists of practices, materialities and places of its own. Together, these comprise the field that the architect is called to inhabit. The inhabitation of this field, that is, its recognition as a situated ground demands its operation as a utopic simulation of a place. Yet, this paranoid ground is always looming; at work upon the weaving of the lines and points that introduce the seemingly disparate elements of reality into drawing convention.

Taking as a beginning the single principle of an observation escaping any conscious external convention, this thesis proposes the survey, the drawing of a city into architectural representation, as a parallel enquiry into the spatiality of both the city and the architectural drawing. What follows this introductory volume is proposed as a movement through and, at the same time, as the making of a drawing. What is then the making of the drawing, this ‘move’ into drawing with regards to space and representation? Is it not that the drawing itself is already a record of its making? Is not the reading of the drawing a situated act of interpretation, which thus constitutes part of its ‘making’? These questions are critical and running through the performance of this *Speculum*, which aims to be at once an investigative device, a survey of, and a reflection on the agency that nestles within architectural drawing.

A genre popular in medieval literature between the twelfth and sixteenth century, the *speculum* was a survey text aiming to present an encyclopaedic knowledge of a field in a single volume. Similar to the concept of mapping as a scientific form of representation, the survey text was respectively considered scientifically accurate and totalising. Posing as a *speculum*, this hybrid object seeks to look inside, to enter within and to inhabit drawing as a situated experience where discourse can be equally spatial and textual: a spatial play of word, image, notation and form. This survey is performed in three distinct acts of transcription: *Weaving Lines/Looming Narratives*, *Kaleidoscopic City*, and *Draw of a Drawing*, which together gradually build up towards a cumulative representation of a city. These were initially, and still are, primarily treated as drawings, although it has become inevitable

<sup>82</sup> Mark Dorrian writes on representation: “The regimes of representation deployed continually produce alienation-effects as they instantiate the architectural object. Even if we are a master of a technique or we employ the most conventional, technical, and stable representational mode, the result is always to some extent surprising and unanticipated. It is always ‘other’ and is open to being read in ways we did not imagine”. Mark Dorrian, ‘Architecture’s Cartographic Turn’, in Frederic Pousin (ed.), *Figures de la Ville et Construction des Savoirs* (Paris : CNRS Editions, 2005), pp. 61-72 ; p. 62.

that in their development they have evoked their unfolding in all: paper, space and text. The drawings project the spatial character of drawing through installation, which is proposed here as a form of drawing in (three-dimensional) space, as well as a way of gaining an insight into the situation of drawing. The city under 'representation' is Edinburgh, my place of work and residence over the course of this research. The choice of this city as a testing ground has been somewhat arbitrary considering that the inquiry may regard the attachments to place that take effect upon representation, but that these effects are assumed to be equally site-specific regardless the particularities of the place that they originate from.

Installation has emerged in this inquiry into drawing not as an original intention but as an intuitive necessity of bringing to visibility the intangible spatiality that drawing entails. In this way, it poses as an opportunity to immerse oneself in, or rather inhabit, a 'space of representation', as the material recoding of the city within an expanded field. This representational field incorporates the kind of objects, places and conditions upon whose exclusion the coherence of the city within convention had previously depended. The inhabitation of drawing is proposed as a kind of experience that involves an attachment to place, which affects both the definition of the place and the individual. There emerges then through this mutual placement a nesting of spaces of representation, as each begins to condition the other through the desire for order and the concurrent mobility of desire.

As each installation follows the other on building up a representation of the city through consequent acts of reading and writing the city and the drawing, there is an inevitable seriality involved in the making of these design components. That does not mean to propose, however, that the concepts and ideas pertaining to each one of the installations – or each one of the stages – of this cumulative representation, maintain any sort of priority of agency (temporal or semiotic) against one another. The experience of drawing as the experience of the city is considered as taking place in multiple simultaneous levels, the pin-pointing of which is here carried out intuitively, as I became myself an object of observation with regards to my preconceptions and intuitions as an architect. Each of the installations is accompanied by a text, which should be seen as both an end and a beginning for its corresponding installation. The essays have developed in parallel to the installations, gathering their theoretical beginnings, as well as working through and alongside them to address the questions raised on their course, in a process of reading and writing that was not complete until the very end of this thesis. Taking the premises of semiotic signification, vision and visibility, and materiality as presence as the three main components that become involved in the understanding of both the city and its representation in architectural discourse, each of the essays becomes anchored on a specific element of drawing as an agency of meaning: the line, the gaze and the surface. Together these form the milieu of representation through which the architect is called to wander along the passage of representation.

The Speculum thus unfolds as a space of its own that draws together installations and text into a continuity. The opening of the following volume will lead you to a series of other 'openings' that will guide you, from installation to installation and from text to text, upon the steps of my own faring into this research as the inhabitation of a landscape formed at the interplay of theory, drawing and urban experience. This thesis invites you to follow in my steps, as I have tried carefully to 'install' you, to place you inside this speculation. Farewell dear reader into my drawing...

## LIST OF FIGURES

1. Section across the East side of the Ponte Vecchio, with its characteristic wooden shutters known as 'argani'. [Image by the author]
2. *The Wayfarer*, Hieronymus Bosch (ca. 1516). [https://en.wikipedia.org/wiki/The\\_Wayfarer#/media/File:Jheronimus\\_Bosch\\_112.jpg](https://en.wikipedia.org/wiki/The_Wayfarer#/media/File:Jheronimus_Bosch_112.jpg)
- 3-4. From the exhibition *The Kinetic City*, British School of Rome, RMA Architects (2013). <http://rmaarchitects.com/2013/02/2013-kinetic-city/>
5. Ponte Vecchio, Florence. <https://commons.wikimedia.org/wiki/File:Ponte-Vecchio-0965.jpg>
6. *Physiologie du Flâneur*, Louis Huart (1841). <http://www.artslant.com/la/articles/bloglist/213864-brett-day-windham>
7. *General View of Paris*, Jacques Alphonse Testard, (1860). [https://commons.wikimedia.org/wiki/File:Testard,\\_Aspect\\_g%C3%A9n%C3%A9ral\\_de\\_Paris,\\_1860.jpg](https://commons.wikimedia.org/wiki/File:Testard,_Aspect_g%C3%A9n%C3%A9ral_de_Paris,_1860.jpg)
8. *Rue du Marché aux Fleurs*, Charles Marville (ca. 1853). <http://vergue.com/post/157/Rue-du-Marche-aux-fleurs>
9. Plan Voisin, Le Corbusier (1922). [http://www.mediaarchitecture.at/architekturtheorie/le\\_corbusier/2011\\_corbusier\\_links\\_en.shtml](http://www.mediaarchitecture.at/architekturtheorie/le_corbusier/2011_corbusier_links_en.shtml)
10. Ville Radieuse, Le Corbusier (1924). <http://io9.gizmodo.com/10-failed-utopian-cities-that-influenced-the-future-1511695279>
11. View of New York (ca. 1930). <http://www.skyscrapercity.com/showthread.php?t=1511531>
12. *Flagrant Delit*, Madelon Vriesendorp (1975). <http://socks-studio.com/2015/02/02/madelon-vriesendorps-manhattan-project/>
13. *Virtual Volume*, László Moholy-Nagy. Moholy-Nagy, László, Moholy-Nagy, László, *The New Vision: From material to architecture* (New York : Brewer, Warren & Putnam, 1932), p. 134.
- 14-15. *Space Modulator with Perforations and Virtual Volume*, László Moholy-Nagy (1940). *Vision in motion* (Chicago: Paul Theobald and Company, 1947). p. 242-243.
- 16-20. Stills from *The Man With A Movie Camera*, Dziga Vertov (1929). <https://iamyouasheisme.wordpress.com/2009/07/11/man-with-a-movie-camera/>
21. *Entrance of the Labyrinth*, Constant Nieuwenhuys (1972). <http://bombmagazine.org/article/2713/constant>
22. *New Babylon*, 'Gele Sector', Constant Nieuwenhuys (1958). <http://bombmagazine.org/article/2713/constant>
23. *New Babylon*, 'Group of Sectors', Constant Nieuwenhuys (1959). In Catherine de Zegher and Mark Wigley. *The Activist Drawing: Retracing Architectures from Constant's New Babylon Beyond* (New York: The Drawing Centre), p. 57.
24. Images composition from the *144 Hours in Kiev* project (2014). <http://www.the-everyday.net/>
25. 'Roofer' selfie on a crane by the Shanghai Tower, Ivan Knuzetsov (2014). <http://www.rollingstone.com/culture/news/high-times-meet-the-russian-kids-who-take-the-worlds-riskiest-photos-20140506>

26. *Goodbye to Language*, 'Split' frame, Jean-Luc Godard (2015). <http://cinemasparagus.blogspot.co.uk/2014/12/the-best-films-of-2014.html>
27. Cinematographer Fabrice Aragno and Jean-Luc Godard on set, with their prototype stereoscopic cameras. <http://filmmakermagazine.com/87878-goodbye-to-3-d-rules/>
28. *Manhattan Transcripts*, Bernard Tschumi (1976-1981). <http://www.tschumi.com/projects/18/>
29. Vertical Montage, sequence from *Alexander Nevsky*, Sergei Eisenstein (1939). [https://commons.wikimedia.org/wiki/File:Vertical\\_montage.\\_Eisenstein.\\_1st\\_part\\_of\\_ex..jpg](https://commons.wikimedia.org/wiki/File:Vertical_montage._Eisenstein._1st_part_of_ex..jpg)
30. Parc de La Villette, 'Points Grid', Bernard Tschumi (1982). In Tschumi, Bernard, *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), p. 190.
31. *Rotterdam Building and Tower*, Rem Koolhaas (1981), MoMA. <http://www.world-architects.com/pages/insight/deconstructivist-architecture-25>
32. Peak Competition, Hong Kong, Zaha Hadid (1983), MoMA. <http://www.world-architects.com/pages/insight/deconstructivist-architecture-25>
33. *Proun 19D*, El Lissitzky (1922). [https://simple.wikipedia.org/wiki/El\\_Lissitzky#/media/File:NY\\_Moma\\_lissitzky\\_19D.JPG](https://simple.wikipedia.org/wiki/El_Lissitzky#/media/File:NY_Moma_lissitzky_19D.JPG) (Public Domain)
34. *Micromegas*, 'Vertical Horizon', Daniel Libeskind (1979). Libeskind, Daniel, *Countersign* (New York: Rizzoli, 1991), p. 33.
35. *Chamber Works*, Daniel Libeskind (1983). Libeskind, Daniel, *Countersign* (New York: Rizzoli, 1991), p. 127.
36. City Edge Competition, Daniel Libeskind (1987). Libeskind, Daniel, *Countersign* (New York: Rizzoli, 1991), p. 70-71.
37. House IV, 'Axonometrics', Peter Eisenman (1975). In Eisenman, Peter, *Diagram Diaries* (London: Thames & Hudson, 2001), p. 103.
38. *Moving Arrows, Eros and Other Errors*, Peter Eisenman (1985). <http://www.eisenmanarchitects.com/projects.tml>
39. Cities of Artificial Excavation, Model, Office of Eisenman/ Robertson (1981). <https://bibliodarq.wordpress.com/>
40. Micro-urbanism: Project for the edge of the Parliament Hill, Ottawa, Metis (2001). Courtesy of Metis.
41. *Architect with Cross-staff*, Cesare Cesariano (1521). In Gissen, David, 'Architecture's Geographic Turns'. In *Log 12* (2008), pp. 59-67; p. 59
42. *Datatown*, MVRDV (1998-1999). <http://www.mvrdv.nl/projects/MCDT>
43. Arnhem Central, Transfer Terminal, 'Diagram 2', UN Studio (2015). <http://www.archdaily.com/777495/arnhem-central-transfer-terminal-unstudio/564e687be58ece8c4200039d-arnhem-central-transfer-terminal-unstudio-diagram-2>
44. *Penelope with Loom*, Attic red figure cup (ca. 440 BCE). <http://www.lessingimages.com/viewimage.asp?i=10030156+&cr=37&cl=1>
46. *The Hallucinogenic Toreador*, Salvador Dalí (1968-1970). [https://en.wikipedia.org/wiki/File:The\\_Hallucinogenic\\_Toreador.png](https://en.wikipedia.org/wiki/File:The_Hallucinogenic_Toreador.png)

45. Documentaries, Salvador Dalí (1929). In Dalí, Salvador, 'Documentary – Paris 1929 – V' (1929), in Robert Descharnes (ed.), *Oui: The Paranoid-Critical Revolution*. Boston: Exact Change, 1998) pp. 104-105.

46. *View from the Berlin Tower*, László Moholy-Nagy (1928). <http://thesip.org/language/en/lkaplanmoholynagy-en/-faulty-photograph>

## BIBLIOGRAPHY

- Agrest, Diana, 'The City as the Place of Representation', *Design Quarterly* (113/114), City Segments (1980), pp. 8-13.
- Allen, Stan, 'Contextual Tactics', in *Points+Lines: Diagrams and Projects for the City* (Princeton Architectural Press, 1999), pp. 10-17.
- Allen, Stan, 'Notations+Diagrams: Mapping the Intangible', in *Practice: Architecture, Technique and Representation* (London: Routledge, 2009), pp. 41-67.
- Amin, Ash and Nigel Thrift, 'The Legibility of the Everyday', in Ash Amin and Nigel Thrift (eds.), *Cities: Reimagining the Urban* (London: Wiley, 2002), pp. 7-30.
- Balshaw, Maria and Liam Kennedy, 'Introduction: Urban Space and Representation', in Maria Balshaw and Lima Kennedy (eds.), *Urban Space and Representation* (London: Pluto Press, 2000), pp 1-21.
- Barthes, Roland, 'From Work to Text', in Josue V. Harari, *Textual Strategies: Perspectives in Poststructuralist Criticism* (Ithaca, New York: Cornell University Press, 1979), pp. 73-81.
- Barthes, Roland, 'Semiology and the Urban', in Neil Leach (ed.), *Rethinking Architecture*. (New York & London: Routledge, 1997), pp. 166-172.
- Barthes, Roland, *The Pleasure of the Text*, trans. Richard Miller (New York: Hill and Wang, 1975).
- Barthes, Roland, *Writing Degree Zero* (1968), trans. Annette Lavers and Colin Smith (New York: Hill and Young, 1995).
- Baudelaire, Charles, 'The Painter of Modern Life', in Jonathan Mayne (ed.), *The Painter of Modern Life and Other Essays* (London: Phaidon Press, 1964), pp. 1-40.
- Beller, Jonathan, 'KINO-I, KINO-WORLD: Notes on the Cinematic Mode of Production', in Nicholas Mirzoeff (ed.), *The Visual Culture Reader: Second revised edition* (New York and London: Routledge, 2002), pp. 60-85.
- Benjamin, Walter, 'Paris – Capital of the Nineteenth Century (Exposé of 1939)', in *The Arcades Project* (Cambridge, Massachusetts: Harvard University Press, 1999), pp. 14-26.
- Benjamin, Walter, 'The Flâneur', in *Charles Baudelaire: A Lyric Poet in the Era of High Capitalism*, trans. Harry Zohn (New York: Verso Books, 1983), pp. 35-66.
- Bergson, Henri, *Creative Evolution*, trans. Arthur Mitchell (New York: Henry Holt, 1911).
- Bergson, Henri, *Matter and Memory* (1896), trans. Nancy Margaret Paul and W. Scott Palmer (London: George Allen and Unwin, 1911).
- Bergson, Henri, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (1889), trans. F.L. Pogson (New York: Dover Publications, 2001).
- Borges, Jorge Luis, 'On Exactitude in Science'. In *A Universal History of Infamy* (New York: E.P. Dutton, 1972).
- Branzi, Andrea, *No-stop City: Archizoom Associati* (Paris: Blanchard Press 2006).
- Breton, Andre, 'What is Surrealism?' In Franklin Rosemont (ed.), *What is Surrealism?: Selected Writings*. New York:

Pathfinder, 1978), pp. 112-141.

Brombert, Victor, 'Baudelaire: City Images and the Dream of Stone', *Yale French Studies* 32 (1964), pp.99 -100, 102-105.

Carter, Paul, 'Making Tracks: Interpreting a Ground Plan'. In *Dark Writing* (Honolulu: University of Hawai'i Press, 2009), pp. 140-172.

Castells, Manuel, 'The Space of Flows', in *The Rise of Network Society* (Oxford: Blackwell, 2000), pp. 407-459.

Castoriadis, Cornelius, *On Plato's Statesman* trans. David Ames Curtis, (Stanford: Stanford University Press, 2002).

Constantinidou, Despina-Alexandra, 'When Lacan Met Dalí: Lacan's "Paranoid" Reading of Saussure's Theory of the Sign', *Gamma: Journal of Theory & Criticism* 20 (2012), pp.237-256.

Corner, James, 'Eidetic Operations and New Landscapes', in James Corner (ed.), *Recovering Landscape: Essays in Contemporary Landscape Theory* (New York: Princeton Architectural Press, 1999), pp. 152-169.

Corner, James, 'The Agency of Mapping', in Dennis Cosgrove (ed.), *Mappings* (London: Reaktion Books, 1999), pp. 213-152.

Cook, Peter, *Archigram* (New York: Princeton Architectural Press, 1999).

Dalí, Salvador, 'Documentary – Paris 1929 – I' (1929), in Robert Descharnes (ed.), *Oui: The Paranoid-Critical Revolution*. Boston: Exact Change, 1998), pp. 93-95.

Dalí, Salvador, 'Documentary – Paris 1929 – VI' (1929), in Robert Descharnes (ed.), *Oui: The Paranoid-Critical Revolution*. Boston: Exact Change, 1998), pp. 106-107.

Dalí, Salvador, 'Reality and Surreality', in Haim Finkelstein (ed.), *The Collected Writings of Salvador Dalí* (Cambridge: Cambridge University Press, 1998), p. 95.

Dalí, Salvador, 'The Rotting Donkey' (1930), in Robert Descharnes (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, 1998), pp. 115-119.

De Certeau, Michel, 'Walking in the City', in *The Practice of Everyday Life* (Berkeley: University of California Press, 1988), pp. 91-110.

De Klerk, Eugene, 'Striptease in Pink Limelight: Removing the Veil between the Subjective and Objective', *eSharp: Borders and Boundaries* 5 (2005), pp. 1-11.

de Saussure, Ferdinand, 'The Object of Linguistics', in *Course in General Linguistics*, trans. Wade Baskin (New York: Philosophical Library, 1959), pp. 7-17.

Debord, Guy, 'Theory of the Dérive', in Ken Knabb (ed.), *Situationist International Anthology* (Berkeley: Bureau of Public Secrets, 2006), pp. 62-66.

Debord, Guy, *Society of the Spectacle* (1967), trans. Donald Nicholson-Smith (New York: Zone Books 1994).

Deleuze, Gilles and Felix Guattari, *A Thousand Plateaus: Capitalism and Scizophrenia*, trans. Brian Massumi (Minneapolis and London: University of Minnesota Press, 1987).

Deleuze, Gilles, 'Duration as Immediate Datum', in *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1991), pp. 37-49.

Deleuze, Gilles, *Cinema 1: The Movement-Image* (1983), trans. Hugh Tomlinson and Barbara Habberjam (London and New York: Continuum, 2005).

Deleuze, Gilles, *Cinema 2: The Time-Image* (1985), trans. Hugh Tomlinson and Robert Galeta (London and New York: Continuum, 2005).

Deleuze, Gilles, *Foucault*, trans. Sean Hand (London and New York: Continuum Press, 1999).

Derrida, Jacques, 'Architecture, Where the Desire May Live', in Neil Leach (ed), *Rethinking Architecture: A Reader in Cultural Theory* (London and New York: Routledge, 1997) pp. 319-323.

Derrida, Jacques, 'Différance', in *Margins of Philosophy*, trans. Alan Bass (London and New York: Harvester Press, 1982), pp. 1-28.

Derrida, Jacques, 'Letter to a Japanese Friend (Prof. Izutsu)', in David Wood and Robert Bernasconi (eds.), *Derrida and Difference* (Warwick: Parousia Press, 1985), pp. 1-5.

Derrida, Jacques, *Positions*, trans. Alan Bass (Chicago: University of Chicago Press, 1981).

Derrida, Jacques, 'Structure, Sign, Play in the Discourse of Social Sciences' (1967), in *Writing and Difference* (London and New York: Routledge, 2005).

Derrida, Jacques, 'Writing Before the Letter', in *Of Grammatology* (1967), trans. Gayatri Chakravorty Spivak (Baltimore: Jons Hopkins University Press, 1997), pp. 75-149.

Derrida, Jacques, *Margins of Philosophy*, trans. Alan Bass (London and New York: Harvester Press, 1982).

Derrida, Jacques, *Of Grammatology* (1967), trans. Gayatri Chakravorty Spivak (Baltimore: Jons Hopkins University Press, 1997).

Donald, James, 'Light in Dark Spaces', in *Imagining the Modern City* (Minneapolis: University of Minnesota Press, 1999), pp. 73-85.

Donald, James, 'The City, The Cinema: Modern Spaces', in *Visual Culture* (London: Routledge, 1995), pp. 77-95.

Dorrian, Mark and Adrian Hawker, 'Postscript as Pretext', in *Metis: Urban Cartographies* (London: Black Dog Publishing, 2002), pp 8-11.

Dorrian, Mark, 'Architectural Design Opening A: Architectural Forensics' [unpublished studio brief], M.Arch. Year 1, 2007-2009 (Edinburgh: School of Architecture, University of Edinburgh, 2007).

Dorrian, Mark, 'Architecture's Cartographic Turn', in Frederic Pousin (ed.), *Figures de la Ville et Construction des Savoirs* (Paris : CNRS Editions, 2005), pp. 61-72.

Einstein, Albert, *The Principle of Relativity* (1905), trans. George Barker Jeffrey and Wilfrid Perrett (London: Methuen and Company, 1923). <http://www.fourmilab.ch/etexts/einstein/specrel/www/> [Accessed 25 April 2013]

Eisenman, Peter, 'Autonomy and the Will to the Critical', In *Assemblage* 41 (2000), pp. 90-91.

Eisenman, Peter, 'Post-Functionalism' (1976), in Michael Hayes (ed.), *Oppositions Reader: Selected Readings from a Journal* (New York: Princeton Architectural Press. 1976), pp. 9-12.

Eisenman, Peter, 'Representation of the Limit: Writing a "not-architecture"', in *Chamber Works: Architectural Meditations on Themes from Heraclitus*. London: AA Publications, 1983), pp. 5-8.

- Eisenman, Peter, *Diagram Diaries* (London: Thames & Hudson, 2001).
- Evans, Robin, 'In Front of Lines that Leave Nothing Behind' (1984), in Neil Leach (ed.), *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge, 1997), pp. 482-489.
- Evans, Robin, 'Translations from Drawing to Building', in *Translations from Drawing to Building and Other Essays* (London: Architectural Association, 1997), pp. 153-193.
- Foster Gage, Mark, 'In Defence of Design'. In *Log* 16 (2009), pp. 39-45
- Foucault, Michel, *The Order of Things: An Archaeology of the Human Senses* (New York: Vintage Books, 1994).
- Frisby, David, 'The Metropolis as Text: Otto Wagner and Vienna's 'Second Renaissance'', in Neil Leach (ed.), *The Hieroglyphics of Space: Reading and Experiencing the Modern Metropolis*. (London and New York: Routledge, 2002), pp. 15-30.
- Gandelsonas, Mario, 'The City as the Object of Architecture', *Assemblage* 37 (1998), pp. 128-144.
- Gardiner, Michael E., *Critiques of Everyday Life* (London and New York: Routledge, 2000).
- Gaudreault, André, Tim Barnard and Jacques Maltheïte, *Film and Attraction: From Kinematography to Cinema* (Urbana: University of Illinois Press, 2011).
- Gissen, David, 'Architecture's Geographic Turns'. In *Log* 12 (2008), pp. 59-67.
- Goodman, Nelson, *Languages of Art: An Approach to a Theory of Symbols* (Indianapolis: Hackett Publishing, 1969).
- Hammer, Martin and Christina Lodder, 'Dematerialising Sculpture: Methods and Motives', in Martin Hammer, Christina Lodder, Sebastiano Barassi and Geraldine A Johnson (eds.), *Immaterial: Brancusi, Gabo, Moholy-Nagy* (Cambridge: Kettle's Yard, 2004), pp. 47-70.
- Heidegger, Martin, *An Introduction to Metaphysics*, trans. John Macquarrie and Edward Robinson (New York: Harper and Row, 1962).
- Homer, *Odyssey*, trans. Stanley Lombardo (Indianapolis: Hackett Publishing, 2000).
- Jameson, Fredric, *Postmodernism, or, The Cultural Logic of Late Capitalism* (New York: Verso, 1991).
- Johnson, Philip, 'Preface' in Philip Johnson and Mark Wigley (eds.), *Deconstructivist Architecture* (New York: MoMA, 1988).
- Kant, Immanuel, *The Critique of Pure Reason*, trans. Paul Guyer (Cambridge: Cambridge University Press, 1998)
- Sayre, Kenneth M., *Metaphysics and Method in Plato's Statesman* (Cambridge: Cambridge University Press, 2011).
- Kern, Stephen, *The Culture of Time and Space 1880-1918*, (London and Cambridge, Mass.: Harvard University Press, 1983).
- Koolhaas, Rem, 'Europeans: Biuer! Dalí and Le Corbusier Conquer New York', in *Delirious New York: A Retroactive Manifesto for Manhattan* (New York: The Monacelli Press, 1994), pp. 235-281.
- Lacan, Jacques, 'The Split between the Eye and the Gaze' (1964), in *The Four Fundamental Concepts of Psychoanalysis*, trans. Alan Sheridan (New York: Norton 1978), pp. 67-78.

Lacan, Jacques, 'The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience' (1949), in *Ecrits* (New York and London: W. W. Norton & Company, 2006), pp. 75-81.

Lefebvre, Henri, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford and Cambridge, Mass.: Blackwell).

Libeskind, Daniel, 'End Space', in *Countersign* (New York: Rizzoli, 1991), pp. 14-15.

Libeskind, Daniel, 'The Pilgrimage of Absolute Architecture (A Conversational Explanation)', in *Countersign* (New York: Rizzoli, 1991), pp. 37-45.

Libeskind, Daniel, 'Upside Down X', in *Countersign* (New York: Rizzoli, 1991), pp. 8-11.

Libeskind, Daniel, 'Versus the Old-Established Language of Architecture', *Daidalos* 1 (1981), pp. 97-102.

Lynch, Kevin, 'Reconsidering the Image of the City', in Lloyd Rodwin and Robert M. Hollister (eds.), *Cities of the Mind: Images and Themes of the City in the Social Sciences* (New York: Plenum Press, 1984), p. 151-161.

Lynch, Kevin, *The Image of the City* (Cambridge, Mass. And London: MIT Press, 1960).

Lyotard, Jean-François, *The Postmodern Condition: A Report on Knowledge* (Manchester: Manchester University Press, 1979).

Maas, Winy, 'Datascapes'. In Winy Maas with Jacob van Rijs and Nathalie de Vries (eds.), *FARMAX: Excursions on Density* (Rotterdam: 010 Publishers, 1996).

Manolopoulou, Yeoryia, *Architectures of Chance* (London: Ashgate, 2015).

Marin, Louis, 'The City's Portrait in its Utopics', in *Utopics: Spatial Play* (New Jersey: Humanities Press 1984), pp. 201-232.

Marin, Louis, 'Utopia of the Map', in *Utopics: Spatial Play* (New Jersey: Humanities Press 1984), pp. 233-238.

Marx, Karl, 'The Manifesto of the Communist Party' (1848), in *Marx/Engels Selected Works I* (Moscow: Progress Publishers, 1969) pp. 98-137.

Mayne, Judith, 'Kino-Truth and Kino-Praxis: Vertov's Man with the Movie Camera', in David Allen and Teresa de Lauretis (eds.), *Cine-Tracts 2* (1977), pp. 81-91.

Mehrotra, Rahul, 'Negotiating the Static and Kinetic Cities: The Emerging Urbanism of Mumbai', in Andreas Huyssen (ed.), *Other Cities, Other Worlds: Urban Imaginaries in a Globalizing Age*. Durham and London: Duke University Press, 2008), pp. 205-218.

Mehrotra, Rahul, 'Static Spaces, Kinetic Places: Public Space in the Mega City of Bombay.' *Cities and Markets*. (Vienna: IFHP World Congress, 2003).

Merleau-Ponty, Maurice, 'The Intertwining-The Chiasm', in *The Visible and the Invisible* (Evanston: Northwestern University Press, 1968) pp. 130-155.

Moholy-Nagy, Lászlò, 'Production-Reproduction' (1922), in Passuth, Krisztina, *Moholy-Nagy* (New York: Thames and Hudson, 1980), pp. 97-101.

Moholy-Nagy, Lászlò, and Alfred Kemeny, 'The Dynamic Constructive system of force' (1922), in Passuth, Krisztina, *Moholy-Nagy* (New York: Thames and Hudson, 1980), p. 290.

Moholy-Nagy, László, *The New Vision: From material to architecture* (New York: Brewer, Warren & Putnam, 1932).

Moholy-Nagy, László, *The Vision in Motion* (Chicago: Paul Theobald and Company, 1947).

More, Thomas, *Utopia* (1684) (Cambridge: Cambridge University Press, 2002).

Perec, Georges, *Species of Spaces and Other Pieces* (London: Penguin Books, 1997).

Rankin, William, 'Noise, Mapping, and the Architecture of Statistics', in Renata Hejduk & Harry Van Oudenallen (eds.), *The Art of Architecture/The Science of Architecture: 93rd ACSA Annual Meeting Proceedings* (Washington DC: ACSA Press, 2005) pp. 371-381. <http://www.acsa-arch.org/search-page/?keyword=RANKIN&section=Conferences&showDesc=True> [Accessed 20 September 2015].

Saunders, William S., *The New Architectural Pragmatism: A Harvard Design Magazine Reader* (Minneapolis: University of Minnesota Press, 2007).

Schmid, Christian (2008). 'Henri Lefebvre's Theory of the Production of Space' in *Space, Difference, Everyday Life: Reading Henri Lefebvre*. London: Routledge, pp. 30-45.

Shaffir, Yvonne, 'Translator's Preface', in Robert Deschames (ed.), *Oui: The Paranoid-Critical Revolution* (Boston: Exact Change, 1998), pp. vii-ix.

Simmel, Georg. 'The Metropolis and Mental Life' (1903), in Gary Bridge and Sophie Watson (eds.), *The Blackwell City Reader* (Oxford and Cambridge, Mass.: Blackwell, 2002), pp. 103-110.

Simon, Herbert A., 'Designing for an Information-Rich World', in Martin Greenberger (ed.) *Computers, Communication and the Public Interest* (Baltimore: The Johns Hopkins Press, 1971), pp. 32-62.

Sjoberg, Gideon, 'The Preindustrial City', *American Journal of Sociology* 60(5) (1955), pp. 438-445.

Soklina, Anna, 'In Opposition to the State: The Soviet Neoavant-garde and East German Aestheticism in the 1980s', *Art Margins* (2002). <http://www.artmargins.com/index.php/featured-articles/310-in-opposition-to-the-state-the-soviet-neoavant-garde-and-east-german-aestheticism-in-the-1980s> [Accessed 20 September 2015]

Sontag, Susan, 'Preface', in Roland Barthes, *Writing Degree Zero* (New York: Hill and Young, 1995) pp. vii-xxi.

Sullivan Kruger, Kathryn, 'The Semiotics of Cloth and Textile Production', in *Weaving the Word: The Metaphors of Weaving and Female Textual Production* (London: Associated University Press), pp. 34-45.

Townsend, Anthony, 'Urbanization and Ubiquity', in *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia* (W. W. Norton & Company, 2013), pp. 1-18.

Tschumi, Bernard, 'Abstract Mediation and Strategies' (1987), in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 191-206.

Tschumi, Bernard, 'Introduction', in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 2-24.

Tschumi, Bernard, 'Spaces and Events' (1983), in *Architecture and Disjunction* (Cambridge Mass.: MIT Press, 1996), pp. 141-152.

Tschumi, Bernard, *The Manhattan Transcripts* (London: Academy Editions, 1994).

Van Berkel, Ben and Caroline Bos, *MOVE, Vol. 2: Techniques* (Amsterdam: Goose Press, 1999).

Van Berkel, Ben, 'Navigating the Computational Turn', in Xavier De Kestelier, Brady Peters (eds.), *AD Computation Works: The Building of Algorithmic Thought* (London: Wiley, 2013), pp. 82-95.

Venturi, Robert, Denise Scott Brown and Steven Izenour, *Learning From Las Vegas* (Cambridge, Mass.: MIT Press, 1977).

Vertov, Dziga, 'The Council of Three' (1923), in Annete Michelson (ed.), *Kino-eye: The Writings of Dziga Vertov* (Berkeley and Los Angeles: University of California Press, 1992), pp. 14-2.

Vertov, Dziga, 'We: Variant of a Manifesto' (1922), in Annete Michelson (ed.), *Kino-eye: The Writings of Dziga Vertov* (Berkeley and Los Angeles: University of California Press, 1992), pp. 5-9.

Virilio, Paul, 'The Overexposed City', in Michael Feher and Sanford Kwinter (eds.), *Zone 1/2*, trans. Julie Rose (Cambridge, Mass.: MIT Press, 1986), pp. 18-77.

Virilio, Paul, 'The Vision Machine', in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp. 59-77.

Virilio, Paul, 'Topographic Amnesia', in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp. 1-18.

Virilio, Paul, 'Less than an Image', in *The Vision Machine*, trans. Julie Rose (Bloomington and Indianapolis: Indiana University Press, 1994), pp. 19-32.

Vitruvius, *On Architecture* (ca. 30 BC), trans. Richard Schofield (London: Penguin Books, 2009).

Wayne Joseph, Branden, 'White on White', in *Random Order: Robert Rauschenberg and the Neo-avant-garde* (Cambridge Mass.: MIT Press, 2003), pp. 25-72.

Wigley, Mark, 'Deconstructivist Architecture', in Philip Johnson and Mark Wigley (eds.), *Deconstructivist Architecture* (New York MoMA, 1988).

Wigley, Mark, 'The Translation of Architecture, The Production of Babel', *Assemblage* 8 (1989), pp. 6-21.

Wigley, Mark, *The Activist Drawing: Retracing Situationist Architectures from Constant's New Babylon to Beyond* (New York: Drawing Center, 2001).

Wiszniewski, Dorian, 'Architectural Design Opening B: Florence: Curating the City, Representation and Seriality' [unpublished studio brief], M. Arch Year 1 and MSc in Advanced Architectural Design 2008-2009 (Edinburgh: School of Architecture, University of Edinburgh, 2008).

## WEB SOURCES

"No more weird architecture" says Chinese president', *Dezeen* (20 October 2014). <http://www.dezeen.com/2014/10/20/no-more-weird-architecture-in-china-says-chinese-president/> [Accessed 10 January 2016]

'Definitions', in *Internationale Situationniste* 1 (June 1958), trans. Ken Knabb. <http://www.cddc.vt.edu/sionline//si/definitions.html> [Accessed 10 January 2016]

'Intro', *The Exceptional and the Every Day: 144 Hours in Kiev*, <http://www.the-everyday.net/> [Accessed 25 August 2015]

'Navigating the Computational Turn', *UNstudio.com*. <http://www.unstudio.com/research/spp/an-essay-about-parametric> [Accessed at 13 September 2015]

'Population Density and Urbanization', United Nations Statistics Division, <http://unstats.un.org/unsd/demographic/sconcerns/densurb/densurbmethods.htm#D> [Accessed 15 January 2016]

Baudelaire, Charles, 'The Swan' [*Le sygne*], in *Le Fleurs du Mal* (1861). <http://fleursdumal.org/poem/220> [Accessed 23 January 2016]

Bordwell, David, 'Adieu Au Langage: 2 + 2 x 3D', *Observations on Film and Art* (September 7 2014). <http://www.davidbordwell.net/blog/2014/09/07/adieu-au-langage-2-2-x-3d/> [Accessed 5 September 2015]

Clark, Brian Charles, 'A Tapestry of Metaphor', [http://www.wdog.com/brian/Scriptorium/writing\\_weaving.htm](http://www.wdog.com/brian/Scriptorium/writing_weaving.htm) [Accessed 8 December 2015]

Fendt, Ted, "'Adieu au Langage" – "Goodbye to Language": A works cited', *Notebook* (October 12 2014). <https://mubi.com/notebook/posts/adieu-au-langage-goodbye-to-language-a-works-cited> [Accessed 5 September 2015]

Hill, Eugene D. (1982). 'The Place of Future: Louis Marin and his Utopiques', *Science Fiction Studies* 9(27) (1982). <http://www.depauw.edu/sfs/backissues/27/hill.html> [Accessed 21 September 2015]

*Instagram*, <https://instagram.com/>

Kotenko, Jam, '#throwbackthursday is Only the Start: Instagram Hashtags for Everyday of the Week', *Digital Trends* (August 4 2013), <http://www.digitaltrends.com/social-media/instagram-through-the-week-with-these-popular-hashtag-games/#ixzz3iEKVYxCD> [Accessed on 25 August 2015]

Latour, Bruno and Emilie Hermant, *Paris: Invisible City* (Paris: La Découverte-Les Empêcheurs de penser en rond 2006). <http://www.bruno-latour.fr/sites/default/files/downloads/> [Accessed 7 December 2011]

Mark Dorrian and Adrian Hawker, *Metis*, <http://www.scotmark.eca.ac.uk/research/9.pdf> [Accessed 5 September 2015]

Minkowski, Herman, *Space and Time: Minkowski's Papers on Relativity*, trans. Fritz Lewertoff and Vesselin Petkov (Montréal: Minkowski Institute Press, 2012). <http://www.minkowskiinstitute.org/mip/> [Accessed 25 April 2013]

Superstudio, 'Twelve Cautionary Tales for Christmas', *Architectural Design* 12 (1971). <http://socks-studio.com/2011/09/17/twelve-cautionary-tales-for-christmas-12-ideal-cities-by-superstudio-1971/> [Accessed 02.02.16]

## FILM

*Adieu au Langage*, dir. by Jean-Luc Godard (StudioCanal, 2014). [Amazon Video].

*Man with a Movie Camera* (1929), dir. By Dziga Vertov (Ninja Tune, 2003). [DVD]

