

Smooth operators: architectural Deleuzism in societies of control

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SMOOTH OPERATORS

ARCHITECTURAL DELEUZISM IN SOCIETIES OF CONTROL

DOUGLAS SPENCER

A thesis submitted in partial fulfillment of the requirements of
the University of Westminster for the degree of Doctor of
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ABSTRACT

This thesis is concerned with the contributions of certain tendencies in architecture to the operation of contemporary modalities of power, especially in respect of its processes of subjectivation. Focused upon the mechanisms of what the philosopher Gilles Deleuze termed a ‘society of control’, it also attends to the presentation by figures prominent within architectural theory and practice—through their own translations of Deleuze, and his writings with Félix Guattari, as well as their mobilisations of ‘complexity theory’—of their servicing of this emergent mode of power as being in some way ‘progressive’. Naming this tendency in contemporary architectural discourse and practice ‘architectural Deleuzism’, and drawing upon a range of thought including that of Deleuze and Guattari themselves, as well as the work of Michel Foucault, the Frankfurt School and more contemporary critical perspectives, I contest its claims to the progressive in any sense other than that in which it serves the advancement of the marketisation of everyday life, its conditions of precarity, and its concomitant instrumentalisation of the communicative and affective capacities of human subjectivity.

This critique is pursued through an analysis of the ways in which figures such as Zaha Hadid, Patrik Schumacher, Alejandro Zaera-Polo, Farshid Moussavi and Jeff Kipnis, in their mobilisations of conceptual figures drawn from the thought of Deleuze and Guattari, have attempted to annul the practice of critique within architectural culture so as to clear the ground for a ‘post-critical’ affirmation of architecture’s contributions to corporate, entrepreneurial and governmental operations. I also attend, as the means through which to contest this affirmation, to the analysis of key architectural projects in the fields of industrial manufacture, office work, education, consumerism and media production, and the orientation of their design toward the production of swarm-modelled labourers, ‘citizen-consumers’, ‘nomadic’ student-entrepreneurs and re-engineered publics.

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RELATED MATERIAL

The following is a list of material produced by the author in relation to and in the development of this thesis.

PUBLICATIONS:

‘Instrumental Urbanism and Immaterial Labour’, in *Positions on the City*, Marina Lathouri and Ryan Dillon (eds), London: AA Publications, 2010.

‘Replicant Urbanism: The Architecture of Hadid’s Central Building at BMW Leipzig,’ in *The Journal of Architecture*, vol.15, no.2, April, 2010.

‘Architectural Deleuzism: Neoliberal Space, Control and the ‘Univer-City’’, *Radical Philosophy* 168, July/August, 2011.

‘Environments of Distributed Labour’ in *NETworks: An Atlas of Connective and Distributive Intelligence in Architecture*, Brett Steele and Francisco González de Canales (eds), London: AA Publications, 2012.

GUEST/KEYNOTE LECTURES:

‘Self-organisation and Self-control: the networked subject of late capitalist urbanism,’ Intermediate School, Architectural Association, London, 20 November, 2009.

‘Complexity without Contradiction: Cybernetics, Architecture and Enchantment’, Keynote lecture at Nordic Association of Architectural Research, Annual Conference 2010, April 22-24, University of Tampere, Finland.

‘Instrumental Urbanism and Immaterial Labour’, AA City Cultures Research Cluster Symposium, 14 May, 2010, Architectural Association, London.

‘Marketing Strategies: FOA and Ravensbourne’, MA History and Critical Thinking, Architectural Association, London, 31 January, 2011.

‘Schooled in Precarity: the subject of education’, Roscoe Occupation, Manchester University, 8 March, 2011.

‘Remaking the Public: CCTV, the Hyperbuilding, and the Image of Labour’, The City as a Project/The Berlage Institute PhD Program, The Berlage Institute, Rotterdam, 27 April, 2012.

CONFERENCE PAPERS:

‘Deleuzian Architecture in Control Societies’, *Defining Space* conference: School of Architecture, Landscape and Civil Engineering /School of Languages, Literatures and Film, University College Dublin, Ireland, October 2007.

‘General Intellect, Collective Intelligence and Immaterial Labour: office architecture and the management of the network’, *Networks of Design* conference: The Design History Society, University College Falmouth, UK, September, 2008

‘Replicant Urbanism’, *Urbanism and Urbanization*: 5th International PhD Seminar, Faculty of Architecture, Urbanism and Planning, K.U. Leuven, 3 October, 2009.

‘Parallel Lines: formal expression as publicity in the architecture of Hadid’s Central Building for BMW Leipzig’, *6th Annual AHRA Research Student Symposium*: Welsh School of Architecture, Cardiff University, 12 December 2009

DECLARATION

I declare that all of the material contained in this thesis, except where indicated as otherwise, is the work of its author.

Douglas Spencer, 20th May 2012.

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INTRODUCTION

MACHINES OF CONTROL

The film bank is empty. To conceal the bankruptcy of the reality studio it is essential that no one should be in position to set up another reality set. The reality film has now become an instrument and weapon of control - The full weight of the film is directed against anyone who calls the film into question...Work for the reality studio or else.

William Burroughs, *The Ticket that Exploded*

Programmed and compliant, the spatiality of contemporary capitalism tends now to converge upon a single organisational paradigm designed to generate and service mobility, connectivity and flexibility as its fundamental imperatives. This spatiality functions, within built environments such as those of labour, business, shopping, and education, to mobilise the subject as a communicative and enterprising social actant. Integrating what had once been discrete programmes within its continuous terrain, and promoting communication as a mechanism of feedback, control and self-valorisation, this spatial model trains the subject for a life of opportunistic networking. Life, in this environment, is acted out as a precarious and ongoing exercise in the acquisition of contacts, the exchange of information and the pursuit of projects. As an instrumental formation of space, its functions are consistent with what Foucault described as the operation of a neoliberal mode of governmentality;¹ one that works through environmental controls and modulations, rather than the disciplinary maintenance of normative individual behaviour. It also, as many have noted, resembles the ‘control society’ forecast some time ago by Gilles Deleuze, in his ‘Postscript on Societies of Control’,² in which the movement of ‘dividuals’ is tracked and monitored across the transversal ‘smooth space’ of a post-disciplinary society. Developed, in part at least, in response to the growth of post-Fordist knowledge economies, so-called immaterial labour, and the prevalence of networked communications media, this spatial paradigm has typically been theorised through models of complexity, self-organization and emergence.

It is the argument of this thesis that this mode of spatial production, compliant with the operation of a society of control, has been, and continues to be, served by a tendency within contemporary architecture which has often invoked, in the process of legitimising the emergence of this mode of spatiality as essentially progressive, the philosophy of Gilles Deleuze and Félix Guattari. ‘Architectural Deleuzism’ names this tendency in contemporary architecture. Its practitioners, ‘smoothing’ the spatiality of

contemporary capital for corporate and governmental concerns, whilst presenting their work in the guise of a philosophically-informed radicalism, or as being in accordance with the putatively natural laws of complexity and self-organisation, are thus the ‘smooth operators’ to which the title of this thesis refers.

The critique of ‘Deleuzian’ architectures and architectural discourse is pursued across three principal chapters. Each of these focuses upon a single architectural practice—Zaha Hadid Architects, Foreign Office Architects and Rem Koolhaas/OMA—and engages with specific examples of their practice whilst relating these to the relevant organisational contexts—work, education, leisure, consumption and media production—to which they respond, and to the discourse in which these are represented. These three practices have been chosen as exemplary of architectural theory and practice claiming either a direct relation to the thought of Deleuze and Guattari, or at least an engagement with organisational models of fluidity, connectivity and networks corresponding, in their conception, to Deleuze and Guattari’s model of ‘smooth space’, and in their function to the operational diagrams of a ‘society of control’.

The architects focused upon here are, of course, representative of high profile global practices rather than the comparatively anonymous ones responsible for the greater majority of factories, offices, malls or campuses in whose spaces contemporary forms of power are implicated. The assessment of the significance of the architects selected here is then not based upon their quantitative impact upon social reality or its lived experience. Rather they are selected and analysed precisely because of their position, achieved through the execution and wide publication of certain key projects and theoretical texts through which they have become a significant force in architectural theory, pedagogy and practice. Their power is one that is capable of, and clearly oriented toward, defining an agenda for contemporary architecture and its politics, and it is on this basis that they

constitute the principle object of the critique of my thesis.

DEFINING (ARCHITECTURAL) DELEUZISM

The term ‘architectural Deleuzism’ was not invented, nor has it been used by, the architects that feature in this work, but is my own reworking of Ian Buchanan’s term ‘Deleuzism’, itself coined in reference to Deleuze’s ‘Bergsonism’, to affirm the creative appropriation of a body of thought for purposes unimagined by its original author.³ Buchanan, in a recent essay, writes that Deleuze:

spoke of Bergsonism, for example, because his reading of Bergson was intended to create an application of Bergson’s thought, or better an apparatus that could be deployed to give thought to problems and circumstances Bergson himself did not and perhaps could not have considered himself. Bergsonism is in this sense simultaneously faithful to Bergson and a departure from him, without being a negation.⁴

Buchanan is at pains here to clarify what is, and what is not to be understood by ‘Deleuzism’ since he finds my own (mis)appropriation of the term inappropriately negative in its implications:

I titled my first book on Deleuze *Deleuzism*—it was intended as an exploration of the problematic of how to ‘follow’ an author who instructs his own readers to go their own way and create their own questions. I make this point because in a recent article Douglas Spencer (2011) has used the term ‘Deleuzism’ as a kind of catch-all pejorative for what he sees as banal uses of Deleuze’s work.’⁵

‘Architectural Deleuzism’ is, I admit, a corruption of the original sense of Buchanan’s term, but one whose pejorative connotations are consciously calculated to challenge the affirmation of the ‘creative application’ of Deleuze, in and of itself, and outside of any specific historical conditions.

Buchanan, characterising Deleuze’s project as one ‘of (liberating) creativity’, wishes to ‘extract from Deleuze’s project an apparatus of social critique built on a utopian impulse.’⁶ Accordingly, he defines Deleuzism as an approach

that is both ‘critical *and* creative’.⁷ In the case of Deleuzism in architecture, however, it is not possible to sustain an account of this as equally weighted toward the critical *and* the creative since the affirmation of creativity—particularly in terms of the production of ‘the new’ and an accommodation to the ‘progressive realities’ of capitalism—has been one of the central means through which this architectural tendency has *opposed* itself to criticality.

THE NEW ARCHITECTURE

During the period of its initial development in the 1990s, Deleuzism in architecture was driven, primarily, by readings of the philosopher’s *The Fold: Leibniz and the Baroque*,⁸ and the chapter ‘1440: The Smooth and the Striated’, from Deleuze and Guattari’s *A Thousand Plateaus: Capitalism and Schizophrenia*.⁹ Promoted as an architectural device in the 1993 special edition of *Architectural Design*, entitled *Folding in Architecture*,¹⁰ which featured essays and projects by Peter Eisenman, Greg Lynn and Jeffrey Kipnis, among others, Deleuze’s ‘fold’, appearing to correlate Leibniz’s philosophy with the formal complexity of the architectural Baroque, seemed, in particular, to offer architecture an escape route from its entanglement in linguistic and semiotic paradigms, and opened the way for a return to form, as a concern supposed to be more proper and specific to its own discipline. Eisenman, for example, claimed to have employed the fold as a generative device in his Rebstockpark project of 1990, a heavily Deleuzian account of which was further elaborated in John Rajchman’s *Constructions*.¹¹ Conceptually related to the fold, the schema of the smooth and the striated was originally elaborated in *A Thousand Plateaus* to articulate the relations between open and closed systems in technology, music, mathematics, geography, politics, art and physics. Smooth space was figured there as topologically complex, in continuous variation and fluid. This was a space—a sea or a desert—through which one drifted, nomadically. Striated space, by contrast, was defined by its rigid geometry, a space carved up into functional categories channelling the movements of its occupants along the pre-inscribed lines of

its Cartesian grid. Striated space was standardised, disciplinary and imperial. Again, these concepts, particularly the implicit (though qualified)¹² privileging of smooth space and continuous variation over static geometry, were found to resonate with architecture's engagement with complex topologies whilst suggesting that its formal experimentation was also imbued with philosophically radical implications. Deleuzian 'smoothing' and the pursuit of 'continuous variation' have been referenced in the architectural writings of, variously, Lynn, Reiser and Umemoto, Patrick Schumacher and Alejandro Zaera-Polo, for instance, to suggest the philosophical substance of the complex formal modulations that characterise their work. The usefulness of Deleuze and Guattari's philosophy was not limited, though, to its provision of the formal tropes of folding and smoothing. It also extended to a conception of the 'new' with which architectural Deleuzism could further differentiate itself from the preceding currents of postmodernism and deconstructivism in the 1980s and early 1990s. In Kipnis's contribution to the *Folding in Architecture* volume, 'Towards a New Architecture', postmodernist architecture was hence cast as politically conservative, even reactionary, due to its ultimate inability to produce the new. In its use of collage and historicism, postmodernism's ultimate effect, he argued, was to 'valorize a finite catalogue of elements and/or processes'.¹³ For Kipnis, postmodern architecture had:

enabled a reactionary discourse that re-establishes traditional hierarchies and supports received systems of power, such as the discourse of the nothing new employed by Ronald Reagan and Margaret Thatcher for their political ends and by Prince Charles, Roger Scruton and even Charles Jencks to prop up PoMo.¹⁴

Whatever the truth of this, one further marker of the 'new' architecture's own newness was, in turn, its departure from any semiotic or linguistic paradigm, even the most radically conceived (as in deconstruction), in favour of a supposedly new Deleuzian orientation adopted by its theorists such as Lynn and Sanford Kwinter. These, wrote Kipnis, had turned from 'post-structural semiotics to a consideration of recent developments in geometry,

science and the transformation of political space, a shift that is often marked as a move from a Derridean to a Deleuzean discourse'.¹⁵ The opposition posed between Derrida and Deleuze in these terms is, however, largely a fabrication on the part of Kipnis rather than one easily located in the thought of the philosophers themselves. In a lecture delivered at Cornell University in 1984 and published in 1987, for instance, Derrida explicitly challenged the reception of deconstruction as 'being limited to the negative or destructuring forms that are often naively attributed to it', and asks if it might not be 'inventive in itself, or at least be the signal of an inventiveness at work in a sociohistorical field?'¹⁶ He continues:

Deconstruction is inventive or it is nothing at all; it does not settle for methodological procedures, it opens up a passageway, it marches ahead and marks a trail; its writing is not only performative, it produces rules - other conventions - for new performatives and never installs itself in the theoretical assurance of a simple opposition between performative and constative. Its process involves an affirmation, this latter being linked to the coming [venir] in event, advent, invention. But it can only make it by deconstructing a conceptual and institutional structure of invention that would neutralize by putting the stamp of reason on some aspect of invention, of inventive power.¹⁷

As Deleuze scholar Paul Patton has argued:

Deleuze and Derrida share an ethico-political conception of philosophy as oriented towards the possibility of change. For both, philosophy is a political activity oriented towards the future, where the future is understood only in terms of its potential difference from the present. For both, the future must be understood as open, rather than determined by the past¹⁸

Nonetheless, the proposition that Deleuze could think the new in terms of 'political space', while Derrida was mired in the detached realm of 'post-structural semiotics', though unsustainable as a reading of their actual philosophies, was mobilised by Kipnis and others in order to distinguish the new architecture from that of its immediate predecessors such as Bernard

Tschumi (or the earlier Eisenman). Whereas such architects had been identified with Derridean deconstruction, a new generation would need to distinguish itself both from its architectural predecessors and from the philosophy with which these had been associated. Yet in order to ratify this new architecture with the same pedigree of philosophical sophistication as that accorded to deconstructivist architecture, a comparable counterpart to Derrida had to be found. Enter Deleuze.

TRANSLATING DELEUZE

As François Cusset has noted, there was a broader trajectory of transition from ‘Lacanian–Derridean’ to ‘Deleuzian–Lyotardian’ positions during this period in American academia.¹⁹ So this condition is far from unique to architecture. But the shift towards Deleuze, in US architectural culture at least, has also to be understood in terms of how the place of the ‘new’, or of ‘becoming’, in the thought of Deleuze could be made amenable to an architecture seeking to establish for itself an image of novelty as its very *raison d’être*. Indeed, for the ‘new architecture’, the term ‘new’ operated as a convenient conflation of two senses of the term: one identifying it as succeeding the old (deconstructivism or postmodernism), the other as an orientation towards a philosophy of invention itself, putatively derived from Deleuze. At this point philosophy was conjoined to an exercise in academic marketing; the new as invention conflated with the new as the rebranding of an architectural ‘avant-garde’. Exemplary of this mobilisation of newness is Reiser + Umemoto’s *Atlas of Novel Tectonics*, where postmodernism is employed as the foil against which the novelty of their approach to architecture is contrasted. Here Deleuze, and Deleuze and Guattari, are read, above all, as philosophers of matter, emergence and becoming. Through their allegiance to this philosophy the architects thus pursue, they claim, an agenda of ‘difference’ and ‘the unforeseen’: ‘The primary and necessary conceit of this work is that beneficial novelty is the preferred condition to stability and the driving agenda behind architectural practice.’²⁰ Where Deleuzism in architecture originally undertook, then, to establish its

autonomy from the linguistically oriented concerns of poststructuralism, it subsequently sought to distance itself too, as part of its affirmation of the new—indeed, affirmation of affirmation—from any obligation to engage with *critique*. Through its alliance with the ‘post-critical’ position emerging, around the same time, in US architectural discourse—marked by the publication of Robert Somol and Sarah Whiting’s ‘Notes Around the Doppler Effect and Other Moods of Modernism’ in the journal *Perspecta* in 2002—it articulated its opposition to critique as a matter both extrinsic to the ‘proper’ concerns of architecture, and as a counterproductive form of ‘negativity’.²¹ In an essay of 2004, ‘On the Wild Side’, for example, Kipnis describes criticality as a ‘disease’ that he wants to ‘kill’, ‘once and for all’.²² For Zaera-Polo, similarly, criticality is anachronistic, and, in its ‘negativity’, allegedly inadequate to deal with contemporary levels of social complexity:

I must say that the paradigm of the ‘critical’ is in my opinion part of the intellectual models that became operative in the early 20th century and presumed that in order to succeed we should take a kind of ‘negative’ view towards reality, in order to be creative, in order to produce new possibilities. In my opinion, today the critical individual practice that has characterized intellectual correctness for most of the 20th Century is no longer particularly adequate to deal with a culture determined by processes of transformation on a scale and complexity difficult to understand ... you have to be fundamentally engaged in the processes and learn to manipulate them from the inside. You never get that far into the process as a critical individual. If we talk in terms of the construction of subjectivity, the critical belongs to Freud a Lacan [*sic*], what I called ‘productive’, to Deleuze.²³

Much like Kipnis’s discourse, Zaera-Polo’s argument here willfully occludes, through its crude binary oppositions, the more complex relations and continuities to be found between Deleuze and other thinkers—in this case, Freud and Lacan—that would otherwise render the neat distinction between a critically ‘negative’ tradition and an immanently ‘productive’ one untenable. As Eugene Holland has written, Deleuze and Guattari’s use of the concept of ‘territorialization’, for example, as a means to figure the interrelated *production* of the social and psychological, was ‘[d]erived initially

from Lacanian psychoanalysis’ and ‘function[s] as a kind of hinge-term to connect Marx and Freud, to articulate the concepts of libido and labor-power.’²⁴ Furthermore, the philosophical project of critique itself, as initiated by Immanuel Kant in his *Critique of Pure Reason* of 1781²⁵ is premised on its *immanence*, on its being ‘engaged in the processes’ and operating ‘from the inside’. Indeed, Iain MacKenzie has argued at length, in his *The Idea of Pure Critique*, that it is precisely because of their insistence upon the immanence of philosophical thought that one can locate ‘Deleuze and Guattari’s contribution as a radicalization or completion of *the idea of critique itself*.’²⁶

Whatever the actual validity of Zaera-Polo’s remarks, they are significant not only in recruiting Deleuze to the affirmative ‘productivity’ of the new architecture, but also in the proposition that architecture position itself within the complexities of contemporary culture so as to ‘manipulate’ them from the inside. Where Deleuzism in architecture is to be autonomous from any engagement with linguistic paradigms or critical perspectives, through its engagement with the inventive capacities of its own formal and material practices, it will become ‘progressive’ by making its cause immanent to that of a social culture of complexity.

THE POSSIBILITY OF CRITIQUE

Though the disavowal of critique has, through its intersection with the ‘post-critical’, a specifically architectural inflection, it ought also to be understood within the wider historical conditions and broader ideological shifts of contemporary capitalism. The very possibility of critique, as a number of thinkers have remarked, has been placed in question in the context of a capitalist system able to present itself as something like the final and indisputable form of the social to which there is, apparently, following the collapse of state socialism, and faced only with alternatives defined as archaic, fundamentalist, and undemocratic, no *realistic* alternative. To question through critique the existing order of things is thus typically characterised as ‘unrealistic’. Kant posited the *Aufklärung* as the ‘age of

criticism, to which everything must be subjected', including religion, government and 'reason itself', implicitly identifying critique with the progressive project of the Enlightenment.²⁷ Today, any contestation or critique of capital can, through the mobilisation of a well-established and predetermined series of rhetorical tropes, be made to appear as retrogressive, anti-social, criminal or infantile (we might well recall, as exemplary of such mobilisations, the media representations of the various occupations, student protests, and riots that have taken place in the UK since 2010).

Mark Fisher has termed this state of affairs, where the current regime of power is able to present itself as that to which there is no alternative, 'capitalist realism'.²⁸ In doing so he has drawn upon earlier remarks by Fredric Jameson and especially Slavoj Žižek, such as the latter's observation in the *The Spectre of Ideology* that:

nobody seriously considers possible alternatives to capitalism any longer, ... it seems easier to imagine the 'end of the world' than a far more modest change in the mode of production, as if liberal capitalism is the 'real' that will somehow survive even under conditions of a global ecological catastrophe...²⁹

In *First as Tragedy, Then as Farce* too Žižek addresses the hegemony of a 'realistic pragmatism', and its demands that 'one should heroically resist dreams of perfection and happiness and accept bitter capitalist reality as the best (or the least bad) of all possible worlds.'³⁰

Patrik Schumacher, in his essay 'Research Agenda: Spatialising the Complexities of Contemporary Business' exemplifies the presence of capitalist realism in his argument that all forms of outright opposition to capital are now redundant and ineffective: 'The recent anti-globalisation movement is a protest movement, i.e. defensive in orientation and without a coherent constructive outlook that could fill the ideological vacuum left behind since the disappearance of the project of international socialism.'³¹

The only option now, he continues, is to be ‘constructive’, and ‘progressive’ by strategically aligning one’s practice with a corporate agenda.

There is of course a longer standing genealogy of such ‘realism’ and ‘pragmatism’ in architecture. First published in 1972, *Learning from Las Vegas*, a publication fundamental to the establishment of paradigms of realism and pragmatism in architecture, for instance, opens with the line: ‘Learning from the existing landscape is a way of being revolutionary for an architect.’³² Manfredo Tafuri’s *Architecture and Utopia* of 1976, though in disenchanted rather than progressive terms, similarly argues against the possibility of an architecture that could be revolutionary simply by tearing up the ground of existing social relations and building, in the most literal terms, a new world: ‘...it is useless’ he writes, ‘to propose purely architectural alternatives. The search for an alternative within the structures that condition the very character of architectural design is indeed an obvious contradiction of terms.’³³ As Fredric Jameson was to suggest, addressing the perspectives produced by both Venturi and and Tafuri in his essay ‘Architecture and the Critique of Ideology’, they are each in some way marked by the same response to the real and near totalising conditions of late capitalism:

Is it possible that these two positions are in fact the same and that as different as they may at first seem, both rest on the conviction that nothing new can be done, no fundamental changes can be made, within the massive being of late capitalism?³⁴

It is the ‘massive being’ and totalising condition of capitalism, then, that is understood as overdetermining the realism and pragmatism of architecture from the period of the late-twentieth century that emerges as the *postmodern*, understood both as a movement within architecture, and, as Jameson was to describe it, a more broadly encompassing ‘cultural logic’. It is also within this period, and for the same reasons, that the very possibility of critique becomes questionable. As Guy Debord, remarked of this situation, in an especially bleak passage from his *Comments on the Society of the Spectacle*, in

1988:

Wherever the spectacle rules, the only organized forces are those that want the spectacle. No one can any longer be the enemy of what exists, nor transgress the *omerta* that concerns everything. We have finished with that disturbing conception, which was dominant for over two hundred years, according to which society was criticizable or transformable, reformed or revolutionized. And this has not been obtained by the appearance of new arguments, but quite simply because all argument has become useless. From this result we can measure not universal happiness, but the redoubtable strength of the networks of tyranny.³⁵

Under these conditions it is critique itself that finds itself criticised, judged, as unreasonable. As MacKenzie observes in *The Idea of Pure Critique*, whereas in the Enlightenment *reason* is a tool in the hands of critique against all indifference, against all unquestioning acceptance of the given, *reasonableness* works to reinscribe the boundaries of and prohibitions against such questioning:

With the benefit of hindsight, we can say that the reign of indifference has entered a new golden age precisely because it finds its strongest support yet in the current milieu of ‘reasonableness’: a milieu that furthers compromise rather than critique.³⁶

This judgement of critique emerges too within architectural post-criticality. Jameson describes Tafuri’s response to the ‘massive being of late capitalism’ as one of ‘self-conscious stoicism’, and that of Venturi of being ‘relaxed’ with it.³⁷ More recent architectural discourse, however, as is evident from the remarks on critique made by Kipnis already addressed above, rather than simply resigned to the apparent inefficacy of critique, has been vehemently opposed to its very existence. To cite a further example, Zaera-Polo in an essay titled ‘A Scientific Autobiography’, published in the *Harvard Design Magazine*, describes his experience of the presence of critique and theory once prevalent in architectural education as ‘nagging’, fundamentalist’ and ‘politically correct’, and as an impediment to being ‘productive’ as an

architect.³⁸ Beyond the pragmatism of postmodernism's recognition that the powers of architecture might be limited by those of capital, the argument developed within post-criticality and architectural Deleuzism becomes one in which the power of architecture is understood to *depend*, in some way, on the elimination of critique.

It is in respect of the way that the thought of Deleuze and Guattari has been drafted in to underwrite the legitimacy of this position within contemporary architecture, and of the broader logic of capitalist realism—that its script, in other words, has been adapted for the 'reality studio'—that I intend architectural Deleuzism to work as a critical concept and a means of determinate negation. Rather than affirming its application of Deleuze as 'creative', I am presenting a critique of the architecture considered here. In one sense at least, then, I am working against the grain of Buchanan's conception of 'Deleuzism'.

The principal object of this critique is not, to be clear, a judgement of the interpretation of Deleuze and Guattari—according to its accuracy or inaccuracy—produced by the architects addressed here. My concern, instead, is to analyse their part in contributing, through their architecture, to the production of the tractable, precarious and opportunistic subjects of a society of control, and, through their discourse, of affirming this as a progressive development. Rather than countering the judgement of critique with a further judgment, based upon some normative or transcendent idea of what architecture should be or what the 'truth' of Deleuze and Guattari's philosophy might be, the critique pursued here is based upon understanding architecture and architectural discourse as practices whose effects are immanent to the wider social field in which they operate.

In another sense, then, I am following Buchanan's model of Deleuzism, which itself follows an ethos expounded by Deleuze, in being concerned with how architectural Deleuzism *works*, with the question, that is, of what its

productive effects are. This comes, however, with the caveat that I cannot join him, and the other Deleuzians, in their argument that this concern with how something works must be understood in contradistinction to, and in place of, a concern with meaning or representation. On the contrary, I understand signification and the production of meaning as themselves a kind of ‘work’, and one whose pertinence to the types of architecture analysed here should be obvious. I insist on this point, too, since the claims typically made within architectural Deleuzism to be producing an architecture that is purely ‘operative’ and ‘post-representational’, to be working at the level of an unmediated ‘new materialism’ purified of signification, are challenged throughout this thesis.

The critique of the kind of work that architectural Deleuzism performs presented here is centred on the production of subjectivity. Whilst this concern will subsequently be addressed in some depth, and in relation to the specific circumstances pertinent to the projects addressed in each of the following chapters, I want here to establish a broader understanding of what is at stake in addressing processes of subjectivation, and to outline how these have been conceived by Deleuze, and also developed by other figures along similar lines.

DELEUZE’S ‘SOCIETIES OF CONTROL’

In a short essay titled ‘Postscript on the Societies of Control’, first published in 1990, in *L’Autre Journal*, no. 1, Deleuze offered some brief remarks on the historical passage from a Foucauldian ‘disciplinary society’ to an ascendant mode of power he termed ‘control’:

The different internments of spaces of enclosure through which the individual passes are independent variables: each time one is supposed to start from zero, and although a common language for all these places exists, it is analogical. On the other hand, the different control mechanisms are inseparable variations, forming a system of variable geometry the language of which is numerical (which doesn’t necessarily mean binary). Enclosures are molds, distinct castings, but

controls are a modulation, like a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point.³⁹

Control is figured by Deleuze, as is discipline, as an emphatically (though not exclusively) spatial practice, but one that now operates through continuous variation rather than discrete enclosure: one that mobilises flows rather than organising confinements. Indicative of the power-shift from discipline to control, for Deleuze, is the movement from the conception of the mass worker of the industrial factory to the notion of individuated workers, to be produced, as such, through the motivating techniques of incentive schemes, seminars and bonuses. Whereas the Benthamite Panopticon served Foucault as the paradigmatic apparatus of disciplinary power, for Deleuze, more nebulous mechanisms of surveillance, monitoring and motivation—‘electronic tagging’ and ‘forms of continuous assessment’, for instance—stand, metonymically, for the operative modality of a society of control.

Where disciplinary power circumscribed the subject within aggregate forms of subjectivity, control permeates the subject at a ‘prepersonal’ level: the subject is no longer an ‘individual’ formed according to the normative requirements of each enclosure but a ‘dividual’ made adaptable to varying demands and conditions. Where discipline regulated, control modulates. Power dissolves from its solid, monolithic state to become a ‘gaseous’ system of effects:

the factory was a body that contained its internal forces at a level of equilibrium, the highest possible in terms of production, the lowest possible in terms of wages; but in a society of control, the corporation has replaced the factory, and the corporation is a spirit, a gas.⁴⁰

Deleuze’s model of ‘control’ emerges, in part, from certain suggestions made by Foucault of emergent tendencies within disciplinary society towards ‘lateral controls’. Foucault remarks in his *Discipline and Punish* of the way in which the panoptical mechanisms of a disciplinary society later come to

circulate beyond the ‘closed fortresses’ of their institutions:

...the massive, compact disciplines are broken down into flexible methods of control, which may be transferred and adapted. Sometimes the closed apparatuses add to their internal and specific function a role of external surveillance, developing around themselves a whole margin of lateral controls.⁴¹

Deleuze also derives the term ‘control’ from the writing of William Burroughs, especially the science fiction of the ‘Nova Trilogy’ of *The Soft Machine*, *The Ticket That Exploded*, and *Nova Express*.⁴² Burroughs refers at length in these works to ‘machines of control’, from the ancient Mayan calendars used to control populations through numeric codes, to parasitic beings from distant stars investing the subject with their alien desires and addictions. These themes are clearly echoed in Deleuze’s own concern with coded and prepersonal mechanisms of control in his references to cybernetics, computing, digitalisation and electronic pass cards, and to the emergence of a corporate ‘spirit’ investing itself in the worker. There is a clear sense in all of this, too, that Deleuze finds himself to be witnessing, at the end of the twentieth century, the ominous signs of a new, even more totalising, mode of power than discipline, and, as well, the technical apparatus that will enable it. ‘Compared with the approaching forms of ceaseless control in open sites’, he warns, ‘we may come to see the harshest confinement as part of a wonderful happy past’.⁴³

Deleuze’s remarks on the operation of a ‘society of control’ are, it must be said, rather brief—amounting in the ‘Postscript’ essay to only nine paragraphs in total, plus some further elaboration of its themes in a short interview with Antonio Negri, published as ‘Control and Becoming’ at around the same time.⁴⁴ Yet the conceptual purchase on contemporary conditions offered by this model of power, with its warnings of an age of ‘complexity’ to come, of its ‘motivational’ stratagems and ‘open environments’, remains pertinent, still, for many, in thinking the relationship between power and the production of subjectivity across the full spectrum of

its manifestations—social, political, economic, technological, physiological, and aesthetic, for instance. For this reason I find it preferable to other terms that might otherwise appear better candidates, on account of their more rigorous development, through which to frame the conditions I am analysing here. ‘Neoliberalism’, for example, though highly relevant in respect to these, suggests, above all, an economic conception of their operations, whilst ‘post-Fordism’, though also significant to this study, positions changes in the mode of production at the centre of broader social transformation.

There is also, of course, a certain appeal to the notion of turning a Deleuzian-inflected critique of power upon a tendency in architecture claiming itself to be Deleuzian in inspiration. I have, however, found it necessary to turn to a number of other figures in order to flesh out more effectively and specifically the relationships between forms of power and modes of subjectivation in relation to the architectures I am concerned with here. Amongst these, Italian operaist and post-operaist Marxism, particularly that developed in the work of figures such as Paolo Virno, Maurizio Lazzarato and Franco “Bifo” Berardi, has proved significant in grasping the production of subjectivity in relation to forms of ‘immaterial’ and ‘affective’ labour. Luc Boltanski and Eve Chiapello’s *The New Spirit of Capitalism*,⁴⁵ with its account of changes in working practices in France following the events of May ‘68, particularly in terms of the adoption by managers of the ‘liberatory repertoire’ of these, has also been key to the analysis of contemporary labour practice in relation to architectural production considered in chapter one, ‘Labour and the Replicant City’. In addressing questions of the ‘market’ and the production of ‘entrepreneurial subjects’, Foucault’s later work on neoliberal governmentality, which overlaps in some respects with Deleuze’s control society thesis, has been central to the analysis of the marketisation of urban space considered in chapter two, ‘Pushing the Envelope’. Also pertinent to the analysis presented in this chapter are figures associated with the so-called Frankfurt School—Theodor Adorno, Max Horkheimer, and Walter Benjamin—in whose perspectives I

locate and mobilise a nascent critique of environmental and cybernetic forms of power and control. In the third and final chapter, 'A Very Special Delirium', Lisa Rofel's *Desiring China*,⁴⁶ and Aihwa Ong's *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*,⁴⁷ serve to identify the specific models of governmentality and the production of subjectivity now operative within the People's Republic of China.

LITERATURE AND SOURCES

Whilst this work thus draws upon a large body of existing philosophical and theoretical sources in the development of its critical analyses, and addresses as one of its objects the writings through which a Deleuzoguattarian model of architecture has been shaped and promoted, there is no substantial body of literature addressing contemporary architecture in the precise fashion, and with the same objectives, as is outlined here. This is no doubt due, at least in part, to my attempt to engage here with contemporary, or at least relatively recently produced written material and architectural projects. This dearth of critical literature may also be read, however, as symptomatic of the continued currency of generally affirmative and post-critical perspectives within architectural culture.

Andrew Ballantyne's *Deleuze and Guattari for Architects*, for instance, consists of an exegesis of Deleuzoguattarian concepts—mostly those inflected through the philosophers's Spinozist or Bergsonian orientations, such as 'swarming', 'emergence', 'rhizomes', and the 'machinic'—and their possible utility for architectural thought and production.⁴⁸ At no point are those appropriations of such concepts within architecture already extant at the time of the book's writing critically addressed, and nowhere is the notion entertained that the thought of the philosophers, rather than serving as a conceptual resource *for* architecture, might equally serve to problematise or critique its practice. It is perhaps unfair to single out Ballantyne in this fashion since his book is a contribution to a larger series, titled 'Thinkers for Architects', whose other works—*Benjamin for Architects*, *Derrida for Architects*, *Bourdieu for Architects*, etc.—

suggest in their very titles their purpose in assisting in the utilisation of philosophy *for* architecture. Nonetheless, such exercises in rendering theory and philosophy resources in the service of architecture indicate the generally affirmative character of contemporary architectural theory. Some considerable distance, it seems, has been established in architectural culture between its current modalities of theorising and the period in the 1970s, following the aftermath of May '68, in which, for example, Bernard Tschumi encountered Bataille and the Situationists as a *challenge* to the functions and practice of architecture as such.⁴⁹

There does exist, however, a relatively small body of more critically engaged writing attending to concerns partially adjacent to the subject of this thesis which is worth outlining, if only to clarify what I understand to be problematic or limited, as well as valuable, in this for my own purposes.

Firstly, there have been a number of essays produced in response to the post-critical architectural position promoted by Robert Somol and Sarah Whiting in their seminal essay 'Notes Around the Doppler Effect and Other Moods of Modernism'.⁵⁰ In his essay "'Criticality" and its Discontents', published in the *Harvard Design Magazine*, George Baird proposes that the shift from the hegemony of 'critical' architecture within the East Coast American schools of architecture to that of the 'post-critical' or 'projective' be understood as the result of two principle factors.⁵¹ The first of these is 'purely biographical —not to say generational', claims Baird, and results from the need of a younger generation of architects, including Somol, Whiting and Stan Allen, to challenge the paternal authority of Peter Eisenman, the latter being associated with a certain form of architectural 'criticality'.⁵² The second reason is said to stem from the 'retreat' of Manfredo Tafuri from contemporary criticism in the mid-80s, and the mood of disillusion that followed this within architectural theory. This notion that an inter-generational conflict is to be found at the heart of the turn to post-criticality is pursued too by Reinhold Martin in his essay 'Critical of What?' which

appeared in a subsequent issue of the *Harvard Design Magazine*.⁵³ Here, however, rather than the ‘purely biographical’ account offered by Baird, Martin gives this conflict a more socially and politically oriented inflection. ‘So, is it possible’, he asks

that the ‘post-critical’ polemic is, like the more general rightward swing in American politics, actually a rather thinly disguised effort to bury the utopian politics of the 1960s once and for all? In other words, is it possible that all of the relaxed, ‘post-critical’ Oedipality is—in direct opposition to the antiauthoritarian *Anti-Oedipus*—actually an authoritarian call to order that wants once and for all to kill off the ghost of radical politics by converting political critique into aesthetic critique and then slowly draining *even that* of any dialectical force it may have inadvertently retained?⁵⁴

Leaving aside the question of the importance placed upon the trajectory of Tafuri’s career by Baird, the issue of an inter-generational conflict, when understood in relation to broader social and political currents at least, suggests a useful and important perspective on certain of this thesis’s concerns. However, it does not in itself develop the possibilities for a critique of the post-critical to their fullest extent. Hence rather than confine my analysis to this perspective my focus falls upon the ways in which post-critical, projective or Deleuzian architecture is tuned to the contemporary modes of subject formation and organisational paradigms prevalent within contemporary capitalism. I am concerned then not so much with the meaning or origins of these architectural currents as with their productive effects within social reality as forms of power.⁵⁵

Outside of these responses to the post-critical architectural position, one of the most significant, but seemingly overlooked critiques of architecture claiming inspiration in Deleuze and Guattari is to be found in Grant H. Kester’s essay ‘(Not) Going with the Flow: The Politics of Deleuzian Aesthetics’.⁵⁶ Kester focuses in the latter part of this essay upon the Vitra Design Museum and Industrial Building in Weil am Rhein, Germany (1989), designed by Frank Gehry and described by Jeff Kipnis, approvingly,

as an example of Deleuzian smoothing in architecture. Here he challenges the simplistic way in which what he describes as the ‘figural’ tropes of Deleuze—the rhizome, the fold, the smooth—are employed by architects and theorists such as Kipnis to claim political significance of their aesthetics qualities. The analysis of architecture is here limited, however (though quite reasonably in the wider context of the essay), to the example of the Vitra Museum where the author’s principal complaint is with the programmatic segregation of manual workers from the museum’s space of exhibition, and hence that a purportedly Deleuzian architecture does nothing to challenge traditional divisions of labour or the social relations on which these are based. It is my thesis, however, that to the contrary such Deleuzian ‘figures’ are employed by architects such as Hadid, FOA or Koolhaas, in more contemporary projects, as a means to realise *new* organisational models which are precisely concerned with overturning or complexifying conventional divisions of labour and programme. The primary role of these Deleuzian ‘figures’, in other words, is I argue not aesthetic but *operative* in terms of organisational production and subject formation.

During the course of researching and writing this thesis a number of texts have been published whose arguments, concerns and subject matter intersect, at certain points, with my own. Sven-Olov Wallenstein’s essay ‘Looping Ideology: The CCTV Center In Beijing’, engages, as I do, in Chapter Three, with Rem Koolhaas/OMA’s CCTV Headquarters building in Beijing though an analysis of the significance of its looped form.⁵⁷ Wallenstein’s argument, however, is that this project should be understood as a continuation of the exploration of the ideas of ‘bigness’ by the architect that originates from his work in the 1970s. On the contrary, I argue that CCTV marks the refinement of a (proto)typology of the ‘hyperbuilding’ developed by OMA from the mid-90s in which the more radical implications of bigness have been abandoned in favour of an architecture designed to service corporate organisational demands. Furthermore, Wallenstein’s

relatively brief essay affords no space in which to pursue, as I have endeavoured to, the wider political and economic transformations of post-reform China and the shifting relationships between the Party of the PRC, its media, the employees of CCTV, and a 'reengineered' metropolitan public, in order to fully analyse the significance of this project. Similarly, Slavoj Žižek, in his 'The Architectural Parallax', begins to engage critically with the implications of what he describes as Alejandro Zaera-Polo's 'neo-capitalist Deleuzianism'.⁵⁸ Though I am sympathetic to the critique that Žižek begins to develop here, in the context of a large and rather all-encompassing essay on architecture and ideology, his remarks can only scratch the surface, however provocatively, of the issues I attend to throughout Chapter Two in my analysis of the writings and architecture of Foreign Office Architects.

Of those commentaries and critiques of the architects with whom I am concerned here that have emerged of late, those closest to my own position would include a particularly astute reading by Douglas Murphy, in *The Architecture of Failure*, of the relationship between the development and uses of architectural design software and the meanings of the 'virtual' in Deleuze's conception of this term, as well as outlining a critique of the 'parametricism' espoused by Patrik Schumacher and others in this context.⁵⁹ Unfortunately, these arguments are confined to but one chapter of a book whose concerns lie primarily with broader historical perspectives on the discipline of architecture.

More substantial, in terms of its central focus on Deleuze and Guattari in relation to architecture, is Simone Brott's *Architecture for a Free Subjectivity: Deleuze and Guattari at the Horizon of the Real*.⁶⁰ Brott appears to share my perspective that the reception and use of Deleuze and Guattari's thought within architecture has largely been in the service of a broadly neoliberal project, and that their philosophy has, in the process, subsequently been

(mis)used to service the discourse of the ‘post-critical’. Whilst Deleuze and Guattari have been invoked, ‘in name at least’, she writes,

the post-critical movement and its scientific and pseudo-realist ethos evacuates any question of subjectivity along with anything else that is not immediately present. The last ten to twenty years could be described as a shift away from the questions of subjectivity and the social, which were traditionally associated with theory and cultural studies, toward a neo-conservative discussion concerned with architectural form and its means of genesis. This formal discussion focused on process (diagram and genealogy), time (iteration and sequence), and information (the post-critical, new determinism).⁶¹

Brott also adds, in her discussion of the ‘post-critical’ mobilisations of Deleuze and Guattari within architecture, that ‘Deleuze and Guattari’s Marxist critique called for the articulation of new forms of subjectivity, not its repression and passive submission to capital.’⁶² Brott’s larger concern in *Architecture for a Free Subjectivity* is thus to rescue the potential for the production of ‘new forms of subjectivity’, and to reopen the discussion of such possibilities in relation to architecture. My focus, however, is precisely set upon the movement in architecture that Brott understands as a misuse of Deleuze and Guattari in its neglect of the question of subjectivity. Furthermore, whilst I can agree with much of the critique that Brott produces in her introductory chapter (in which she addresses what I am calling here architectural Deleuzism), I cannot agree that the question of subjectivity has been ‘evacuated’ from this movement, or that its effects are primarily ‘repressive’. On the contrary the discourse of architectural Deleuzism, as is one of my main points here, is saturated with references to its productive effects upon the subject—organisational, communicational, affective, political—that are cast as liberating the users of their buildings, designed for similarly enlightened and supposedly progressive clients, from the strictures and enclosures of older formations of lived social experience. If the appropriation of Deleuze and Guattari were limited to issues of form and its generation, as Brott argues, then architectural Deleuzism would have

been capable neither of convincing clients in manufacturing, education or media production of its powers to productively remodel the organisational behaviour of its employees or students, nor of attempting to persuade others of the essentially progressive qualities of such work.

PROJECTING DELEUZE

This thesis is divided into three major chapters. In Chapter One, ‘Labour and the Replicant City: Hadid, Schumacher and the Project of Emancipation’, I begin by questioning the claims made by the architects Zaha Hadid and Patrik Schumacher to be in pursuit of a ‘progressive’ project through their employment of forms whose smoothness and fluidity are held to approximate a Deleuzoguattarian ethos. Drawing upon critical perspectives of labour management derived from post-operaism, and Boltanski and Chiapello, I then challenge the notion promoted by Schumacher, in his writing and pedagogy, that the ‘coincidence of tropes between new management theory and recent avant-garde architecture’, constitutes an ‘emancipatory project’. Bringing these concerns together, the chapter’s final section focuses upon Zaha Hadid Architect’s Central Building for BMW, Leipzig, and the fashion in which managerial concerns to harvest the ‘collective creativity’ of its flexible labour force are served by this architecture.

Chapter Two, ‘Pushing the Envelope: Foreign Office Architects and the Reinvention of the Political’, begins by considering the relations between the materialism Zaera-Polo (mis)reads from Deleuze and Guattari and his construction, on the basis of this, of a ‘political ecology’ of ‘material organisations’. I then draw upon both Deleuze and Guattari’s notion of ‘molar’ capture, and certain arguments from Adorno and Horkheimer’s *Dialectic of Enlightenment*, to produce a critique of such organisational models and their capacity to naturalise relations of power and domination. In this chapter’s second section FOA’s Meydan Retail Complex, Istanbul, and their

Ravensbourne College, London, are analysed, with particular reference to Foucault's notion of neoliberal governmentality, as means of extending the market throughout the social field, to identify, respectively, citizenship with consumerism and education with entrepreneurialism. The final section of this chapter addresses the claims made by Zaera-Polo and Farshid Moussavi to be practicing an architecture of unmediated affect that somehow transcends signifying and conceptual elements, and is akin to the model of 'faciality' elucidated by Deleuze and Guattari in their *A Thousand Plateaus*. Here I contest the purportedly 'post-linguistic' status of their architecture to argue that, much like the work of Zaha Hadid, it operates, in fact, as a means of affirmative publicity for the marketisation of urban and educational space.

Whereas the first two chapters deal with architectural Deleuzism as an more or less direct appropriation of the thought of Deleuze and Guattari, Chapter Three, 'A Very Special Delirium: Koolhaas and the Architecture of Capital', adopts a different approach. Turning to the writings of Rem Koolhaas and the architecture of his practice, OMA (Office for Metropolitan Architecture), I consider, firstly, the affinities between the architect and the philosophers, especially around the notion of 'delirium', and their attempts to produce models of radical difference through recourse to avant-garde practices. This is undertaken so as to explore the possibility that an architecture close, in its conceptions, to the thought of Deleuze and Guattari, might produce a spatiality not premised on the production of subjectivities compliant with the imperatives of a control society. Taking Koolhaas's essay 'Bigness', and the architectures of OMA's Kunsthall in Rotterdam, and their Casa da Musica, Porto, I argue that these do indeed suggest the possibility of a contemporary architecture that does not function straightforwardly, or exclusively, as a machine of control.

Having argued for this possibility within the work of OMA, I then engage critically with the tendency in their more recent projects to shift from an

architecture of Bigness to that of the ‘hyperbuilding’. I argue that this shift represents the substitution of forms of metropolitan congestion, with their open-ended and delirious productivity, with infrastructural and urban ones in which patterns of efficient circulation are designed to serve corporate objectives. At the same time, and related to this, I reflect upon the concurrent discursive shifts in the discourse of Koolhaas from a position of affinity with Deleuze and Guattari to one of common cause with architectural Deleuzism. The critique of this turn in Koolhaas and OMA centres on the CCTV (China Central Television) Headquarters building in Beijing. Informed by the work of Rofel, Ong, and other recent research on the emergence of forms of neoliberal governmentality in post-reform China, I analyse CCTV as a key site in the making of new subjectivities centred on changed conditions of labour, citizenship and public life in the People’s Republic.

In lieu of a conventional conclusion summarising the findings of this thesis, and since, in any case, each of the chapters include their own conclusions, I end with an epilogue titled ‘Endgames’. Here I attend to contemporary manifestations of an architectural discourse wherein Deleuze and Guattari feature far less prominently, and whose central position within its theorising has now been occupied by figures such as Bruno Latour and Niklas Luhmann. In relation to this shift, I address the relinquishment of any claims for the progressive or liberatory potentials of this architecture, and its absolute accommodation to the demands of the mechanisms of contemporary capitalism. Rather than marking the end of architectural Deleuzism, however, I consider this development as a continuation, and further refinement, of its instrumentalisation of theory and its affirmation of capital’s powers of valorisation and control, but one whose endgame is now more clearly apparent than was the case within its earlier iterations.

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- ² 'Postscript on Control Societies', in Gilles Deleuze, *Negotiations, 1972-1990*, trans. Martin Joughin, New York; Chichester: Columbia University Press, 1995, pp. 177-182.
- ³ Ian Buchanan, *Deleuzism: A Metacommentary*, Edinburgh: Edinburgh University Press, 2000.
- ⁴ Ian Buchanan, 'Desire and Ethics', in *Deleuze Studies*, Dec 2011, Vol. 5, pp. 7-20.
- ⁵ Ibid., p. 18.
- ⁶ Buchanan (2000), op. cit., p. 8.
- ⁷ Buchanan (2011), op. cit., p. 18.
- ⁸ Gilles Deleuze, *The Fold: Leibniz and the Baroque*, trans. Tom Conley, London: The Athlone Press, 1993.
- ⁹ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi, London and New York: Continuum, 1992.
- ¹⁰ Greg Lynn (ed), *Folding in Architecture*, Chichester and Hoboken, NJ: Wiley-Academy, 1993/2004 (reprinted).
- ¹¹ John Rajchman, *Constructions*, Cambridge, MA: MIT Press, 1998, pp. 19-35.
- ¹² Deleuze and Guattari cautioned against any straightforward notion of smooth space as in itself radical or salvational in *A Thousand Plateaus*: 'Never believe that a smooth space will suffice to save us', op. cit., p. 500.
- ¹³ Jeffrey Kipnis, 'Towards a New Architecture' in Lynn, op. cit., p. 18.
- ¹⁴ Ibid.
- ¹⁵ Ibid.
- ¹⁶ Jacques Derrida, 'Psyché: Invention of the Other', in Derek Attridge (ed), *Acts of Literature*, London and New York: Routledge, 1992, pp. 335-336.
- ¹⁷ Ibid., p.337.
- ¹⁸ Paul Patton, 'Future Politics' in *Between Deleuze and Derrida*, Paul Patton and John Protevi (eds), London and New York: Continuum, 2003, p. 17.
- ¹⁹ François Cusset, *French Theory: How Foucault, Derrida, Deleuze, & Co. Transformed the Intellectual Life of the United States*, trans. Jeff Fort with Josephine Berganza and Marlon Jones, Minneapolis and London: University of Minnesota Press, 2008, pp. 62-3. For a further account of the reception of Deleuze within the Americana Academy, see Simone Brott, 'Deleuze and "The Intercensors"', in *Log* 18, Winter 2010, New York: Anyone Corporation, pp. 135-151.
- ²⁰ Jesse Reiser and Nanako Umemoto, *Atlas of Novel Tectonics*, New York: Princeton Architectural Press, 2006, p. 20.
- ²¹ See, for example, Robert Somol and Sarah Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism', *Perspecta*, Vol. 33, *Mining Autonomy*, 2002, and 'Okay Here's the Plan', *Log*, Spring/Summer 2005; George Baird, 'Criticality' and its Discontents', *Harvard Design Magazine*, 21, Fall 2004/Winter 2005; Jeffrey Kipnis, 'Is Resistance Futile?', *Log*, Spring/Summer 2005; Reinhold Martin, 'Critical of What? Toward a Utopian Realism', *Harvard Design Magazine* 22, Spring/Summer 2005. 'Post-critical' writings have often taken Koolhaas's well-known reservations about the possibility of a critical architecture as an explicit reference point as well, although the latter has notably declined any direct identification with the label. See Rem Koolhaas and Reinier de Graaf, 'Propaganda Architecture: Interview with David Cunningham and Jon Goodbun', *Radical Philosophy* 154, March/April 2009, pp. 37-47

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- ²³ 'Educating the Architect: Alejandro Zaera-Polo in conversation with Roemer van Toorn', accessed 15 December 2008 at: <<http://www.xs4all.nl/~rvtoorn/alejandro.html>>.
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- ²⁵ Immanuel Kant, *Critique of Pure Reason*, trans. J. M. D. Meiklejohn, Mineola, New York: Dover, 2004.
- ²⁶ Iain MacKenzie, *The Idea of Pure Critique*, New York and London: Continuum, 2004, p. xxiii.
- ²⁷ Kant, op. cit., p.ix.
- ²⁸ Mark Fisher, *Capitalist Realism: Is There No Alternative?*, Winchester and Washington: Zero Books, 2009.
- ²⁹ Slavoj Žižek, 'Introduction: The Spectre of Ideology', in *Mapping Ideology*, Slavoj Žižek (ed), London: Verso, 1995, p. 1.
- ³⁰ Slavoj Žižek, *First as Tragedy, Then as Farce*, London and New York: Verso, 2009, p. 26.
- ³¹ Patrik Schumacher, 'Research Agenda: Spatialising the Complexities of Contemporary Business', 2005(b), accessed 8 July, 2009, at <<http://www.patrikschumacher.com/Texts/Corporate%20Fields-%20New%20Office%20Environments.html>>.
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- ³³ Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, trans. Barbara Luigi La Penta, Cambridge, MA: MIT Press, 1976, p. 181.
- ³⁴ Fredric Jameson, 'Architecture and the Critique of Ideology', in *Architecture, Criticism, Ideology*, Joan Ockman, et al (eds), New York: Princeton Architectural Press, 1985, p. 87.
- ³⁵ Guy Debord, *Comments on the Society of the Spectacle*, xiii, accessed 22 March, 2012, at <<http://www.notbored.org/commentaires.html>>.
- ³⁶ MacKenzie, op. cit, p. 17.
- ³⁷ Jameson, op. cit., p. 87.
- ³⁸ Alejandro Zaera-Polo, 'A Scientific Autobiography: 1982-2004: Madrid, Harvard, OMA, the AA, Yokohama, the globe' in *Harvard Design Magazine*, Fall 2004/Winter 2005, pp. 5-15.
- ³⁹ Deleuze, op. cit., pp. 178-179.
- ⁴⁰ Ibid., p. 179.
- ⁴¹ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan, London: Penguin, 1977, p. 211.
- ⁴² William Burroughs, *The Soft Machine*, 2nd Edition, New York: Grove, 1992 (1966); *Nova Express*, New York: Grove, 1992 (1964); *The Ticket that Exploded*, 2nd edition, New York: Grove, 1992 (1967).
- ⁴³ Gilles Deleuze, 'Control and Becoming', in Deleuze, op. cit. p. 175.
- ⁴⁴ Ibid., pp. 169-176.
- ⁴⁵ Luc Boltanski and Eve Chiapello, *The New Spirit of Capitalism*, trans. Gregory Elliot, London and New York: Verso, 2007.
- ⁴⁶ Lisa Rofel, *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture*, Durham and London: Duke University Press, 2007.
- ⁴⁷ Aihwa Ong, *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*, Durham and London: Duke University Press, 2006.

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- ⁴⁹ Bernard Tschumi, *Architecture and Disjunction*, Cambridge, MA: MIT Press, 1996.
- ⁵⁰ Robert E Somol and Sarah Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism', in *Perspecta 33: Mining Autonomy*, Michael Osman, Adam Ruedig, Matthew Seidel, Lisa Tilney (eds), Cambridge MA and London: 2002.
- ⁵¹ George Baird, "'Criticality" and its Discontents,' in *Harvard Design Magazine* 21, Fall 2004/ Winter 2005, pp. 16-21.
- ⁵² Ibid., p. 18.
- ⁵³ Reinhold Martin, 'Critical of What? Toward a Utopian Realism' in *Harvard Design Magazine* 22, Spring/Summer 2005, pp. 104-109.
- ⁵⁴ Ibid., p. 106.
- ⁵⁵ In addition to these principally North American responses to post-criticality in architecture, mention should also be made here of the collection *Critical Architecture* and its significance in initiating a resurgence of criticality within British architectural culture to which this thesis itself ought to be understood as a contribution: Jane Rendell, Jonathan Hill, Murray Fraser and Mark Dorrian (eds), *Critical Architecture*, London and New York: Routledge, 2007.
- ⁵⁶ Grant H. Kester, '(Not) Going with the Flow: The Politics of Deleuzian Aesthetics' accessed 10 February 2010, at <<http://digitalarts.ucsd.edu/~gkester/Research%20copy/Deleuze.htm>>.
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- ⁵⁸ Slavoj Žižek, 'The Architectural Parallax', in Nadir Lahiji (ed), *The Political Unconscious of Architecture: Essays in Honour of Fredric Jameson*, Aldershot: Ashgate, 2011, pp. 255-297.
- ⁵⁹ Douglas Murphy, *The Architecture of Failure*, Winchester, and Washington: Zero Books, 2010.
- ⁶⁰ Simone Brott, *Architecture for a Free Subjectivity: Deleuze and Guattari at the Horizon of the Real*, Aldershot: Ashgate, 2011.
- ⁶¹ Ibid., 9.
- ⁶² Ibid.

ONE

LABOUR AND THE REPLICANT CITY

HADID, SCHUMACHER AND THE PROJECT
OF EMANCIPATION

We're told businesses have souls, which is surely the most terrifying news in the world. Marketing is now the instrument of social control and produces the arrogant breed who are our masters.

Deleuze and Guattari, *What is Philosophy?*

Zaha Hadid and Patrik Schumacher have sought to conjoin an architecture informed by Deleuzoguattarian processes of smoothing and folding to contemporary theories of labour management and workplace organisation. In doing so, they have argued, they are pursuing a ‘progressive’ and ‘emancipatory’ project. Their argument for this proposition rests upon the claim that the ‘complexity’ of their formal strategies coincides with that of the social reality into which these are projected, and that the theoretical resources of their ‘avant-garde’ architecture effectively correspond with those employed within contemporary organisational models. Indicative of this position, Hadid remarked in her Pritzker Prize acceptance speech of 2004:

I believe that the complexities and the dynamism of contemporary life cannot be cast into the simple platonic forms provided by the classical canon, nor does the modern style afford enough means of articulation. We have to deal with social diagrams that are more complex and layered when compared with the social programs of the early modern period.

My work therefore has been concerned with the expansion of the compositional repertoire available to urbanists and designers to cope with this increase in complexity. This includes the attempt to organize and express dynamic processes within a spatial and tectonic construct.¹

Similarly, Schumacher, outlining the rationale for his ‘Corporate Fields’ project, writes:

The spatial repertoires elaborated by ‘deconstructivism’ in the late 90s and the more recent trend towards an ‘architecture of folding’ turn out to be congenial to the new ideas in organisational and management theory. Architectural notions such as ‘superposition’, ‘multiple affiliation’ and ‘smoothness’ correspond to organisational tropes such as ‘matrix’, ‘network’ and ‘blur’. This marked but hitherto unexplored coincidence of tropes between new management theory and recent avant-garde architecture (deconstructivism/folding) was one of our key motives in taking on the problem of corporate organisation.²



fig. 1. *Phaeno Science Centre*, Wolfsburg, Germany: Zaha Hadid Architects, 2005

Schumacher refers directly to Gilles Deleuze and Félix Guattari as figures significant to the development of Hadid's architecture in a number of his writings. In his *Digital Hadid: Landscapes in Motion* he also confers a pivotal role upon Greg Lynn and Jeff Kipnis in drawing out the significance of Deleuze and Guattari's concepts—such as the 'smooth' and the 'striated'—for the architecture of 'folding' with which he associates Hadid's practice.³ Elsewhere in this publication Schumacher writes, 'Our projects remain incomplete compositions, more akin to the Deleuzian notion of assemblage than to the classical conception of the organism.'⁴

Besides their more explicit references to Deleuze and Guattari, Hadid and Schumacher seem also to have translated the former's conceptual apparatus of 'smoothing', 'folding' and 'deterritorialising' into strategies of spatial production. 'Smoothing', for example, appears translated into the spatial

trope of the ‘artificial landscape’ frequently invoked by Hadid in describing her own architecture. Here, the smooth transitions and continuities she associates with landscape formations are used to articulate the relations between the ground plane and the building envelope, and between internal and external spaces, in an analogously fluid manner, in projects such as the Phaeno Science Centre in Wolfsburg [fig.1] and Museum of Art for the 21st Century (MAXXI) in Rome [fig.2]. Whereas in Hadid’s early projects these formal relations were articulated through the anamorphic distortions of their planar elements, the more fluid aesthetic of her later work implies, through analogy, landscape processes such as erosion, striation and sedimentation. The apparent virtues of this formal approach to the production of ‘open systems’ is then harnessed to an experiential and social frame of reference through which its progressive qualities are proclaimed:

Artificial landscapes are coherent spatial systems. They reject platonic exactitude but they are not just any “freeform”. They have their peculiar lawfulness. They operate via gradients rather than hard edge delineation. They proliferate infinite variations rather than operating via the repetition of discrete types. They are indeterminate and leave room for active interpretation on the part of the inhabitants.⁵

... I think we know have the chance to organize things differently, and it can be done with the diagram in an interesting way—not with this idea of pure efficiency. You can occupy space and make clusters of organization in such a way that people from all levels of society meet each other.⁶



fig. 2. *MAXXI Museum*, Rome, Italy: Zaha Hadid Architects, 2010

In this translation of Deleuze and Guattari's conceptual apparatus into the terms of contemporary spatial production, the operation of smoothing becomes the means to conceive of, and to promote as progressive, new forms

of social experience. The terms that Schumacher mobilises in describing this new mode of spatial production, it should be noted, are strikingly similar to those chosen by Deleuze to outline the new conditions of a ‘control society’.

Whereas Deleuze, in his ‘Postscript on Control Societies’, wrote:

The different internments of spaces of enclosure through which the individual passes are independent variables: each time one is supposed to start from zero, and although a common language for all these places exists, it is analogical. On the other hand, the different control mechanisms are inseparable variations, forming a system of variable geometry the language of which is numerical (which doesn’t necessarily mean binary). Enclosures are molds, distinct castings, but controls are a modulation, like a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point.⁷

Schumacher, in *Digital Hadid*, writes of,

a new concept of space (magnetic field space, particle space, continuously distorted space) which suggests a new orientation, navigation and inhabitation of space. The inhabitant of such spaces no longer orients by means of prominent figures, axis, edges and clearly bounded realms. Instead the distribution of densities, directional bias, scalar grains and gradient vectors of transformation constitute the new ontology defining what it means to be somewhere.⁸

From the ‘spaces of enclosure’ and ‘clearly bounded realms’ that define an older regime of containment, to the ‘sieve whose mesh will transmute from point to point’ and the ‘gradient vectors of transformation’ defining now more flexible conditions, the account of a historical transition from a spatiality that is ‘striated’ to one that is ‘smooth’ can be followed in parallel across both passages. The transition in the valence accorded to this movement, however, is one that shifts from critique to affirmation; from Deleuze’s warning to Schumacher’s valorisation. This shift paradoxically turns Deleuze’s analysis of a nascent ‘control mechanism’ into a prescription for its implementation. Critique is absorbed into the very forms of knowledge and power it had sought to denounce in order to reinvent and

validate their operation. This reversal is achieved by an architectural Deleuzism, to which the contributions of Schumacher and Hadid have been significant, that has recast Deleuze and Guattari's 'conceptual personae' as affirmative figures of a particular ethos of practice: 'folding' in architecture, for example, is posited as superior to collage, and the 'smooth' is promoted as more 'open', and thus more 'progressive', than the 'striated'. This work of valorisation is further reinforced in its reference to the contemporary conditions of fluidity and mobility—to the language of networks, fields, swarms, and self-organisation—with which Deleuze and Guattari's terms *appear* to accord in their commitments to 'openness' and 'complexity'.

Whereas Hadid and Schumacher have argued for the progressive potential of these conditions many, particularly, those working within Italian operaist and post-operaist currents of critical thought, have understood these in very different terms. Whilst they may offer tactical opportunities for some form of radical praxis, the organisational forms through which these conditions are produced, they have theorised, are themselves strategies developed within post-Fordist capital through which the 'soul of the worker' might be seamlessly integrated within new modes of labour and production. Maurizio Lazzarato, in particular, has sought to understand these new modes of 'immaterial labour' as centred on a process of subjectivation in which the 'worker's personality and subjectivity have to be made susceptible to organization and command.'⁹ The restructuring of labour and production under post-Fordism, based upon networked and fluid organisational models made instrumental to capital accumulation, is understood by Lazzarato to result in new forms of exploitation:

immaterial labor constitutes itself in forms *that are immediately* collective, and we might say that it exists only in the form of networks and flows...Small and sometimes very small "productive units" (often consisting of only one individual) are organized for specific ad hoc projects, and may exist only for the duration of those particular jobs. The cycle of production comes into operation only when it is required by the capitalist; once the job has been done, the cycle dissolves back

into the networks and flows that make possible the reproduction and enrichment of its productive capacities. Precariousness, hyperexploitation, mobility, and hierarchy are the most obvious characteristics of metropolitan immaterial labor.¹⁰

Writing from a similar perspective, Tiziana Terranova, in her *Network Culture: Politics for the Information Age*, has argued that models of networking, swarm-intelligence and self-organisation now constitute an emergent paradigm of ‘soft control’:

the dynamics of flows—once understood in terms of nonlinear relations between a large number of simple bodies—is far from constituting a utopian state of pre-Oedipal bliss but has become the field of operation of a new mode of cybernetic control (or soft control).¹¹

For Hadid and Schumacher, on the contrary, these modes of composition, at least in terms of spatial production, already offer the potential for a ‘progressive’ project in which the subject can be liberated in his/her movements and interactions. To address the issues raised by the differing perspectives, the question of architectural form will first be addressed here.

Formal experimentation is central to Hadid’s practice and her development of novel formal solutions, appropriate to and reflective of contemporary modes of social experience, underwrites the claims made by her and Schumacher to be both ‘avant-garde’ and to have taken up again what Jürgen Habermas famously termed the ‘incomplete project of modernity’. Given such claims, the question of form, and its relation to progressive means of spatial production and subjective experience, will be pursued principally through the framework of Manfredo Tafuri’s critical reading of the architectural avant-garde, whose ultimate function, in his assessment of its early 20th century practitioners, was to accommodate both architecture and the general subjective experience of the urban population to the logic of the assembly line. Through this framework will be explored the ways in which the architecture of a contemporary ‘avant-garde’, such as Hadid and

Schumacher style themselves, might be said to serve a similar function for the new productive logics of post-Fordism.

In the second section of this chapter, the focus will fall upon Schumacher's 'Corporate Fields' design unit, as was taught within the Design Research Laboratory (DRL) programme at the Architectural Association from 1997 to 2000. Here the architect's thesis that the research agenda pursued in this unit constituted an 'emancipatory project', founded upon the 'coincidence of tropes between new management theory and recent avant-garde architecture', will be critically addressed in relation to the broader context of contemporary modes of labour, management theory and workplace design. At the same time, the Marxian and post-operaist conceptual apparatus of 'immaterial labour', 'general intellect' and 'precarity' will be brought to bear on this confluence of architectural and managerial perspectives.

Zaha Hadid Architects' Central Building for BMW Leipzig constitutes the focal point of the third section of this chapter. Here Hadid's architecture intersects directly with particular managerial strategies in the design and realisation of their spatial requirements. At BMW Leipzig the reconfiguration of labour relations under a new order of 'flexibility', and the particular economic conditions of this region of eastern Germany, are served by an architecture which is itself addressed to the mobilisation of subjects and the reconfiguration of their relations through the 'management' of complexity. Especially significant in this regard are the attempts to foster, through architectural means, the 'collective creativity' of BMW's workers, and to design the conditions of 'transparency' by which they are to self-monitor and positively appraise their own conditions of labour.

THE INCOMPLETE PROJECT OF MODERNISM

'One of the tasks I set for myself', Hadid declared in her Pritzker Prize speech, 'was the continuation of the unfinished project of modernism, in the experimental spirit of the early avant-garde'.¹² The nature of this project was

further expanded upon by Schumacher:

Hadid's oeuvre ... can be defined as an attempt to push ahead with "the incomplete project of modernism". This is the most general account Zaha Hadid has – on many occasions – given of her work. The "incomplete project of modernism", as Hadid understands it, is tilted more towards Russian Constructivism than German Functionalism, giving greater prominence to formal innovation than to scientific rationalization. But this opposition is one of degree rather than principle. For all shades of the modern movement, the historical intersection of abstract art, industrial technology and the social revolutions succeeding in the aftermath of the First World War have been the indispensable ingredients.¹³

Schumacher's bastardisation of Habermas, in which the 'incomplete project of *modernity*'¹⁴ becomes instead the 'incomplete project of *modernism*' [my emphases], has been read by Hal Foster as a 'slippage' revealing Hadid's repositioning of modernism to be a mere 'repertoire of styles' devoid of any truly critical engagement with the 'processes of modernization'.¹⁵ Yet this argument is itself questionable in its implication that Hadid offers little more to architecture than digitally enhanced revivals of modernism. Her stylistic references to the early-20th century avant-garde are, as Foster indicates, eclectic, taking in Suprematism, Constructivism, Expressionism, Futurism and De Stijl. But there is also a certain logic to this eclecticism, and one which does, after all, appear concerned with 'processes of modernization'. Hadid's points of reference within modernism indicate a consistent interest in formal deformation and distortion, and with the spatial dynamism of the figures extracted from these processes. The architecture that Hadid has produced through the adoption of these means has tended either to express dynamic morphological forces—explosive, compressive or fluid—for example, or to accommodate complex programmes through the logic of these dynamics, or in some cases to do both at the same time. Hadid appears to have appropriated compositional techniques, rather than styles, from early-20th century modernism, and deployed them in contexts for which their dynamic qualities are peculiarly relevant, rather than arbitrary. In this she is adapting them to a social reality in which speed, mobility and

flexibility have become hegemonic values to be serviced and expressed. This architecture requires, then, an analysis in which the relations between formal techniques and conditions of patronage are understood historically, critically and politically.

This is, of course, precisely the approach adopted by Manfredo Tafuri from the late-1960s in his account of the early-20th century architectural avant-garde and its relations to ‘Fordist’ conditions of production. Given Hadid and Schumacher’s claims to ‘avant-garde’ status, and their concern to furnish clients with an architecture adequate to contemporary modes of organisational complexity, their practice might fruitfully be approached through this Tafurian frame. Rather than follow Tafuri in simply refusing the possibility of any contemporary avant-garde position, however, the approach here will be to employ his intellectual methodology as a means to draw out the parallels between historical conditions under which seemingly radical forms of architectural production were once aligned with a certain mode of production, in the inter-war era, and present-day practice making similar claims to the progressive status of both its architecture and that of the projects it serves.

CONSTRUCTIVE FREEDOMS

Drawing upon Georg Simmel’s analysis of metropolitan experience and nervous stimulation for his book on *Architecture and Utopia*, Tafuri identified a pivotal role for avant-garde techniques of abstraction in acculturating the ‘mass’ of the population to conditions of general equivalence within the capitalist economy:

The problem was, in fact, how to render active the intensification of nervous stimulation (*Nervenleben*); how to absorb the shock provoked by the metropolis by transforming it into a new principle of dynamic development; how to “utilize” to the limit the anguish which “indifference to value” continually provokes and nourishes in the metropolitan experience. It was necessary to pass from Munch’s *Scream* to El Lizzitsky’s *Story of Two Squares*: from the anguished

discovery of the nullification of values, to the use of a language of pure signs, perceptible by a mass that had completely absorbed the universe without quality of the money economy.¹⁶

In the development of this notion of abstraction, the artistic avant-garde of the early-20th century underwent a fundamental shift from its nostalgic and antagonistic negations of modernity to one of positive affirmation. Its techniques come to mirror the rationalisation of industrial production and its forms to echo the standardisation of its products. This shift is evident, for Tafuri, not only within the Soviet avant-gardes of Constructivism and Productivism, but in De Stijl and the Bauhaus, as the latter abandoned its Expressionist origins to embrace the ‘new unity’ of ‘art and industry’ and became ‘now a utopia serving the objectives of the reorganization of production.’¹⁷

If modernist industrial design and architecture derive their formal language from avant-garde processes of abstraction as Tafuri argues of Constructivism, De Stijl and the Bauhaus, and they do so in order to accommodate themselves, and the metropolitan subject, to the rhythms and sensibilities of the assembly line, then Hadid’s architecture is strikingly analogous in the logic of its own practice. As is widely discussed in reference to the origins of her architecture, the abstract paintings of Kazimir Malevich inform the formal language of the paintings with which her career is said to begin:

One concrete result of my fascination with Malevitch in particular was that I took up painting as a design tool. This medium became my first domain of spatial invention. I felt limited by the poverty of the traditional system of drawing in architecture and was searching for new means of representation.

The obsessive use of isometric and perspective projection led to the idea that space itself might be warped and distorted to gain in dynamism and complexity without losing its coherence and continuity. Despite its abstractness—this work was always aimed at architectural reality and real life.¹⁸

Outlining the parallels between Hadid's use of graphic space and those of the early-20th century avant-garde—such as can be seen in her painting *Blue Slabs, The Peak Club, Hong Kong*, for example [fig. 3]—in terms of architectural 'evolution', Schumacher argues:

Drawing accelerates the evolution of architecture. In this respect, modern architecture depends upon the revolution within the visual arts that finally shook off the burden of representation. Modern architecture was able to build upon the legacy of modern abstract art as the conquest of a previously unimaginable realm of constructive freedom.¹⁹

Hadid has made the supposed 'constructive freedoms' of modernist abstraction central to her own practice, engaging them with contemporary conditions of production, organisation and experience. Hence whereas the avant-garde of the 1920s employed abstraction as the means to code its architecture in the productive logic of the grid and serial repetition—i.e. in the hegemonic forms of what Deleuze and Foucault would describe as disciplinary modernity—Hadid uses it to decode the formal language and typological categories of modernist architecture, deforming them into 'open' compositions through which the currents of the more fluid and networked organisational models required by economic production today can be routed.

Abstraction's capacity to decode established patterns of architectural use and occupation in this fashion is clearly understood by Schumacher as being 'liberating' in its implications:

Abstraction implies the avoidance of familiar, ready-made typologies. Instead of taking for granted things like houses, rooms, windows, roofs etc. Hadid reconstitutes the functions of territorialization, enclosure and interfacing etc. by means of boundaries, fields, planes, volumes, cuts, ribbons etc...To maintain the liberating spirit of abstraction, in the final building a defamiliarizing, "minimalist" detailing prevents volumes from immediately denoting rooms and cuts turn into windows again.

This minimalism withdraws the familiar items that otherwise would allow the inhabitants to fall into habitual patterns of behaviour. Instead they are confronted with an abstract composition that needs to be discovered and made sense of in a new way. Instead of points, lines and planes we now work with control points, splines, nurb surfaces, and force-fields etc.²⁰

This reading is, however, problematic in that techniques of ‘defamiliarisation’ are not in themselves liberatory, whatever their Brechtian overtones. Some differentiation between the freedoms of formal invention that are possible on the picture plane and those of spatial production in the built realm is required since ‘liberation’ does not transfer from the one to the other in the straightforward manner suggested here by Schumacher. ‘Constructive freedoms’ exercised by Hadid within the graphic space of her paintings are always relativised in the context of architecture’s use and experience. The programmatic weaving and complexity typical of Hadid’s museum and exhibition projects might be said to work, for instance, to ‘free’ the visitor from the conventional modes of perception and experience associated with such spaces. In this case, the process of ‘defamiliarisation’ acts upon a more or less willing subject as an exceptional experience from which he or she is free to withdraw at any point. However, in the context of a ‘defamiliarised’ workplace, such as Hadid’s Central Building at BMW in Leipzig, the experience of being ‘confronted with an abstract composition’ is also the means through which workers are repeatedly subjected, through terms set strictly by the employer, to the architecture of a workplace in which new conditions of mobility, visibility and ‘human relations’ have been imposed. On the basis of such repetition the experience of ‘defamiliarisation’ becomes instead one of habituation, through which workers are assimilated to new modes of managerial organisation, as opposed to an experience of liberation as such.



fig. 3. *Blue Slabs, The Peak Club, Hong Kong*, Zaha Hadid, Acrylic on cartridge paper, 185 x 282 cm, 1983

NETWORKS, TRANSPARENCY AND POROSITY

Abstract processes of architectural composition similarly serve the networked conditions sought within contemporary organisational models used by businesses such as BMW. Hadid's abstract figures, derived through processes of layering, warping, and shearing, are made to service analogously complex organisational programmes. Schumacher writes:

Dense proximity of differences, and a new intensity of connections distinguishes contemporary life from the modern period of separation and repetition. The task is to order and articulate this complexity in ways that maintain legibility and orientation.²¹

Under conditions of intensified connectivity—ones which operate across 'open' territories, and where boundaries are to be strategically smoothed over and points of contact productively multiplied—the formal tropes of layering, transparency and porosity are likewise mobilised as the techniques of post-disciplinary organisational environments. New relations of proximity and interaction are programmed around sight-lines, pathways and points of intersection articulated by the continuous deformation of the spatial envelope.

Hadid's commitment to 'porosity in organization', to the concept of the 'open', as is broadly evident throughout her practice, and particularly exemplified in projects such as the Museum of Art for the 21st Century in Rome, the Phaeno Science Centre in Wolfsburg, and the Central Building for BMW, Leipzig, implies an apparent freedom from the 'separation and repetition' of modernity. Yet, again depending upon the context, it may equally function as a freedom to expose the subject to new conditions of exploitation or surveillance. Although Hadid and Schumacher characterise their practice as avant-garde or progressive, their servicing of hegemonic organisational paradigms now operative in contemporary capitalism also serves, in certain circumstances, as a means of 'control' in Deleuze's sense of the term. In the case of 'smoothing', for instance, not only, as Deleuze and

Guattari caution, are smooth spaces ‘not in themselves in liberatory’,²² but as Deleuze later wrote—less ambivalently—when viewed in the context of ‘control society’, they may be more oppressive even than those of their ‘disciplinary’ predecessors from the 19th and early-20th centuries: ‘Compared with the approaching forms of ceaseless control in open sites, we may come to see the harshest confinement as part of a wonderful happy past.’²³

Openness, transparency and porosity have also been read by Paul Virilio, with specific reference to their architectural manifestations, as the medium through which the subject is directly exposed to the forces and speed of information networks that characterise contemporary modes of organisation. Summarising the insights of Virilio, K. Michael Hays writes in an introduction to the former’s essay on ‘The Overexposed City’:

...mechanically proximate space yields to electromagnetic proximity (simultaneous and instantaneous) and the city grid to the informational network...For in the overexposed city, the architectural organism is no longer opaque, occlusive, and inscribed with visible information, but, like the human body on which it was formerly based, porous and vulnerable to the intrusion of forces that are no more visible than an electron.²⁴

Virilio also suggested a direct correlation between techniques in an earlier era of architectural practice, where ‘tracing paper, acetate and plexiglass used in project studies are replacing the opacity of paper’,²⁵ and the ‘overexposure’ of the subject in the contemporary metropolis; this is a correlation that might similarly be drawn in the case of Hadid’s architecture, albeit while recognising that her practice now employs the very different tools of digital design.

If transparency and porosity are the architectural means through which subjects are exposed to the ‘invisible’ forces and organisational imperatives described by Virilio and Deleuze, then the prevalence of these qualities

within Hadid's architecture should be read as more than a merely formal concern. Against Hal Foster's interpretation of Hadid as simply a 'computer age' stylist, as an architect betraying the genuine radicalism of the original avant-garde from whom she borrows so extensively, Virilio offers us an alternative perspective from which the operative relations between abstract design procedures and real conditions of social organisation can be analysed.²⁶ Hence, whereas Foster understands the computer as the means through which Hadid automates the volumetric intersections and multiple overlays that characterise her formal agenda, so that her architecture tends towards a slick 'deco' styling, as opposed to strict deconstruction as such, as he puts it, the role of computation in design can be understood, on the contrary, as being broadly instrumental rather than narrowly stylistic in its significance.²⁷ The use of the computer does not, as Foster suggests, reduce design to screen-based superficiality, but enables a more technocratically efficient relay between the forms of porosity and transparency that preoccupy Hadid and the corresponding organisational ambitions of her clients. In the designs for the Central Building at BMW Leipzig [figs.4,5], for example, the programmatic elements of the building, alongside the trajectories that communicate between them, are animated and rendered as translucently superimposed layers optimally configured to enable productive workplace encounters and thereby give the appearance of a democratically 'open' workplace.

Rather than betraying the goals of the original avant-garde, then, Hadid and Schumacher can in the context of their pursuit of transparency and porosity, and according to the logic of Tafuri's critique, be seen to follow in the same lineage by adopting modes of abstraction that align architecture with hegemonic modes of social organisation. The intersections, overlaps and programmatic convolutions of their architecture correspond to the operational logic of a contemporary control society and the smooth commerce it seeks between the activities of work, leisure, communication and consumption.

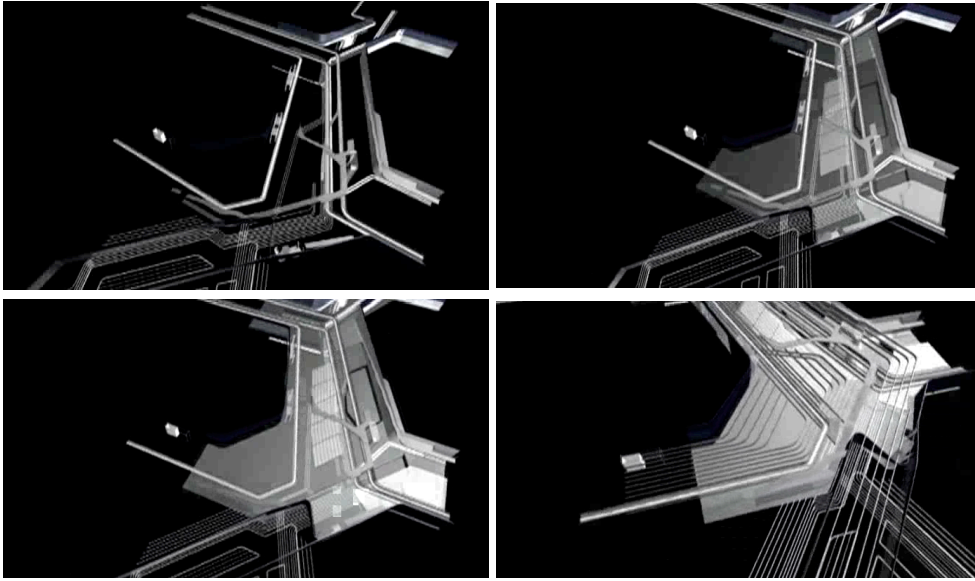


fig. 4. a,b,c and d. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005. Stills taken from BMW's promotional film for the plant

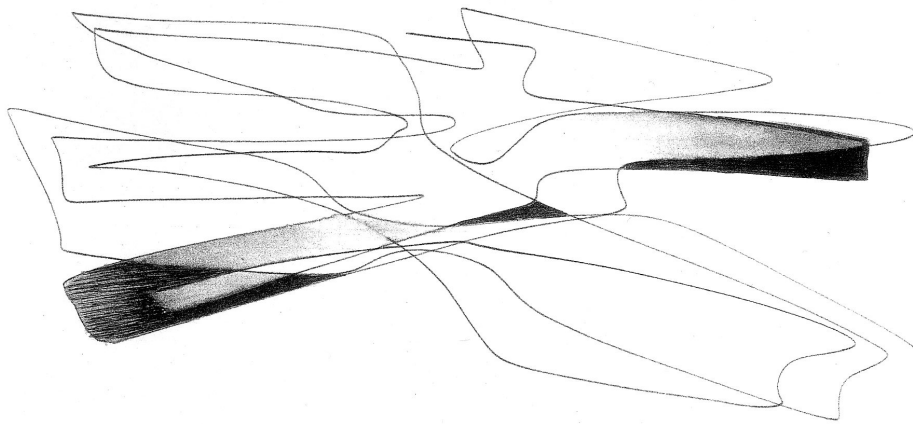


fig. 5. *BMW Leipzig, Central Building*, Zaha Hadid Architects 2005: preliminary sketch

REKLAMEARCHITEKTUR

Thus while the abstract manoeuvres of Hadid's architecture achieve the required conditions of defamiliarisation and porosity through which contemporary organisational models are able to operate instrumentally, there exists too an aesthetic and affective dimension to her projects. The dynamic abstractions that characterise her projects serve as a kind of

‘publicity’ or ‘*reklamearchitektur*’ (to borrow the terms that Tafuri used to characterise Norman Bel Geddes’ ‘Futurama’ installation at the 1939 New York World’s Fair) for the processes which shape social and subjective experience.²⁸ Speed, complexity, mobility, and the ‘distributed network form’ are reassuringly aestheticised within tangible forms of spatial experience which imply, both optically and haptically, the exhilaration of social connectivity and conceal, as their obverse, the volatility and precarity that also accompany these conditions.



fig. 6. *Vitra Fire Station*, Weil am Rhein, Germany, Zaha Hadid Architects, 1993

Hadid’s architecture has come to this juncture via a transition from the aesthetic of sharply juxtaposed planar shards, suggestive of explosion and collision, which characterised her earlier works, to one of globular morphologies and neatly parallel lines curving in concert which typify her more recent projects. The tendency of this development, from the forms of the Osaka Folly (1989-90) or Vitra Fire Station (1993) [fig.6], on the one hand, to the E.On Energy Research Department (2006-10) [fig.7] or MAXXI Museum in Rome (1998-2010), on the other, might be ascribed to any number of factors, or their combination—explanations offered by critics

suggest the personal development of the architect, or broader shifts within the currents of architectural styling, or the availability of new CAD-based design tools, for example. The pertinent issue here, however, is that in effect the smooth modulations of her architecture serve clients who are also evidently agreeable to their aesthetic performance: Hadid has arrived at a formal vocabulary which is fine-tuned to the valorisation of contemporary organisational dynamics.

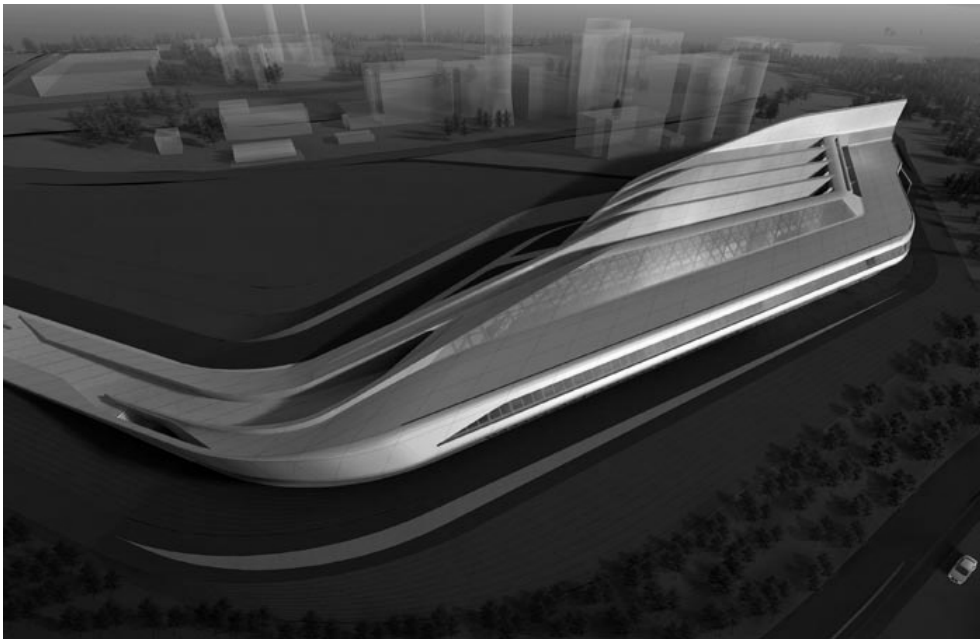


fig. 7. *E.ON Energy Research Department*, Aachen, Germany, computer rendering, Zaha Hadid Architects, 2006-10

In her use of form as a medium of positive affirmation for the socio-economic dynamics of its age, Hadid's architecture can be understood to occupy a position remarkably similar to that of Erich Mendelsohn's within Weimar Germany. Mendelsohn, Tafuri argues, occupied a singular place in Weimar architecture in his adaptation of formal expression to serve commercial interests, achieving a kind of sublimation of the formal 'exasperation' that marked the 'crisis of form' within Expressionism to the dynamics of the capitalist metropolis through a remarkable series of department stores, cinemas and factories:

It should be noted that Mendelsohn chose to work for monied capitalist clients who could sponsor projects that permitted him to enter into the quick of the urban substance. Running counter to the utopias realized by the radical architects, who in their housing projects (Siedlingen) in the urban peripheries attempted to modify the laws forming a city, Mendelsohn's Reklamearchitektur took its place in that chaos of stimuli which is the commercial center and which, with him, could lose that anguished aspect attributed to it by Expressionism and propose itself anew as a dynamic force to the public of Weimar Germany.²⁹



fig. 8. *Rudolf Petersdorff Department Store*, Wrocław, Erich Mendelsohn, 1928

The radial cornering and curved facades that wrapped Mendelsohn's architecture, underscored by parallel linear features and the dramatic effects of newly available artificial illumination, suggest at once both speed and its formal control [fig.7]. Metropolitan 'shock effects' were harmonised and

ordered by Mendelsohn within a strict tempo of a horizontals, verticals and curves such that the viewing public might be absorbed, rather than alienated, by the *nervenleben* of the city. Mendelsohn's architecture was thus both a 'shock absorber' for the dynamics of the metropolis and an advertisement for its newfound activities—the accommodation of industrialised labour, commodity consumption and mass entertainment.



fig.9. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: detail of entrance and reception area

Hadid's own personal reorientation from planar disjunction to linear fluidity serves ends akin to those of Mendelsohn's architecture, and employs notably similar means to do so. Across a number of recent buildings, most significantly exemplified in the BMW Leipzig and MAXXI projects, a number of parallel linear elements circuit around the facades and snake through the architectural envelope, forming smooth-contoured intersections defined by radial curves [fig.9]. Whilst these movements might originate in the programmatic diagrams for these projects, and the elements through which they are articulated consist of structural and infrastructural components which are functionally motivated, they signal too, in terms of Hadid's ambition, the harmonic qualities of 'continuous movement' and the 'mastering of complexity'. In this fashion the formal qualities of Hadid's architecture operate, just as did Mendelsohn's, as a means of publicity for contemporary modes of capitalist organisation, though the precise forms these now assume, as will be discussed in this chapter's third section, are significantly changed from those of the modern period.

THE 'EMANCIPATORY PROJECT' OF CORPORATE RESTRUCTURING

A thoroughgoing critique of the architecture of Hadid and Schumacher cannot settle, however, upon the argument that their architecture appears to advertise, through its formal compositions, hegemonic organisational paradigms. This argument requires a more thorough conception of how architectural form might itself operate in relation to the production of subjectivity, a concern that will be addressed in this chapter's third part. The critique as developed thus far would also leave unexamined the supposition that these organisational paradigms are straightforwardly instrumental to a logic of control and devoid of the 'progressive' tendencies claimed of them by Schumacher.³⁰ This question of the 'progressive', and its relationship to organisational models, merits further enquiry that will be pursued here, in

the first instance, through an analysis of the pedagogical project, ‘Corporate Fields’, through which Schumacher, and others, have elaborated and explored this position.

CORPORATE FIELDS

Corporate Fields is the title given to the research project conducted by Schumacher, and others, within the Design Research Laboratory (DRL) graduate architectural programme at the Architectural Association, which ran from 1997 to 2001 and has been documented in the publication *Corporate Fields: New Environments by the AA DRL*.³¹ Schumacher introduces the programme, in his contribution to this publication, ‘Research Agenda: Spatialising the Complexities of Contemporary Business’, as follows:

Each of our teams [of architectural students] collaborated with one of the following corporate quasi-clients: BDP, DEGW, M&C Saatchi, Arup, Microsoft UK or Razorfish...creative leaders in their own fields. These companies and their organisational strategies served as a point of departure for the development of experimental design scenarios. On a more general level these scenarios respond to the innovative work patterns of a ‘post-industrial’ economy.³²

The rationale informing this project is premised upon the argument that whilst the contemporary business organisation—particularly within those advanced sectors of the ‘knowledge economy’ represented by Schumacher’s choice of ‘quasi-clients—is ‘liquefying’ and undergoing rapid change, architecture has, thus far, failed to embrace these fluid paradigms:

New ways of organising labour are emerging, as witnessed in countless new organisational and management theories...The business of management consultancy is now thriving while the discipline of architecture – with few exceptions – has yet to recognise that it could play a part in this process.³³

The organisational models employed within these most advanced sections of business represent, for Schumacher, a movement away from the rigidly segmented and hierarchical work patterns of the ‘Fordist’ era and towards

those that are ‘de-hierarchised’ and based upon flexible networks. Architecture, using such formal tropes as ‘smoothness’ and ‘folding’, he argues, might make itself ‘relevant’ by entering into a dialectic with the ‘new social tropes’ with which business organisations and management theories are already engaged, thereby allowing ‘architecture to translate organisational concepts into new effective spatial tropes while in turn launching new organisational concepts by manipulating space.’³⁴

Schumacher’s rationale does not rest simply upon making architecture more ‘relevant’ through such a dialectic, however; he also argues that it constitutes an ‘emancipatory’ and ‘progressive’ project. Acknowledging that organisational tendencies towards de-hierarchisation and flexibility are currently ‘tied’ to the ideology of neoliberalism, and may thus be experienced by employees as ‘existential insecurity’, and that corporate power ultimately seeks to conserve the ‘strictures of class-society’, Schumacher nonetheless claims that, ‘today no better site for a progressive and forward-looking project than the most competitive contemporary business domains’.³⁵ This position is maintained by an insistence that left-wing activism has all but ‘disintegrated’ insofar as traditional models and spaces of radicalism ‘stagnate’ and ‘regress’.³⁶ More contemporary forms and sites of activism, such as the anti-globalisation ‘movement of movements’, in which many have identified the emergence of a significant form of resistance and anti-capitalist politics, are similarly discredited in Schumacher’s text:

The recent anti-globalisation movement is a protest movement, i.e. defensive in orientation and without a coherent constructive outlook that could fill the ideological vacuum left behind since the disappearance of the project of international socialism.³⁷

Only within the business organisation, claims Schumacher, can the ‘progressive realities’—such as ‘de-hierarchisation, matrix and network organisation, flexible specialization, loose and multiple coupling, etc.’—that

can fill this ‘ideological vacuum’ be found.³⁸ These ‘progressive realities’ are, in any case, not understood as the creations of business itself, but as conditions ‘forced upon the capitalist enterprise by the new degree of complexity and flexibility of the total production process.’³⁹ Hence they can be bracketed from their neoliberal context, and then pursued, in themselves, as a means by which architecture, through its dialectical relations with these socio-economic ‘realities’, can locate and pursue an emancipatory project.

MISSION-TACTICS AND THE NEW SPIRIT OF CAPITALISM

If, however, these ‘progressive realities’ do not originate in the contemporary production process, as circumstances ‘forced upon the capitalist enterprise’, as Schumacher argues, but instead come from earlier forms of protest, resistance and critique later appropriated by managerial practice, then their redirection towards an emancipatory end becomes a very different, and far more problematic, prospect; one dependent on the supposition that a process of recuperation can somehow be simply be reversed so that its work is undone. That the orientation of contemporary managerial theories toward de-hierarchised and networked forms of organisation originate, in fact, not in the production process, but in a critique of capitalism which is then appropriated by capitalism, is argued by Luc Boltanski and Eve Chiapello, in their *The New Spirit of Capitalism*, where they write:

autonomy, spontaneity, rhizomorphous capacity, multitasking, conviviality, openness to others and novelty, availability and creativity, visionary intuition, sensitivity to differences, listening to lived experience and receptiveness to a whole range of experiences, being attracted to informality and the search for interpersonal contacts—these are taken from the repertoire of May 1968.⁴⁰

This liberatory ‘repertoire’, Boltanski and Chiapello continue, originally directed against capitalism, has since been seized upon within management literature, and detached from the broader context of its attack on all forms of exploitation (not just those concerning the division of labour and its alienating conditions), such that its themes are then ‘represented as

objectives that are valid in their own right, and placed in the service of forces whose destruction they were intended to hasten.’⁴¹

Though in part focused around the events of May 1968, in France, and elsewhere in Europe and America, the critique of alienation was developed, both theoretically and practically, throughout the 1970s by certain theorists and labour movements into further demands for autonomy and a widespread ‘refusal of work’. Workplace hierarchies, those of management and the official unions, were deliberately challenged or bypassed, and workers employed tactics such as the ‘go-slow’ to confront the authority of management. As Boltanski and Chiapello outline, the managerial response to this challenge from labour, beginning in the 1980s, was to begin to dissolve workplace hierarchies and bureaucratic structures, at least at their lower and middle levels, and to grant workers a certain degree of autonomy. The adoption of this strategy was, however, not motivated through any real concession to the validity of worker’s demands per se, but rather through the recognition that the production process could in fact be made more efficient by their introduction. In removing the presence of supervisory and bureaucratic figures from the workplace, firms adopting this strategy were disposing of workers who were, in any case, essentially unproductive, or, within its now more antagonistic atmosphere, even counterproductive. Furthermore, in a neat but cynical twist, worker’s demands for ‘self-management’ became the employer’s demand that workers should indeed manage themselves: self-motivation, flexibility, and interpersonal skills become the requisite attributes of a new organisational paradigm in which control was to be effectively and invisibly internalised by the worker:

‘Controlling the uncontrollable’ is not something with an infinite number of solutions: in fact, the only solution is for people to control themselves, which involves transferring constraints from external organizational mechanisms to people’s internal dispositions, and for the powers of control they exercise to be consistent with the firm’s general project.⁴²

Whilst this shift occurring in the 1980s represents a tendency within the capitalist production process, rather than the absolute abandonment of older practices, it nonetheless signifies a fundamental departure from the division of labour that had been originally established under the conditions of industrial manufacture. These conditions, as Marx observed, in seizing only upon those skills from which it could extract value within the production process, divided the workers from all other dimensions of their being. The division of labour, he wrote in *Capital*, ‘converts the worker into a crippled monstrosity by furthering his particular skill as in a forcing-house, through the suppression of a whole world of productive drives and states’.⁴³ Conversely, in the newly organised production process envisaged by management theories in the 1980s, all the subject’s ‘productive drives and states’—physical, intellectual and affective—are mobilised as a whole. These must be channeled, in turn, through the topology of the distributed network system which increasingly assumes hegemony today as the paradigmatic form of labour organisation. Moreover, within certain sectors of employment oriented to what is described, within the post-autonomist discourse of figures such as Antonio Negri, Paolo Virno or Maurizio Lazzarato, as ‘immaterial labour’, the active pursuit of social communication and collaboration, within these distributed networks, becomes an absolute demand: ‘the activity par excellence is integrating oneself into networks and exploring them, so as to put an end to isolation, and have opportunities for meeting people or associating with things proximity to which is liable to generate a project.’⁴⁴

Hence the adoption of the distributed network form is premised too on its capacity to operate across the entire socius,⁴⁵ to blur or even dissolve the divisions between an ‘inside’ and an ‘outside’ to work, in terms of both its spaces and its times, so that for many labour is now experienced as boundless in its extent. One management theorist of the ‘digital economy’, Don Tapscott, for instance, claims that ‘[t]he new organization ... is a vast web of relationships including all levels and business functions in which the

boundaries between inside and outside are permeable and fluid.’⁴⁶ Rather than a strict hierarchy of command and control through which individual workers are directed from above, then, the dominant idea is that they should be self-motivated—or, to use the naturalising discourse appropriated from complexity theory by such management literature, ‘self-organising’—along the model of a molecular formation, or ‘swarm’, to reference another of its preferred tropes, so that they cluster themselves into mobile and collaborative teams focused around particular ‘projects’. Like the German Panzer divisions that were mobilised under *auftragstaktik* (mission-type tactics) in the Second World War, these contemporary workplace teams operate under ‘mission tactics’ where they are first briefed on their general objective and then required, under their own initiative, to array themselves across a terrain in pursuit of these goals without need of further direction from above.⁴⁷

Auftragstaktik were originally developed by the German military officer, General Heinz Guderian, as a means to minimise what Carl von Clausewitz had earlier described as the ‘friction’ of war, and are still studied by elements within the US Department of Defense for the lessons they offer in achieving speed, agility and mobility.⁴⁸ In the post-Cold War context of mobile and spatially dispersed guerrilla and terrorist networks, the US military has itself turned to networking its own forces and is thereby exploring the adoption of its enemies’ ‘swarming’ tactics. ‘[N]etworks’ writes Sean J Edwards, in *Swarming on the Battlefield*, ‘are better at fighting other networks’.⁴⁹ The military’s mission-based units are akin to business’s project-based teams in terms of their spatially dispersed, networked and autonomous composition, and indeed lessons in theories of ‘swarming’ are traded between both parties. In *Power to the Edge: Command...Control...in the Information Age*, the authors observe:

Early proponents of an Information Age transformation in Defense are joined by counterparts in the private sector who also recognize that, in order to survive in the face of an uncertain and dynamic

future, organizations need to develop new concepts of operation (business models), [and] focus primarily on agility.⁵⁰

Swarming strategies are common, therefore, to both business and military operations as a means of responding to volatile conditions, and the adoption of distributed network forms by business is, whatever the claims of its gurus might be, a means towards operational agility rather than the progressive reformulation of work itself.⁵¹ In this sense, the organisational paradigm that is privileged within contemporary work practices comes to resemble what Deleuze and Guattari described as a 'war machine'. It is important to note that they saw this as a formation which is 'nothing to do with war, but to do with a particular way of occupying, taking up, space-time, or inventing new space-times'.⁵² As a war machine, the distributed network form effects a smoothing of space and time, through which it dissolves boundaries between the inside and outside of work. It arrays itself across a terrain which it remakes, as its own space-time, through the speed, mobility and agility of its operations. And, like the more literal war machines of Guderian's Panzer divisions (equipped with portable radios), or the contemporary practices of the US military, this spatial smoothing is equally dependent upon advanced communications technology.

In architecture and design the distributed networked form has come to play a significant role in the production of environments through which new configurations of space-time can be realised. In their report titled 'The Future of the Workplace is Now', for instance, leading British office design group DEGW state:

The office has to be designed as a centre of high intensity collaboration, formal and informal, scheduled and ad hoc, large and small scale, virtual and real. The paradigm of the office as a centre of collaboration replaces the paradigm of the office as a place where the staff is physically gathered to work individually.⁵³

Likewise, the 'Future of Work' report produced by the Capital One

company in 2005, in consultation with DEGW, focuses on ‘Enabling mobility and workplace settings that support knowledge work when and where it is most effective’, and ‘enabling work, anyplace, anytime.’⁵⁴ Capital One’s subsequent introduction of collaborative and mobile work practices, with workspace reorganised into ‘neighbourhoods’ of teams, brought the company advantages in what it describes as ‘portfolio flexibility’, ‘business agility’, ‘productivity’ and ‘employee satisfaction’.⁵⁵

Office design has responded to these organisational shifts by producing systems of fixtures which are themselves flexible and adaptive, and which purport to be conducive to the collaborative performance of workers. Companies such as Space Oasis, for example, produce reconfigurable furniture systems, including a range of ‘team desks’ whose names alone—‘Academy’, ‘Fraternity’, ‘Union’, and ‘Alliance’—signal the kinds of cooperative paradigms they are supposed to serve.⁵⁶ Not only are the conventional fixtures of the office to be reformulated as ‘team’ workspaces, however, but office space as a whole is transformed into a continuous environment geared to the accommodation of a diverse range of working scenarios—‘informal’, ‘scheduled’, ‘ad hoc’, etc. Capital One, for example, has introduced a range of ‘activity settings’ including ‘quiet zones’, ‘enclaves’ and ‘coffee lounges’ into its workplaces, and the Manhattan offices of InterActionCorp, as designed by Frank Gehry, feature elevator lobbies that double as cafeteria-equipped ‘gathering points’ and a viewing-deck for its staff in what is described as an ‘employee commons’ [fig.10].

If the practice of work, now understood as the collaborative networking of knowledge, can take place ‘anyplace, anytime’ in such environments, there is also a sense in which its very definition becomes ever more elusive because there is now no particular place, or time, with which it can be identified. Work is dissolved into a broader category of socialised ‘activity’ which permeates the office environment and from which there can be no break. The hitherto established perception of work as such, in its spatio-semiotic

coding, is diffused through the grafting of non-work settings—the neighbourhood, the café, the lounge, the commons—within the space of the office to suggest the total blurring of work and leisure, and of the corporate, the civic and the domestic.



fig.10. *InterActionCorp*, Frank Gehry, New York, 2008: ‘employee commons’

This tendency to dissolve the visible workspace within the typological forms of public space also now extends beyond the building envelope in which work was once contained. Bars, restaurants, shops, and public transport systems are increasingly designed to accommodate the networked office team’s spatial orchestration within convivial and informal settings, and to support its demand for ubiquitous online wireless connection. In its UK and North American outlets, for example, McDonalds has recently introduced ‘European style’ redesigns, replete with modernist furniture, reproductions of abstract paintings, pastel-based colour schemes, small laptop desks and wi-fi access. This transition, from fittings which were often manifestly designed to encourage customers to consume and depart in the shortest period possible, signals a move towards offering an informal and ‘team-friendly’ space intended to compete effectively with the existing provisions of

its rivals. The refectory style long tables and benches of various other high street restaurants, the café chairs and terraces of the major bars, and the lounge furniture of the coffee chains, such as Starbucks, also attest to the aspiration to offer informal settings in which collaborative work can be conducted.

HUMAN MOLECULES

Echoing the position of Patrik Schumacher's regarding these spatio-temporal developments, much of the new economy's business and management discourse describes the shift to cooperative work practices, and their flattening of workplace hierarchies, as being socially progressive, creative and anti-bureaucratic. This positive spin is further underwritten by the naturalising discourse of 'self-organisation' and 'complexity' in which it is framed. In their book *It's Alive: The Coming Convergence of Information, Biology, and Business*, for instance, Christopher Meyer and Stan Davis observe:

we will again have scientific management—but this time the underlying science will be 'general evolution'. The theories that drive biology will be adopted in the way we use information, and the way we manage our enterprises. Biology, information, and business will converge on general evolution.⁵⁷

In Don Tapscott's *The Digital Economy* the author claims, 'The industrial hierarchy and economy are giving way to molecular organizations and economic structures.' He continues:

The new enterprise has a molecular structure. It is based on the individual. The knowledge worker (human molecule) functions as a business unit of one. Motivated, self-learning, entrepreneurial workers empowered by and collaborating through new tools apply their knowledge and creativity to create value.⁵⁸

Within these, and other manuals of innovation in contemporary business, references to theories of complexity and emergence are frequent. Workers are figured as molecular agents whose adaptive and creative potential resides in their capacity to spontaneously 'self-organise' to make larger aggregates

whose ‘distributed intelligence’ is superior to that of a mere mass of isolated individuals. The phenomenon of the ‘swarm’ referred to above, in particular, receives significant attention as an imitable model of emergent behaviour. In this sense ‘swarming’ is described, in the context of networked business, as:

a type of collaboration in which large numbers of geographically dispersed people quickly self-organize in a peer-to-peer network to deal with a problem or opportunity ... a fluid, shifting network with no central control or hub.⁵⁹

The discourse of complexity, emergence and self-organisation, as focused about the figure of the ‘swarm’, works therefore to embed new forms of labour management within an account of laissez faire naturalism to which it is, in practice and effect, fundamentally opposed in its attempts to actively produce the worker’s subjectivity in compliance with these managerial objectives. As has been extensively argued within Italian post-autonomist accounts of ‘general intellect’ and ‘immaterial labour’, contemporary management techniques are now invested in the production of subjectivity itself.⁶⁰ They are, in other words, addressed to the subject’s communicational, creative and affective potentials, and to the mobilisation of these in the production of value. ‘If production today is directly the production of a social relation’, writes Maurizio Lazzarato, ‘then the raw “material” of immaterial labor is subjectivity and the “ideological” environment in which this subjectivity lives and reproduces.’⁶¹ Workers, in this sense, do not *self*-organise, as spontaneous and autonomous agents, but are required, as a condition of employment, to produce a subjectivity that can function within a networked social composition; this is a process Boltanski and Chiapello poignantly describe as one in which ‘knowledge workers’ must continually engage in the labour of ‘self-fashioning’.⁶² Hence management does not relinquish control to some ‘natural’ process, but rather organises the dispersal of workplace control throughout the internal and external environments through which the networked subject now moves.

Boltanski and Chiapello also note that those fields of knowledge, such as psychology and cognitive science, which appear the most ‘human’ in their orientation, are often employed by management practices to ‘penetrate more profoundly into people’s interior being’. Control is thus not only released and dispersed across the spectrum of social space, but is also fused with a subjectivity that is similarly managed and instrumentalised.

Self-styled specialists in ‘adaptable workplace solutions’, such as firms like Haworth, offer clients the consultancy services of a multidisciplinary ‘Ideation Group’ which, it claims, ‘uses science to help clients understand, translate, and measure workplace performance and better inform workspace design.’ This group’s report on ‘Collaborative Knowledge Work Environments’ refers knowingly to findings in ‘space syntax analysis’, ‘proxemics’, and ‘situational awareness’ alongside cognitive, anthropological and ethnographic studies to codify ideal environments for co-operative ‘knowledge work’.⁶³ In this way, office design supports the instrumentalisation of the subject’s cognitive and social capacities as a concealed technocratic exercise in the planning of spatial settings.

Through these developments, office work expands beyond the disciplinary enclosures of the traditional work space to occupy social space as a whole, whilst simultaneously calling on the most personal and prepersonal capacities of the subject to serve its collaborative composition.⁶⁴ Work is made an environmental occupation in which various networks—technological, interpersonal and neural—are integrated to form a space in which business projects can be pursued with speed, agility and flexibility. In such an environment, the office worker is compelled to network, to perform acts of sociability and cooperation, simply to remain employable. In this sense, as Paolo Virno suggests, since sociability is made into a means, rather than end in itself, it produces a climate of ‘[o]ppportunism, cynicism and fear.’

Returning to Schumacher's argument, in light of these developments, it becomes difficult to conceive how his 'progressive realities' can possibly be bracketed from their existing neoliberal context and pursued as an 'emancipatory' project. If the demands for autonomy, flexibility and spontaneity originating in a critique of capitalism have now been subsumed by it, and if they have been put to work as the basis for a corporate war machine, and if architecture and design have already been reconfiguring space in allegiance with this war machine's organisational paradigm, then how might the further amplification of the distributed network form within the actual space of the corporation lead anywhere other than further along its existing trajectory?

PROGRESSIVE REALITIES

In articulating a provocative thesis that the 'Corporate Fields' project ultimately serves only as an instrument of neoliberalism, Jon Goodbun, in his essay 'A Political Theory of Ecology in Architecture (or, Is the AA-DRL a right wing think tank?)', has proposed an alternative perspective suggested by a reading of both Marx and Tafuri. Whilst agreeing, 'up to a point', with the critique outlined so far in this chapter, Goodbun suggests:

there can no doubt be found a real utopian moment in this work of the AA-DRL. Marx talked about our post-capitalist future as a free association of workers, and the landscapes of the Corporate Fields research might just as easily suggest fields of freely organised immaterial labour.

Our ability to imagine post-capitalist futures is dependent upon architectural practice being grounded in real social transformation. Tafuri argues that in the absence of real social struggles within which architects can situate themselves, architects should position themselves as technologists at the leading edge of capitalism.⁶⁵

In the passage from *Architecture and Utopia* that Goodbun refers to here, Tafuri invites those searching within his text for an 'operative criticism' to 'transform themselves into analysts of some precisely defined economic

sector...bringing together capitalist development and the processes of reorganisation and consolidation of the working class'.⁶⁶ For Goodbun, then, 'Corporate Fields', and the type of research it is engaged in more broadly, might potentially be considered as progressive since:

researching new collaborative working practices, exploring new emergent forms of socio-spatial management, and developing networks as formal, structural and informational forms, all signify the active engagement of architectural ideology in a new cycle of progressive development.⁶⁷

On this point, that 'collaborative working practices' and network forms are, in theory, indicators of 'progressive development', at least, Goodbun appears to be in some sympathy with Schumacher's analysis and strategy, if not the actual outcomes of the 'Corporate Fields' project itself. What remains implicit and undiscussed in a strategy of placing oneself at the leading edge of capitalist development, however, is the ideology of the 'progressive' itself. Forms of communication and collaboration, for instance, cannot be considered as necessarily progressive regardless of their social or historical context. To suggest that capitalism's current employment of these forms might lead only to the further consolidation of its mechanisms of control is, of course, not only to question Schumacher's position, and with it, I would concede, to one articulated by in similar terms by Tafuri, but also to fly in the face of the vision of the revolutionary potential of the 'multitude' that Hardt and Negri espouse in their books *Empire* and *Multitude*.⁶⁸ It is also to challenge the premises upon which much contemporary architectural theory rests, particularly, but not exclusively, in its 'post-critical' forms. The shift that occurs in Deleuze's thought from the period in which *A Thousand Plateaus* was written, and his later comments on the emerging control society, however, already indicates the emergence of a critique of the social composition on which the thesis of progress outlined here is based. Where Deleuze and Guattari appear to recommend the fluid and nomadic composition of the war machine as a force which challenges the power of

the state, in *A Thousand Plateaus*, they do so, at the close of the 1970s, at a historical juncture where the state, and its disciplinary apparatus, still appear to constitute the principal locus of power. By the 1990s, however, it is apparent to Deleuze and Guattari that power itself now resides primarily in the more fluid and widely dispersed social compositions in which corporate interests are invested. Communication itself, to follow an argument borne out by the research of Boltanski and Chiapello, now becomes an instrument of control within these compositions. Hence Deleuze's comment, in an interview with Negri, that 'the key thing may be to create vacuoles of non-communication, circuit breakers, so that we can elude control.'⁶⁹ This remark is offered in reply to Negri's suggestion that communism, which he defines via the Marx of the *Grundrisse* as a 'transversal organization of free individuals' might now be more likely of realisation within the contemporary 'communication society'.⁷⁰ Deleuze's lukewarm reply to this suggestion—'Maybe, I don't know'—is accompanied by a more forthright rebuttal of Negri's investment in the prevalence of communication. Speech and communication, Deleuze argues, are now 'thoroughly permeated by money.'⁷¹ The 'circuit breakers' that Deleuze proposes might operate analogously, as weapons with which to clog the machinery of capitalism, to the sabots that were once thrown into the cogwheels of 19th-century industrial manufacture; a strategy, then, of sabotage and resistance at complete odds with any ethos in which fluidity, connectivity or communication are conceived as essentially progressive.⁷²

Nicholas Thoburn, in his essay 'Vacuoles of Noncommunication: Minor Politics, Communist Style and the Multitude', uses this point to contrast the positions of Deleuze with those to be found in Hardt and Negri's *Empire* and *Multitude* from a similar perspective:

Whereas Deleuze ... insists that capital tends to become immanent to the mobilisation of life such that political subjectivity...exists in the midst of complex and mutable regimes of control on the condition that 'the people are missing', Hardt and Negri tie the multitude...to the

emergence of a self-organising immaterial mode of labour that tends toward autonomy from capital.⁷³

Hardt and Negri's universalising 'narrative of an emerging political subject', is problematic for Thoburn since it tends 'to discourage an attention to the multiplicity, conflict and alternate trajectories of social arrangements.'⁷⁴ Similarly, concepts of 'progress' and the discourse of the 'progressive' imply a given trajectory that is already mapped out in advance; a line to be followed according to a canalised projection of futurity. As outlined above, Schumacher's construction of 'Corporate Fields' as an emancipatory project, with its exclusive focus upon 'participatory decision making, lateral communication, ongoing self-determination of all productive contributors, etc.'⁷⁵ can only justify itself by castigating all other perspectives and practices of political activism as 'incoherent', 'stagnant' or 'regressive'.

The question of the progressive is further problematised by the accounts of the individual student projects associated with the unit presented in *Corporate Fields: New Environments by the AA DRL*. Here, there is scant reference to the broader agenda in which the unit as a whole is framed by Schumacher. Rather than being engaged directly within an emancipatory politics, the projects are represented as offering an advance over modernist approaches to office design in *methodological* terms, through their deployment of non-standard geometries. What gestures there are to be found toward any form of radicalism as such are achieved by implication—through what are, at times, rather spurious appeals to the authority of figures such as Deleuze to underline the supposedly wider significance of formal procedures.

In the description of the project titled 'Stratified Clusters', for instance, the irregular cells that are introduced into an office environment to produce a 'formal system structured to impose differentiation' are unproblematically equated with Deleuze's thinking of 'difference' within *Difference and Repetition*.⁷⁶ More prevalent here, however, are justifications for the formal elements of design discussed in terms of how they will better serve the

organisational dynamics of contemporary business practice. Individual projects are oriented toward, for example, allowing ‘for a tighter integration of company disciplines and services’,⁷⁷ or offering ‘solutions’, that are ‘based upon a belief in the organisational and managerial benefits to be gained from including a broad range of differentiated interior spaces’,⁷⁸ or attempting to ‘intensify the qualities that already characterise the company’s management structure.’⁷⁹ The projects appear focused, then, not upon the broader and putatively radical implications of the unit espoused by Schumacher, but only upon that part of it concerned with producing ‘new formal tropes for new social tropes’. This agenda is pursued through a logic of intensification and amplification so that current uses of office space, within companies moving towards more flexible, cooperative and team-based working practices, are regarded as the basis from which to redesign an environment that is more adequately and efficiently engaging with the potentials of these nascent patterns of occupation. One such project, ‘Archi.Species: Scripting a Robotic Office World’, describes this process (employing a software programme named, perhaps unfortunately, ‘office-Stalker’), as follows:

software was developed by the design team as a stand-alone network application, and used during the research phase to establish a clear and coherent view of the often obscure global patterns of movement and organisation relating to the activities of individual employees and jobs within the company. When linked to sensors and cameras in the Razorfish offices, the set-up could record where, how and how often individuals interacted with one another during a typical day, as well as track equipment and furnishings associated with the existing design and management teams.⁸⁰

From such data-gathering exercises a series of formal interventions are elaborated, within the existing office space, to better accommodate and intensify these ‘patterns of movement’ within the organisational paradigm of the corporation. As Mohsen Mostafavi elucidates, in his essay ‘The Enormous File’, these interventions are mostly achieved by modulating the area diagram and the floor section, so that a number of the projects—

drawing upon precedents such as Paul Virilio and Claude Parent's experiments with the 'function of the oblique', and other examples of the 'mat building'—make use of inclined and/or sheared floor plates to render the office interior as a continuous surface.⁸¹ This strategy, it is maintained, better supports the forms of mobility, flexibility, and connectivity of contemporary work practices than the rigid compartmentalisation of employees which is produced by horizontally stacked floors and vertically dividing internal walls.

These methodologies, and the kinds of architecture in which they result, would then appear to constitute the real focus of the 'Corporate Fields' project, rather than the exploration of the possibilities for architecture to extract an emancipatory project from out of the contemporary production process. Without any concern to eliminate the 'existential insecurities' that Schumacher acknowledges constitute the subjective conditions of these production processes, these design strategies are equipped only to further the transformation of subjectivity according to a problematic narrative of progress as dictated solely by managerial and corporate imperatives. To paraphrase Marx, the projects of 'Corporate Fields' deliver the worker to the process of production, and not the process of production to the worker.⁸² Rather than the corporate context it is, in effect, the 'emancipatory' potential which is being bracketed in these schemes. This outcome is, though, somewhat inevitable given the project's position regarding what it claims are the progressive characteristics of contemporary organisational paradigms. Schumacher's castigation of 'protest' movements as by definition regressive is, it seems, informed, however problematically, by a Marxian understanding of the socially transformative role of the production process. Elaborating the theoretical premises that underlie 'Corporate Fields' he quotes Marx and Engels in *The German Ideology*: 'A certain mode of production, or industrial stage, is always combined with a certain mode of cooperation, or social stage, and this mode of cooperation is itself a productive force.'⁸³ 'Productivity', Schumacher then continues, 'remains the

key selection criterion placed upon any social experiment. Any emancipatory ambition has to reckon with this inescapable fact.’⁸⁴ It is certainly true that Marx did understand that social transformation could not come about through a stance which was ‘in diametrical opposition with the capitalist form of production’, and that the ‘technical basis’ of the capitalist production process was itself a revolutionary force in the transformation of social relations.⁸⁵ However, Marx did not argue that rather than opposing the production process one should straightforwardly push in the other direction, in full support of it. His analysis is clearly dialectical: ‘the development of the contradictions of a given historical form of production is the only historical way in which it can be dissolved and then reconstructed on a new basis’.⁸⁶ The absence of any such dialectical logic, of any analysis or development of contradictions, renders any project, where it joins itself to the ‘leading edge’ of capitalist development, capable only of driving it further along its existing trajectory. This is the fatal limitation of the ‘Corporate Fields’ project.

But rather than judging the ‘Corporate Fields’ project itself a failure according to the terms of the post-hoc rationalisation written by Schumacher some years after its conclusion, however, its significance might better be understood in terms of the forms of knowledge that it actually produced, and how these, in turn, are now being mobilised as forms of architectural practice. It is worth noting, in this context, that the AA’s Design Research Laboratory has acted—and continues to act—as in many ways a training ground for a significant number of students subsequently employed by Zaha Hadid Architects, and that a number of those students who studied during the time of the ‘Corporate Fields’ project went on to hold significant positions in the design team responsible for Hadid’s Central Building for BMW in Leipzig (including the project architect, Lars Teichmann), to which the analysis of this chapter now turns.

REPLICANT URBANISM: BMW LEIPZIG

With *Blade Runner*'s replicants, circulating capital achieves its highest form and real subsumption attains its ultimate stage of development: the replicants become the privileged objects of society's intelligence.⁸⁷

The term 'replicant', drawn from the 1982 film *Blade Runner* directed by Ridley Scott, is used here to conceptualise the 'urbanism' produced within the Central Building designed by Zaha Hadid for BMW's plant at Leipzig in 2005. It is used not to suggest that this urbanism is somehow 'fake' or 'inauthentic'—as is the critique typically levelled at 'new urbanism', for example—but that it is, like the humanoid replicants of the film, a creation of corporate capital designed to function in its service as an improved version of the original from which it is derived.⁸⁸ Where the film's Tyrell Corporation, who produce the replicants, market their products as 'more human than the human', we might similarly understand a replicant urbanism as one that is 'more urban than the urban'.

In the pairing of Hadid with BMW an architectural practice already concerned with the productive articulation of complexity, and with knowledge-based work practices gleaned from the 'Corporate Fields' project, is employed by a client similarly engaged with the application of new organisational models in the workplace. BMW Leipzig is perhaps the most advanced example of contemporary architecture's engagement with post-Fordist organisational models of labour and the architect's broader concerns with 'articulating complexity' are recruited to the specific problematics of contemporary industrial manufacture—the volatility of the market and its fluctuations, the shift from mass production to mass customisation and just-in-time production, the management of variable shift patterns and temporarily contracted workers. Considering these factors the workforce, rather than being directed from above, has been made to operate as an 'open' and self-organising system which produces within itself, through the

communicative interaction of employees, the knowledge with which to manage and continually improve the complex production processes. For this to occur communication has to be generated within the system and hence the architect's task is to produce a spatiality which facilitates this and too a sense of collectivity which mitigates against the real antagonisms likely to develop between a workforce disenfranchised of secure and equitably paid employment and the management of BMW.

In pursuit of this post-Fordist model of labour practice the project's clients and architects appropriated the integrative and organisational capacities of the city as their operational paradigm, Hadid explaining that her response to the programme's complexity was to 'urbanize the site', and Schumacher writing of his ambition to reproduce the 'complexity and the unpredictability of city life' within its architectural envelope. BMW's factory assumes an urban form and a civic agenda not by virtue of its scale (urban proportions were already achieved within architecture by Albert Kahn for Henry Ford in the 1920s, at his River Rouge plant in Detroit, Michigan), but in its capacity to integrate and coordinate commodity production, inter-subjective relations, demographic management and cinematic spectacle within its organisational realm. Addressed here is the context of the production process, with its integration of immaterial, affective and material labour, and its requisite forms of subjectivity, for which this 'replicant' urbanisation is produced in Hadid's architecture.

COMMUNITY OF FATE

BMW selected a location nine kilometers north of Leipzig, in the former East Germany, as the site of its new car factory in 2001, with several factors being key to its choice of location. These included: qualifying for an EU subsidy of \$454 million towards a total construction cost of \$1.6 billion;⁸⁹ a regional tradition of car manufacturing; proximity to other car manufacturers—Volkswagen, Opel, Mercedes-Benz, Porsche—which thus provided a local knowledge and skills pool; transport and infrastructural

conditions; the stability of the terrain; and, critically, the availability of a 'flexible' workforce.⁹⁰

At the time Leipzig was chosen by BMW for its new site the unemployment rate for the region stood at 21%—double that of Western Germany.⁹¹ From the position of strength in which this placed BMW its management were able to negotiate with works councils and the metal workers' union IG Metall, as the preconditions for its significant investment in Leipzig, an agreement to set wages at 20% below those of its other plants in Germany,⁹² and to implement a labour regime based upon variable shift patterns, productivity bonuses and the extensive use of a temporary workforce.⁹³ This 'formula for work', as it was called, was designed by BMW's management to enable the immediate modulation of labour time and productivity in relation to market fluctuations. As Ludger Pries writes in his study 'Cost competition or innovation competition? Lessons from the case of the BMW plant location in Leipzig':

From the very beginning, and as a crucial part of the Leipzig offer, the weekly factory running time was designed with a wide range of working hours (from 60 to 140 hours). The possibility of a working scheme with two and three shifts was agreed upon, and even the two-shift scheme allowed for a wide range of working hours (from a model with 8 shifts of 8 hours, or 64 hours weekly; up to a model with 11 shifts of 9 hours, or 135 to 144 hours weekly). Based on different systems of short, medium, and long working time accounts, this system allows the flexible adaptation of the working and factory running rhythms to the market conditions (with up to 30 Saturday shifts per year without additional payments).⁹⁴

Furthermore, this 'community of fate', as it has been described,⁹⁵ was founded for BMW with the cooperation of local government, employment agencies, and the University of Halle in establishing a training and recruitment programme, 'Poleposition', for the new factory overseen by PUUL GmbH (an enterprise set up for this purpose by BMW itself). Through the agency of Poleposition, BMW were able to manage effectively the demographics of its prospective workforce and thus avoid the

imbalances of gender and age found to be problematic at its other plants, such as Regensburg, where the greater part of the workforce were males maturing at the same age.⁹⁶

NERVOUS SYSTEM

The conditions of labour flexibility and demographic management that BMW were able to secure in Leipzig should not be understood as the result of mere opportunism, however, but rather as consistent with the company's broader movement towards new models of production and workplace organisation.

From the 1970s, when it first introduced performance-related pay, BMW has been moving away from US and European Fordist models of production toward the 'Toyota system' of 'lean production' and 'just in time' manufacture.⁹⁷ The adaptation of the workforce to the forms of flexibility demanded by this system is already evident, before its introduction of the shift patterns operating at Leipzig, in the company's practice of moving workers between its plants according to changing demand for various car models.⁹⁸ Alongside its adoption of methods adapted from Toyotism, BMW has focused too upon strategies of product innovation and continuous improvement, and the creation of the methods of production and labour organisation through which these might be realised.⁹⁹ Hence they have adopted practices more prevalent within the 'knowledge economy' of immaterial production, such as the levelling of workplace hierarchies and collaborative team work, to generate the forms of communication from which ideas and innovation might be realised.

This emphasis upon communication has, in turn, led BMW to innovations in plant layout and circulatory patterns. Preceding the Leipzig plant, for example, the BMW Spartanburg site in South Carolina, in the USA, on whose layout the former is based, placed executive management within the same building and floor level as production to encourage communication

between blue- and white-collar workers.¹⁰⁰ At the Leipzig plant itself the production line circuits between the three main production areas—assembly, body in white, and the paint shop—so that these are clustered around an inner core forming the site of the central building which is conceived as its ‘communication hub’ or ‘central nervous system’ [fig.11]. Through this central building the circuits of production are joined to those of communication.

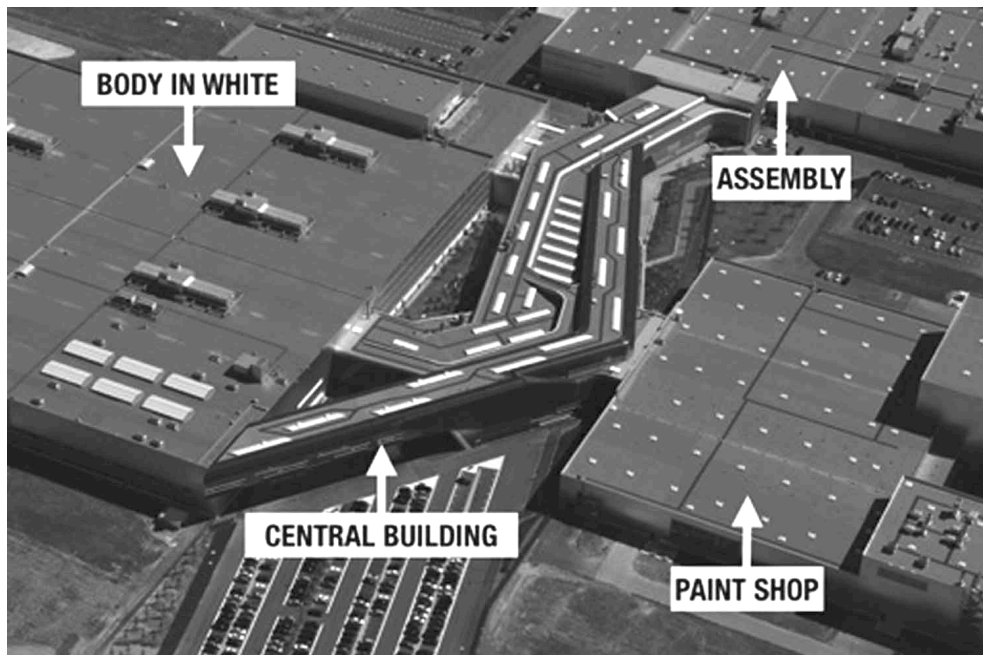


fig.11. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: aerial perspective showing clustering of production facilities in relation to the Central Building

Whereas the Fordist factory, as exemplified at Ford’s River Rouge Plant “was constructed according to a single idea of simplification of the flow of materials”,¹⁰¹ with raw materials entering at its starting point and the commodity appearing at its end, the flows that constitute the post-Fordist production process at BMW Leipzig are structured around more complex, networked and recursive patterns which are not simply material, but composed too of ideational, affective and communicational elements.

In the competition brief through which architects were invited to submit

their designs for the project, the routing of the production line through the central building, accommodating the main entrance lobby, the office areas and the refectory, is described as rendering the ‘quality of the product transparent in the centre of work activities’.¹⁰² The production line is then to serve both its functional duties and, symbolically, as the thread which unites the plant’s workforce within a coherent network. To this form of symbolic mediation is added the intention that the Central Building must serve as ‘a “marketplace” for information’ which will, through the design of its architecture, ‘significantly improve communication’.¹⁰³ To be strategically located within this centre of communication too is the ‘audit area’ where all employees will contribute their knowledge and experience to issues of ‘quality’, as cars are selectively removed from the production line for collective inspection and assessment [fig.12].



fig.12. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: audit area

In this model of labour organisation all employees must play their part in the communicative process through which knowledge is produced. This, in turn, requires that they perceive themselves to be part of a collective enterprise, that visible signs of hierarchical structures are absent, and that communication flows between employees uninhibited by issues of rank or authority. Hence where the project’s planner and supervisor, Peter Claussen,

complains of other plants that shop-floor workers “didn’t feel they could speak up”,¹⁰⁴ at Leipzig they were to be encouraged, through the design of the working environment, to do so.

The task assigned to architecture here is then to articulate the material flows of industrial production with the circulatory patterns of the workforce; to design a spatial environment through which the perceptual, affective, and communicational capacities of employees are collectively engaged with the technical supervision and development of the production process and its product. In this respect the practices of immaterial labour and the concept of general intellect addressed above are pertinent to the architecture of the Central Building. They operate, though, in a somewhat different context from those of the knowledge economies engaged with in the ‘Corporate Fields’ project. Rather than focused about communication and the production of knowledge in itself, these are to be integrated within an industrial production process whose ultimate output is of course a material commodity. The articulation of industrial and cognitive practices exemplified here merits, at this point, a more thorough elaboration of general intellect and immaterial labour so as to fully comprehend its implications for architecture as a socio-spatial practice.

GENERAL INTELLECT, ‘METROPOLISATION’ AND THE PRODUCTION OF SPACE

Marx’s account of general intellect is to be found in the so-called ‘Fragment on Machines’ (Notebooks VI and VII) of his *Grundrisse*. Here he outlines the possibilities for the supersession of capitalism through the contradictions produced in its increasing development of mechanised labour. With the coming of the ‘automatic system of machinery’, of the ‘automaton consisting of numerous mechanical and intellectual organs’, he writes, ‘the workers themselves are cast merely as its conscious linkages.’¹⁰⁵ On the one hand this development absorbs the worker’s direct labour and skills within the ‘self-moving’ apparatus of the automated machine so that knowledge is

concentrated in fixed capital. Marx describes this process as the ‘appropriation of living labour by objectified labour’ and, in *Capital*, as the movement from ‘formal subsumption’, where a pre-existent form of labour is ‘subsumed to capital (in its own process) and the capitalist intervenes in its process as its director, manager’,¹⁰⁶ to ‘real subsumption’ where, with the introduction of large-scale mechanised industry, the forms and processes of labour are produced directly by and for capital itself. On the other hand the ‘conscious linkages’ to which workers are now reduced in the production process are joined together in a new social relation, produced by capital, to ‘supervise’ its machinery. Through this process capital invests in the value of the social subject’s knowledge as a collective capacity, rather than in its individuated physical labour power:

He [the worker] steps to the side of the production process instead of being its chief actor. In this transformation, it is neither the direct human labour he himself performs, nor the time during which he works, but rather the appropriation of his own general productive power, his understanding of nature and his mastery over it by virtue of his presence as a social body—it is, in a word, the development of the social individual which appears as the great foundation-stone of production and of wealth.¹⁰⁷

Whilst this social relation is produced within and for capital, it nonetheless has the potential to operate independently, as a form of ‘general intellect’, through which its knowledge can be further developed as a potential weapon against capital itself. This is particularly the case, notes Marx, given the tendency of mechanisation, in taking over from human labour power, to increase the time of ‘non-labour’ available to the subject in which to develop this knowledge. Hence the contradiction which Marx identifies at the heart of capitalism’s developmental logic:

Capital is the moving contradiction ... it calls to life all the powers of science and of nature, as of social combination and of social intercourse, in order to make the creation of wealth independent (relatively) of the labour time employed on it. On the other side, it wants to use labour time as the measuring rod for the giant social

forces thereby created, and to confine them within the limits required to maintain the already created value as value. Forces of production and social relations—two different sides of the development of the social individual—appear to capital as mere means, and are merely means for it to produce on its limited foundation. In fact, however, they are the material conditions to blow this foundation sky-high.¹⁰⁸

The analysis of the relations between capital, knowledge and social forms contained in the ‘Fragment on Machines’ has been central to the current of Italian Marxism that spans from operaism and post-operaism in the 1960s and 70s, to the contemporary post-operaism thought of figures such as Toni Negri, Paolo Virno and Maurizio Lazzarato. Engaging this passage’s conceptual apparatus in the analysis, firstly, of class composition and labour organisation in post-war Italy, and latterly to more globalised and post-Fordist perspectives, the account of general intellect in whose contradictions Marx placed such significance has been critically elaborated within this current. The general perspective that has emerged from these analyses, though not without significant differences in inflection, is that capitalism has thus far escaped the (for it) catastrophic implications of its contradictory development through the practice of re-appropriation; by drawing upon those elements of ‘general intellect’ which evolve outside of its immediate sphere, that is, as a reservoir of ideas and practices for its own further development. The reinscription of the critique of hierarchy produced around the events and legacy of May ‘68 within new managerial practices (as addressed by Boltanski and Chiapello above), serves as one example of this tendency. Capitalism’s engagement with the processes of general intellect is most marked, however, in the context of the development of the new economies—media, marketing, travel, public relations, etc.—which are founded upon the monetisation of communication, affect and perception; the so-called ‘cognitive capitalism’ which is the product of immaterial labour.

At the same time, however, the ‘Fragment on Machines’ also suggests to the thinkers of this Marxian current certain radical implications apparently

unrecognised by Marx himself; namely that it is now ‘living labour’ which is the subject and the motive force of development, and not capital itself, which is capable only of appropriating the former’s knowledge, practice and social forms of being for its own purposes. As Virno argues in his essay ‘Virtuosity and Revolution: The Political Theory of Exodus’:

Marx conceives general intellect as “a scientific capacity” objectified within the system of machines, and thus as fixed capital. He thereby reduces the external or public quality of intellect to the technological application of natural sciences to the process of production. The crucial step consist rather in highlighting to the full the way in which general intellect...comes to represent itself finally as a direct attribute of living labor, as a repertoire of diffuse intelligentsia, as a “score” that creates a common bond among the members of the multitude.¹⁰⁹

As has been outlined above, it is within this ‘multitude’, with its collective and non-hierarchical practices of communication and knowledge production, that Negri and Hardt locate the radical potential of an ‘emerging political subject’. Whilst Hardt and Negri, amongst others within this current, have tended to locate the figure of the multitude within post-Fordist modes of immaterial labour which supersede those of the factory and the production line, such as those identified within the ‘Corporate Fields’ project, general intellect has also been understood to operate in conjunction with these modes of material labour by some, including Virno and Lazzarato. As Lazzarato observes:

The opposition between manual labour and intellectual labour, or between material labour and immaterial labour, risks failing to grasp the new nature of the productive activity which integrates and transforms this separation.¹¹⁰

In this reading, ‘general intellect’ is not positioned as necessarily exterior to the factory, and is in fact employed within it as a means of refashioning the relation of the worker to the production process, so that, as Lazzarato continues, ‘today it is “the soul of the worker which must come down into the factory”’. It’s his personality, his subjectivity which must be organised and

commanded'.¹¹¹ Understood in this capacity, the operation of general intellect becomes a useful model through which to grasp the organisational paradigm employed by BMW at their Leipzig plant, with its concern to mobilise the perceptual, affective, and communicational capacities of its workforce as a supervisory and creative adjunct to its production process.

Whilst the relation of 'general intellect' to modes of production and labour has been subject to considerable analysis and argument, however, its implications for what Lefebvre termed the 'production of space'—the construction of spaces through which the social relations of production are reproduced, via means of historically determinant political, philosophical and aesthetic categories in urban planning and architectural design—has been generally neglected. In this regard, some recent remarks by Negri, though not in themselves directly answering to this neglect, suggest a basis from which an analysis of the production of a space of general intellect might be projected, and do so in a fashion particularly relevant to the architectural design of the Hadid's Central Building at BMW Leipzig.

In the 'Multitude and Metropolis' seminars that ran from 2005-06 at the International College of Philosophy in Paris, Negri located the site of general intellect within a specifically metropolitan space:

Exploitation is no longer a matter of capturing two additional hours of labor from the individual worker, but instead the power to capture the communication taking place in the great spaces of the city, and the larger the space the larger the accumulation will be. The city is thus defined by a continual metropolisization. This is one of the ways in which capital [asserts] its power today, faced with the impossibility of maintaining it with respect to specific factories and determinate relationships.¹¹²

Here Negri posited the space of the metropolis as one which produces, or at least accommodates, the social relations in which the multitude is able to thrive. 'The pleasure of being in the city' he elaborates, 'the pleasure of living there, its wealth, is this; a wealth of language, of expression, of

affective relationships and networks.’¹¹³ Negri’s contention here is that capital appropriates this wealth by relocating its processes of accumulation, from the factory to the metropolis, in accordance with its shift from a material to an immaterial mode of production. Leaving to one side the problems alluded to above in Negri’s suggestion of the absolute supersession of material production by immaterial production, this contention is significant in positing a necessary relationship between the space of the metropolis and the social forms in which general intellect is manifested.

Moishe Postone, in his *Time, Labour and Social Domination: A reinterpretation of Marx’s critical theory*, returns to the thesis originally presented by Marx in the *Grundrisse* that it is capital, in its development of automated means of production, which moves the worker ‘to the side of the production process’ and thus forges a new ‘social body’ composed of conscious linkages between workers who are now cast in a supervisory role. Here he argues, against what he terms ‘traditional Marxism’, for a ‘critique of labour in capitalism’, as opposed to a ‘critique of capitalism through labour’.¹¹⁴ Whereas in traditional Marxism, that is, the proletariat is charged with the historic mission of overcoming capitalism, Postone argues, following Marx, that the proletariat has itself been constituted, through and for capital’s production process, as an historically specific class,¹¹⁵ and thus the relations through which it is maintained must themselves be overcome. ‘Overcoming capitalism’, he writes, ‘also involves overcoming the concrete labor done by the proletariat.’¹¹⁶ Postone’s account of the relations between capital, labour and social being not only parts company, in this sense, with traditional Marxism, but also presents an alternative reading to the ‘Fragment on Machines’ from that offered by the post-autonomist current of Negri, Virno, Lazzarato, *et al.* Whereas the latter figures ‘correct’ Marx by positioning ‘living labour’ and the forms of social being it produces as pre-existent to their appropriation by capital, Postone insists, with Marx, that it is the process of capitalism’s development and its organisation of labour which produces forms of social being. ‘Marx’s critical theory’, he writes, ‘tries to

show that labor in capitalism plays a historically unique role in mediating social relations, and to elucidate the consequences of that form of mediation.’¹¹⁷ It follows that for Postone it is capital which is the primary agent in the production of forms of subjectivity adequate to its production process. In other words, capital is the ‘Subject’,¹¹⁸ though a unique and ‘remarkable’ one, and not the proletariat, nor indeed, it might be extrapolated from this thesis, the multitude:

there is no linear continuum between the demands and conceptions of the working class historically constituting and asserting itself, and the needs, demands, and conceptions that point beyond capitalism. The latter—which might include a need for self-fulfilling activity, for example—would not be limited to the sphere of consumption and to issues of distributive justice, but would call into question the nature of work and the structure of objective constraints that characterize capitalism. This suggests that a critical theory of capitalism and its possible overcoming must entail a theory of the social constitution of such needs and forms of consciousness—one able to address qualitative historical transformations in subjectivity and to understand social movements in these terms.¹¹⁹

On this basis, Postone challenges any straightforward privileging of collective over individual forms of social being. Since both the direct labour of the atomised individual and the ‘conscious linkages’ of general intellect are ‘historical transformations’ produced by capital, as subject, the movement from the one to the other cannot represent a process of linear ‘progression’ in which the final stage would be to liberate collectivity from its exploitation by capital. ‘Just as Marx did not criticize capitalism from the standpoint of industrial production’, he writes, ‘he did not positively evaluate the collectivity, in which all persons are parts, as the standpoint from which to criticize the individual’.¹²⁰ Hence gestures towards the progressive character of collectivity contained within ‘urbanised’ architectural strategies are similarly undermined. Rather these are to be understood, from this perspective, as spatial productions serving an historically specific mode of production in which cognitive, communicational and affective capacities are valorised.

A number of perspectives relevant to the analysis of Hadid's Central Building at BMW Leipzig emerge from these accounts of 'general intellect'. Firstly, that as more and more automated means of industrial production are developed, direct labour moves 'to the side' of the production process, and the 'conscious linkages' between workers are then cultivated so as to fulfill a supervisory role. Secondly, as underlined in Postone's account of Marx, it is capital, and not living labour, which produces forms of social being through its organisation of labour. Thirdly, as Virno and Lazzarato argue is now the case, the contemporary factory is reorganised to incorporate elements of immaterial labour within industrial production. Fourthly, and according to Negri, the forms of social being in which 'general intellect' prevails are served by metropolitan and urban spatial conditions. Finally, from Postone, it is around the production of subjectivity that critique must be focused.

COMPLEXITY ARTICULATED AND THE DESIGN OF THE CENTRAL BUILDING

The design of the Central Building operates across two interrelated registers: the organisational and the affective. In the first of these registers the programme stipulated by BMW—that the Central Building operate as 'a "marketplace" for information' and that it 'significantly improve communication'—is served through a strategic coordination of the flows of the factory's machinery, product and workforce. In the second register the qualities of these organisational flows are made visible to the workforce, its visitors, and, in mediated form, to a wider public, as a form of *reklamearchitektur* (advertising architecture, to recall Tafuri's account of Mendelsohn's department stores), through the formal and material qualities immanent to the architecture.

Whereas the innovative layout of the plant at BMW—with the three main production buildings linked in a clustered formation—signals, as at the

Spartanburg site, a shift toward an organisational model in which patterns of circulation prevail over linear and unidirectional processes, the individual buildings which accommodate the different stages of production do so in a fashion which remains essentially Fordist in design. It is to the Central Building, then, that the task of articulating modes of immaterial production within material production, and of finding new architectural means to do so, is principally devolved.

Henry Ford's architect, Albert Kahn, standardised the design of industrial construction in the modernist period according to the formula of a 'one-story structure of incombustible materials, with enormous uninterrupted floor spaces under one roof, with a minimum number of columns.'¹²¹ This formula was ultimately derived, as Federico Bucci clarifies in his study of Kahn, from the functional requirements of servicing the production line: 'the form of the building was determined by its floor plan; and in turn, the floor plan was determined by the manufacturing flow.'¹²² Where multiple, and more complex determinants now arise within the organisational models of immaterial production, however, correspondingly more complex means of servicing these are required.

Hadid's response to such demands, by which the architecture of the Central Building was required to productively articulate the plant's multiple flows and circuits, was to explore their dynamics through a series of vector diagrams from which its plan derives [figs.13,14]. This technique, which Hadid herself describes as a process in which she is attempting to 'turn space into linear lines', is, she acknowledges, a generic tool employed in a number of her projects including, for example, the MAXXI Museum in Rome.¹²³ In the case of the Central BMW building, however, this diagrammatic method serves the specific task of channelling the movements of the plant's workforce according to the programme of communication advanced by its managers. The circulatory pattern is so organised as to direct all the plant's employees to regularly pass the 'audit area' described

above, for instance, where faults in production are exhibited [fig.12]. Hence the attention of the plant's workers is, through the 'vectorisation' of the plant's diagram, unavoidably confronted with factors to which must they must collectively attend, in addition to their individual roles within the production process. They are encouraged through such means, recalling Claussen's comments regarding workers' participation, to 'speak up' and assume collective responsibility for standards of production.

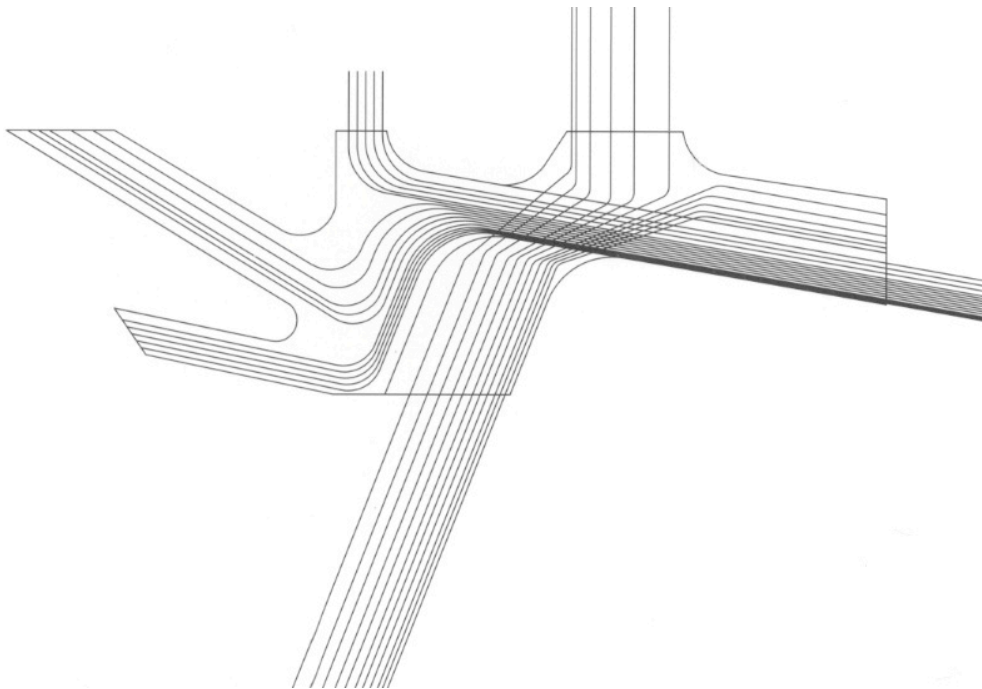


fig.13. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: vector diagram of circulation patterns

The vectors of the circulatory pattern also channel the workforce into an apparent collectivity by having all employees enter at the same point, and by having this entrance open out immediately on to a large open area designated as a 'market place' and which includes a cafeteria [fig.15]. As with the audit area, though less directly instrumental to specific tasks within the production process, this 'market place' is designed to promote communication between workers as they pass one another in this area or congregate in its cafeteria. Whatever the realities of how this space is used

by employees, the intentions of the plant's management are not, of course, to promote communication as an open-ended social practice, but instead to guide the workforce towards forms of socialisation through which a collective discourse relevant and useful to the business of the plant is elicited. Ideally, at least, and according to the tour guides who explain the function of the 'market place' to visitors, it is used by workers to exchange their knowledge and experience of work so that this will, in turn, be fed back into working practices and their 'continual improvement'.

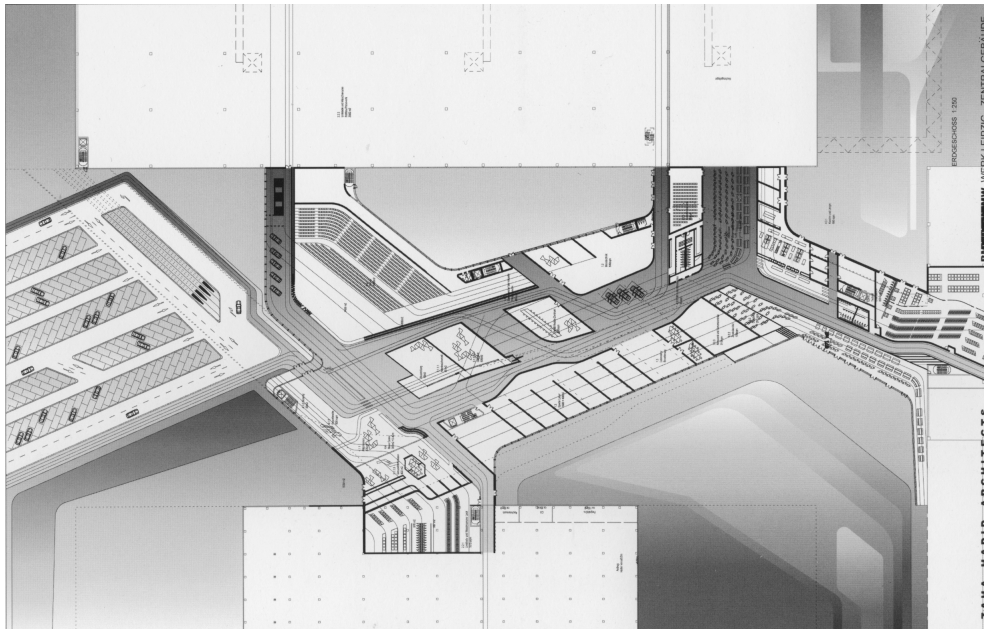


fig.14. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: plan

Here, then, we find exemplified the incorporation of new modes of immaterial labour within the traditional spheres of material labour referred to above by Virno and Lazzarato. It is significant, in terms of spatial production, however, that this act of incorporation cannot be realised within the conventional architectural forms of the factory, but is instead achieved through the introduction of a mediatory space through which complex circulatory programmes are mobilised. Through these programmes—exhaustively diagrammed and 'vectorised' by Hadid to achieve the outcomes envisioned by the plant's managers—the movements and occupational

patterns of the workforce are made to produce and disseminate, as instances of immaterial labour, knowledge and discourse derived from the experience of their material labour. This collectively produced knowledge then feeds back into the production process as a means to its further advancement. From the managerial perspective, then, it is not the workforce itself, not their collective formation as such, but the knowledge produced through this formation which is primarily valorised in this circulatory pattern.



fig.15. *BMW Leipzig, Central Building, Zaha Hadid Architects, 2005: Market Place and cafeteria*

Recalling, in this context, Hadid's ambition to 'urbanize the site' of BMW Leipzig, and Schumacher's claims to be reproducing there the 'complexity and the unpredictability of city life' through its circulatory diagram, Negri's account of the instrumentalisation of the relationship between the metropolis and general intellect within contemporary processes of capital accumulation would appear confirmed. Yet, given that this relationship is here reproduced as an artifice constructed within the factory, it considerably complicates and problematises Negri's initial thesis on metropolisation and the 'impossibility', for power, of exercising control within this realm of production.

In the example of BMW Leipzig, at least, capital does not appropriate for itself the cognitive values of general intellect to be found in the metropolis, but produces its own version of this space so as to elicit and channel general intellect within its own production process. If it is thus able to produce a space which is, in turn, productive of the social relations it means to instrumentalise, then this further suggests that it is capital, and not living labour, that is the primary force here. It might be said, in terms of spatial production, then, that Negri recognises a process of formal subsumption, within the practice of appropriation he terms ‘metropolisization’, whereas what contemporary architecture such as Hadid’s achieves is a real subsumption of metropolitan spatial forms to capital.

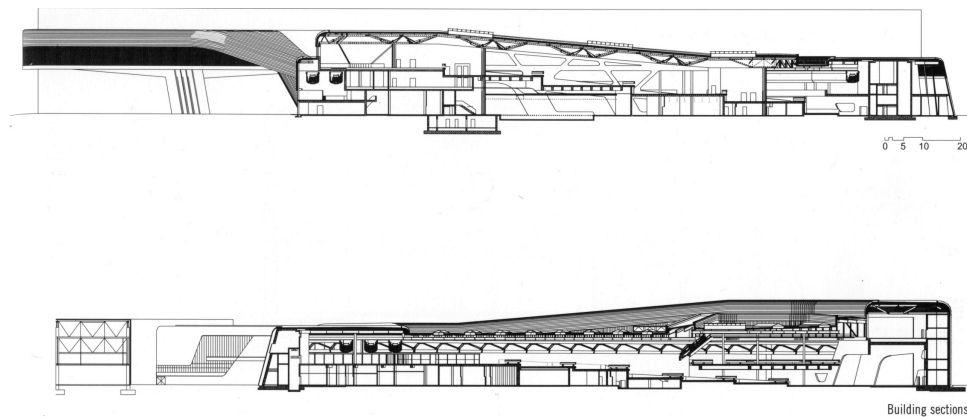


fig.16. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: sections

The architectural means of this real subsumption are not restricted to the diagrammatic organisation of circulatory patterns alone, however, and also employed here—as a further design strategy carried over from the ‘Corporate Fields’ project—is the manipulation of the architectural section. Rather than stack the building’s programmes one atop the other within discrete floors assigned to specific functions, the floor-plates are modulated by inclines, openings and cantilevers [fig.16]. This sectional modulation is designed to provide the spatial articulation of ‘openness’, complexity and ‘social layering’ sought by Hadid in line with her conception of the project

since, according to her urbanistic spatial model:

The idea is that you have a wide range of activities happening together in one space. There's a mix of blue- and white-collar areas, which prevents an exclusive domain from being established. Another interesting element is the transformation of a production field into an urban field.¹²⁴



fig. 17. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: open offices



fig. 18. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: terraced office 'cascades'

In addition to these urban elements of the project, references to landscape formations are mobilised as a further spatial trope through which the organisational and affective capacities of the project are pursued. Landscape and topography are hence—as much as the urban—recurrent models of spatial organisation within Hadid's oeuvre, and as she remarks of the Central Building in particular, 'the interior structure has a landscape quality to it.'¹²⁵ Such 'landscape qualities' are particularly evident in the terraced 'cascades' (as Hadid describes them) which accommodate the plant's planning and administrative offices [figs.17,18]. Whilst in their open, undivided, layout these offices evidently recall an earlier form of 'office landscape'—that of the *Bürolandschaft* model developed in West Germany in the 1950s by the Quickborner team of management consultants—the extent of their 'landscaping' is taken beyond the reorganisation of conventional office floor space that concerned the original model. Through the topographically modelled inclination of their terraces the offices are joined, physically and visually, to the broader 'landscape' of the Central Building and its 'open' conditions achieved through the open trusses providing its structural support [fig.19].

This 'opening' of the workspace through the manipulation of the section is, in its appropriation of urban and landscape morphologies, intended to serve a managerial agenda of de-hierarchising the workplace as analysed in the wider context of corporate practice, by Boltanski and Chiapello, above. In the section of BMW's 2004 annual report addressing the progress of the Central Building the company announce:

On the one hand, this building is to serve as the main entrance for employees and visitors. On the other, it is to be the site of all the plant's planning and administrative employees' workplaces. Their desks are situated in a single, albeit intricately terraced area which extends over several open levels (the so-called "cascades"). There are no hierarchies or managers' offices in this open space, just 740 identical workplaces for everyone from the trainee to the plant director. Here everyone is immediately accessible to everyone else. "Structure creates behaviour" is the motto, and the open structure of

the central building creates greater motivation, more intensive communication and thus higher productivity.¹²⁶

If, however, the open conditions of Hadid's urbanised and landscaped architecture work to produce an environment in which conventional workplace hierarchies and boundaries have been relinquished, it does not follow that power and control have also absented themselves from this scene. Rather they operate through mechanisms which are now immanent to the production of space as opposed to being relayed through a disciplinary chain of command. We might recall, in this context, Boltanski and Chiappelo's comments that the solution to controlling the workforce to which contemporary management is now drawn 'is for people to control themselves, which involves transferring constraints from external organizational mechanisms to people's internal dispositions.'¹²⁷ In the particular case of the Central Building it is the spatial production of visibility and accessibility through which this power to produce self-control is directly mobilised. Through the recognition that their activity is transparent to their co-workers, that is, the requisite dispositions of each worker towards communication, availability and productivity are effectively internalised.

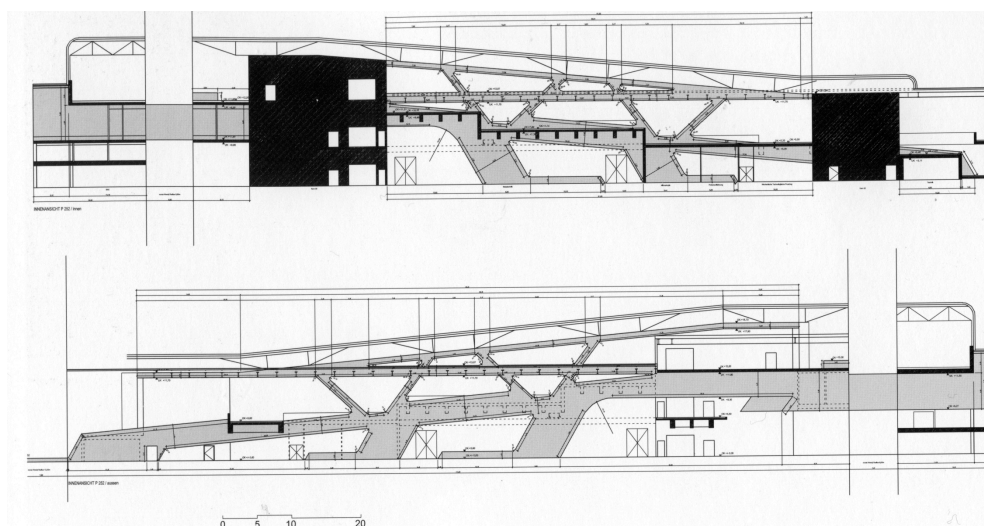


fig. 19. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: interior elevations

The mode of spatial production through which these dispositions are elicited is, in its appropriation of urban morphologies and internalised landscapes, fundamentally distinct to that of the modernist period. Whereas the architectural production of large-scale, continuous interior volumes was a pre-requisite for the Fordist mode of industrial production, their ‘openness’ was largely one of undifferentiated ‘abstract space’—a purely quantitative and homogenous dimension, to follow Lefebvre’s use of this categorisation, according with capitalism’s purely quantitative mode of production. Control was exercised over this space through surveillance—the panoptical apparatus which Foucault identifies with disciplinary society¹²⁸—through the measurement of outputs and the observation of labour by foremen and supervisors. The mechanisms of control operating within BMW in Leipzig, in contrast to this, are achieved through the production of differentiated adjacencies and proximities and modelled on the complexities of urban space. Hence whilst the interior of the building is, in one sense ‘open’, it is not so in the same fashion as that of the homogenous and ‘abstract’ space of the modernist factory or office space. As Hadid remarks of the project’s ‘openness’: ‘[a]lthough the structure is open, it’s the layering that makes it complex. Our idea was to achieve openness, layering and complexity simultaneously’.¹²⁹ Concurring with Hadid’s emphasis on achieving complexity within the Central Building, Schumacher elaborates on this point:

The byline for BMW could be “articulated complexity.” In the building, we attempt to deploy architectural language and formal discipline to organize a series of connections and to orient various flows—of people, of space, of automobiles—within a very large, deep space. The ambition was not to invent complexity, but rather to make apparent and clarify the complexities that were already inherent in the project¹³⁰

This conjunction of complexity and urban simulation, and its capacity to operate as a means of post-disciplinary control, suggests a realisation of what Eric Alliez and Michel Feher have described as the ‘sophisticated city’,

where, they write, ‘power becomes truly immanent to its object’ (with the ‘object’ here being the post-industrial city).¹³¹ In their reading of the film *Blade Runner*, they deduce in its representations of a futuristic urbanism the movement from the surveillance-based mechanisms of disciplinary society to those of ‘sophistication’—by which term they understand the combination of ‘complexity, artificiality and the production of simulacra’—and the role of the city as the medium through which new means of control are exercised.¹³² “‘Big Brother’”, they write, ‘is less interested in spying on the community, an endangered species, than in “producing” one, in the cinematographic sense of the term’.¹³³

BMW Leipzig can be understood as a realisation of this ‘sophisticated city’ in its capacity to produce a disposition towards community, which is, in turn, productive of ‘self-control’ through the means of an architecture given in the form of an urban simulation. Furthermore, the ‘cinematographic’ dimension of production referred to by Alliez and Feher is echoed in the account of the BMW Central Building’s architecture by Lars Teichmann, its project architect: ‘The Central Building was designed to be predominantly functional, but it complies equally with representational requirements, presenting the brand in an almost cinematic way.’¹³⁴ Hence, the powers of this spatial production are not, then, confined to its physical capacity to organise, distribute and channel the movements of the workforce into desired forms of affective behaviour, but extend too to the properties of affect which are immanent to the architecture and design of the Central Building.

As Alliez and Feher argue in their account of the ‘sophisticated city’, the act of ‘surveillance is replaced by simulation or, more precisely, projection replaces recording’.¹³⁵ From this perspective the production line which is routed through the Central Building, for instance, serves as a ‘projection’ of urban conditions into its envelope [figs.20,21]. Whereas the cars which are conveyed along this line act as the material signifier of a more or less explicit

message—that ‘quality is the achievement of all employees’¹³⁶—their elevated movement, recalling that of an overhead urban railway line, together with the lighting effects which emphasise their path through the building, operate in an affective register suggestive of metropolitan sensory experience.



fig. 20. *BMW Leipzig, Central Building*, Zaha Hadid Architects, 2005: reception area showing elevated production line

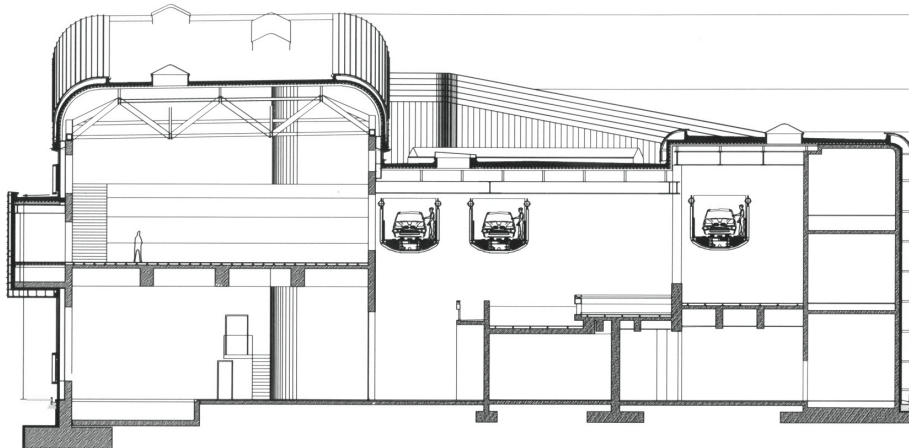


fig. 21. *BMW Leipzig Central Building*, Zaha Hadid Architects, 2005: section showing exposed production line

In addition to these urban simulations, the more abstract qualities of the plant's organisational circuits are also rendered as visual and tactile elements of the architecture to suggest the smooth and controlled fashion in which this is articulated [fig. 22]. As Schumacher elaborates in this context:

We employed only homogenous, continuous materials such as concrete and welded steel; we strove to eliminate as many columns as possible; and we minimized the number of corners ... The eye is drawn along continuous concrete walls; seamless, welded steel handrails; even the conveyor belts overhead. These lines flow in parallel, they bifurcate, they travel up and down through the section, but always tangentially... Here, the eye never comes to rest. As one moves around a corner, new vistas open up in all directions. In the best instances, it almost gives one a sense of flying.¹³⁷



fig. 22. *BMW Leipzig Central Building*, Zaha Hadid Architects, 2005: roof framing

As Schumacher also underlines, the design of the Central Building is directed, in the first instance, by an experiential agenda which is, at times, allowed to override strictly functional considerations:

All of the structure was oriented to trace the lines of movement through the building, to emphasize these linear trajectories ... You will notice many instances where the steel roof beams are curved to follow the flows. These are not the most efficient ways to span these distances, but as the structure is such a major component of the visual field, we felt it necessary that it work beyond its role as support to become an orienting device within the space.¹³⁸

The aesthetics of controlled convergence, bifurcation and continuous mobility referred to here are particularly evident too in the exterior cladding of the Central Building [figs.30,31]. Here the vector diagrams used to plan the building's circulation patterns [fig.18], with their parallel trajectories and radial curves, appear to re-emerge, translated into an abstract form of ornament through which organisational paradigms are made available to the senses as aesthetic qualities. Together with the shaping of structural elements to follow circulatory paths, and the continuities emphasised by the building materials, these vectorised forms work to reinforce, affectively, the diagram by which the workforce is physically mobilised and distributed.

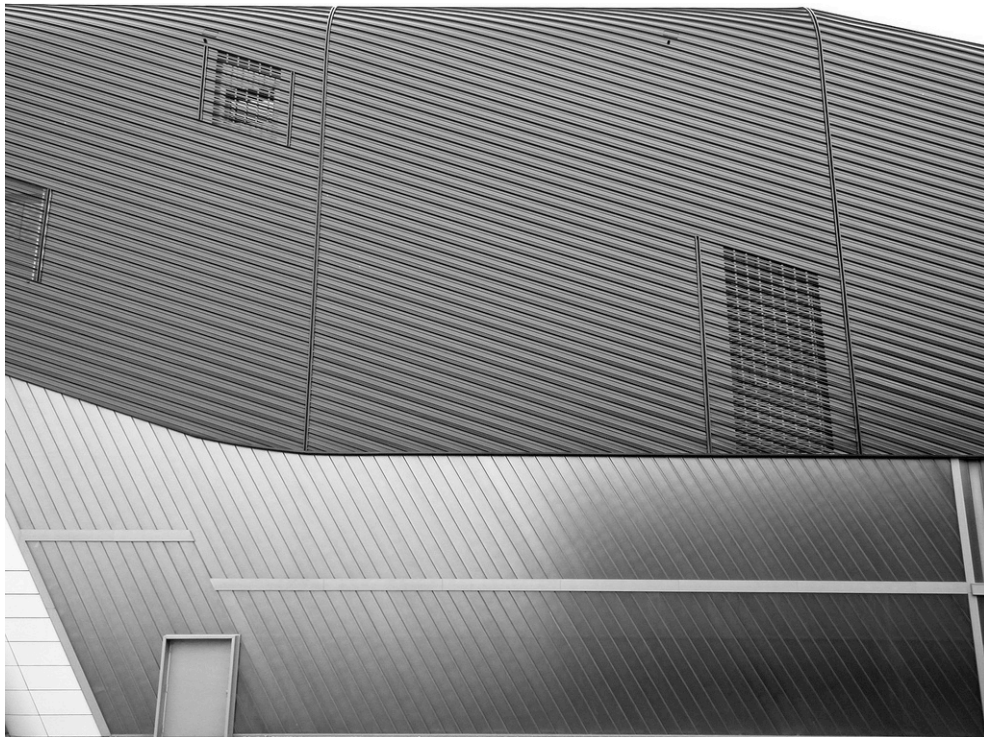


fig. 23. *BMW Leipzig Central Building*, Zaha Hadid Architects, 2005: detail of exterior cladding



fig. 24. *BMW Leipzig Central Building*, Zaha Hadid Architects, 2005: detail of exterior cladding

In the sense that architectural form is employed in the Central Building to give qualitative expression to organisational paradigms currently valorised within capitalism, it represents a contemporary example of the *reklamearchitektur* identified by Tafuri in his accounts of the work of Mendelsohn and Bel Geddes. This dimension of architecture as publicity is underscored too by the fact that the plant is open to public tours, and that the Central Building has been extensively featured in advertisements for BMW. It is also the case, however, that such publicity represents only an ideal vision of the conditions of experience within contemporary capitalism. From the perspective of labour, in contrast, conditions at BMW Leipzig are likely to be experienced as precarious, particularly for its large numbers of temporarily contracted workers. Through the contractual arrangements imposed upon the workforce by BMW's management, the hours of work, and therefore wage levels, are rendered immediately contingent upon the fluctuations of both the immediate sales market and global economic conditions, (as was evident from the extensive lay-offs resulting from the global recession beginning in 2008).¹³⁹

The treatment of architectural form, as a means of publicity in the Central

Building, also suggests a certain parallel with that of the mass ornament which formed the object of Siegfried Kracauer's critique in his 'The Mass Ornament' essay of 1927.¹⁴⁰ For Kracauer, the mass ornament appeared rational, but was, in fact, a means to suspend and circumscribe the fully liberating potentials of rationalism within the narrow interests of capital that he described as its *ratio*. 'Viewed from the perspective of reason,' he wrote, 'the mass ornament reveals itself as a mythological cult that is masquerading in the garb of abstraction.'¹⁴¹ Similarly, the vectorisation of form and the abstract means through which complexity is articulated in the Central Building, and in Hadid's architecture more widely, suggests a certain mythologisation of contemporary organisational models, and in ways which obscure both the real tensions and the full potentials of networked conditions within contemporary social reality. These tensions and potentials are dissimulated in 'mythological' guise not only through the formal principles of continuous variation through which they are smoothed over, but also through the discourse of 'elegance' that has been promoted by Schumacher.¹⁴² In this discourse 'elegance' is presented as the means through which architecture articulates complexity so that its work appears as 'an effortless display of sophistication.'¹⁴³ Complexity, according to Schumacher, is not a condition to be opened up and explored but a problem to be mastered. The 'elegant solution', he claims, 'is marked by an economy of means by which it conquers complexity and resolves complications.'¹⁴⁴ This triumph over complexity is further mystified by an appeal to the 'laws of nature' with which it is said to correspond: 'It is the sense of law-governed complexity that assimilates this work to the forms and spaces we perceive in natural systems, where all forms are the result of lawfully interacting forces.'¹⁴⁵

Contemporary architecture's discourse about its own practice, then, joins that of its spatial production to work as a 'smooth operator'; a means of publicity through which are advertised and offered to experience the easy management of connectivity and mobility in order that its precarities,

frictions, and tensions are obscured. Hence the formal ‘articulation of complexity’ of Hadid’s architecture ultimately expresses the capacity of corporations such as BMW to manage productively, and efficiently, the complexity of the economy, whilst the means through which they do so only renders the subjects of its replicant urbanism more vulnerable to variations actually experienced not as smooth transitions, but as abrupt, unpredictable and turbulent. Furthermore, given the tensions that can be expected to result from these experiences, the relinquishing of hierarchies and the encouragement of cooperative forms of labour might serve not only to achieve ‘higher productivity’, but also (though not always successfully), to smooth over the points of possible antagonism between workers and management.¹⁴⁶ In both its physical distribution of the plant’s employees, and in its management of experiential affect, the design of Hadid’s architecture shapes forms of subjectivity according to the current demands of the production process, and serves contemporary mechanisms of control through its simulation of urban complexity.

CONCLUSION

Zaha Hadid and Patrik Schumacher have produced a discourse through which their architecture is framed as being essentially progressive, even emancipatory, through its formal affinity with a Deleuzoguattarian spatial vocabulary of smoothing and folding, and its programmatic allegiance to organisational flexibility, cooperation and networking. This position can only be sustained, however, if formal approaches and organisational methods are considered apart from the specific contexts and instances in which they are operative.

The architects equate the ‘constructive freedoms’ to be gained in taking up again the ‘incomplete project of modernism’ with wider freedoms conferred upon the subject experiencing their architecture. Landscaped, porous and open forms, it is claimed, free the subject from the regime of ‘separation and

repetition' associated with 'disciplinary' modernity. The apparent radicalism of these approaches is further elaborated by the suggestion that their inspiration lies in Deleuze and Guattari's concepts of 'smooth space' and 'the fold', as if these were prescriptive rather than analytical and critical terms. In practice the open volumes, continuous surfaces and vectorised forms of Hadid's architecture may serve, as at BMW Leipzig, as the means to physically distribute and affectively engage subjects according to a corporate managerial agenda, so that their movements and perceptions are made immanent to the needs of capital rather than being emancipated from its controls. In its 'articulation of complexity' the architecture of Hadid serves correspondingly complex organisational programmes such as those seeking to integrate material and immaterial labour. At the same time, the diagrams through which these programmes are conceived are aestheticised so that their vectorised forms serve as a *reklamearchitektur* for organisational efficiency. Within this ornamental register the real conditions of rupture, disjunction and precarity that mark subjective experience—the 'existential insecurities' recognised by Schumacher—are not acknowledged but effaced, literally smoothed over, in a crude subsumption of Deleuzoguattarian concepts to capital, so as to present its conditions of experience in their ideal form.

Schumacher offers a pre-emptive defence against any criticism of architecture's engagement with corporate restructuring, since, as he argues, 'progressive' tendencies within the production process can be bracketed apart from their neoliberal context and released by an 'avant-garde' architecture:

Productivity remains the key selection criterion placed upon any social experiment. Any emancipatory ambition has to reckon with this inescapable fact.

Rather than a priori shunning commercial pressures as alien to the culture of architecture our attitude is that business success is a potential indicator of progress, reflecting historical needs that at least

deserve critical examination. This leads us to the investigation of the social and spatial patterns of the most proliferous business activities in the advanced economies.¹⁴⁷

Schumacher conceives of the production process as being, in the first instance, autonomous from business practice, and as containing ‘progressive realities’ which are then ‘forced upon the capitalist enterprise by the new degree of complexity and flexibility of the total production process.’ His position corresponds in some respects with what Postone terms ‘traditional Marxism’ in the sense that it proposes a critique of capitalism through labour, rather than a critique of labour in capitalism. Schumacher’s position is thus ‘traditionally’ Marxist in its materialism and corresponding belief in the capacity of the production process to serve an emancipatory role if removed from its capitalist context. ‘The approach defended here’, he writes in support of his ‘Corporate Fields’ project, ‘is based on a materialist conception of history and the respective framing of the architectural/spatial problematic ... The social life-process is first of all a competitively measured production process’.¹⁴⁸

As Postone, Negri, Virno and others have argued, however, such a position misses the full force and sophistication of Marx’s analysis of capital and his critique of the production of subjectivity, as a production by and for capital, as presented in the first volume of *Capital* and, especially, the *Grundrisse*. In their accounts of the immanence of the production process and the production of subjectivity to capital these figures understand it as a totalising system formally determined by a logic of abstraction. As Roberto Finelli has argued in this context:

Capital as ‘self-valorising value’ is the total subject of modernity, which has as its goal only its own infinite growth...Since a totality cannot be given and exhausted in a material and particular content, it follows that what is valid in the system of capital as a totality is form or the determination of form. Formal determination, for Marx, expresses the functions that come from the self-reproductive logic of the capitalist totality, that is, the totality of social relations necessary for

the production and reproduction of capital.¹⁴⁹

Hence the production process, and its ‘modes of cooperation’ cannot be isolated as originally autonomous in the fashion proposed by Schumacher when he argues:

Current socio-economic restructuring proceeds through the contradictory interaction of technological, organisational and political processes. It is crucial to distinguish those aspects that pertain to productive progress from those that pertain to the simultaneously evolving political conditions that frame and overdetermine or ‘distort’ productive restructuring. Post-fordism as a new paradigm of production attaining new levels of productivity needs to be distinguished from the simultaneous neo-liberal offensive that utilises the unsettled relations of production for a decisive shift to the right in the underlying political relations.¹⁵⁰

An account of capital as a totalising system constituted by abstract determinants does not, however, preclude the possibility that the forms of cooperation it produces—the ‘social relations necessary for the production and reproduction of capital’—might ultimately be turned against it. Such, after all, is the basis of Hardt and Negri’s position mapped out in *Empire*, *Multitude*, and elsewhere, namely that the production of subjectivity and its associated forms of cooperation always produces something in excess of that which is immediately appropriated by capital, and that this surplus in communication, production and creativity becomes a weapon for the multitude against capital. In this respect then, despite his declared materialism, Schumacher’s project of assisting, through the medium of architecture, in the development of tendencies toward ‘de-hierarchization, matrix- and network-organisation, flexible specialisation, loose and multiple coupling’ might appear to suggest some affinity with Hardt and Negri’s position.¹⁵¹ This is not so, however, because Hardt and Negri, alongside others within the post-autonomist current, understand these tendencies to be most prevalent outside of the immediate production process and see them as being located, instead, within the wider context of the metropolis from

which capital appropriates communication as a value for itself. Whereas the industrial factory and the conventional office are sites of real subsumption—as productions by capital—the metropolis, the ‘social factory’, as it has been termed, remain largely within the realm of formal subsumption as already established formations subsequently used by capital.¹⁵² Rather than providing a space within the metropolis which might amplify the potentially radical forms of socialisation and cooperation identified within post-operaist thought, however, Schumacher and Hadid, first in the ‘Corporate Fields’ project, and then in their architecture for BMW Leipzig, make them immanent to a corporate agenda. The site of production itself is urbanised so that its forms of cooperation and communication are both *produced by* and are *productive for* capital. The architects produce, for capital, an expanded spatial repertoire so that it might achieve the real subsumption of the metropolis within the factory or office. The metropolis is, to employ the Deleuzian concept appropriated by Schumacher, folded within the production process, replicated as directly productive for capital in a form more efficient than the deindustrialised and depopulated city of Leipzig itself, but to which access is now made contingent upon production quotas.

As Jason Read has argued in his *The Micro-Politics of Capital*, formal subsumption is always marked by ‘the encounter between capitalism and its outside’, whereas in real subsumption this border is dissolved. ‘Real subsumption’, he writes, ‘is inseparable from the movement by which capital covers the globe.’¹⁵³ This movement may also be expressed as the achievement of a smooth space through which real subsumption is accomplished; a movement to which Hadid and Schumacher, in their fabrication and application of a supposedly Deleuzoguattarian spatial repertoire, from which all tensions and contradictions are removed, have evidently aligned themselves.

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- ¹ Zaha Hadid, Pritzker Acceptance Speech, 2004 accessed April 22, 2009, at: <http://www.pritzkerprize.com/laureates/2004/_downloads/2004_Acceptance_Speech.pdf>.
- ² Patrik Schumacher, 'Research Agenda', in Brett Steele (ed), *Corporate Fields: New Environments by the AA DRL*, London: AA Publications, 2005a.
- ³ Patrik Schumacher, *Digital Hadid: Landscapes in Motion*, Basel: Birkhäuser, 2003, p. 23.
- ⁴ Ibid., p. 30.
- ⁵ Ibid., p. 28.
- ⁶ Zaha Hadid, in Olbrist, Hans Ulrich, *Zaha Hadid and Hans Ulrich Obrist* (The Conversation Series, 8), Cologne: Verlag der Buchhandlung Walther König, 2007, p. 73.
- ⁷ Gilles Deleuze, 'Postscript on Control Societies', in. *Negotiations, 1972-1990*, trans. Martin Joughin, New York and Chichester: Columbia University Press, 1995, pp. 178-179.
- ⁸ Schumacher, op. cit., (2003), p. 19.
- ⁹ Maurizio Lazzarato, 'Immaterial Labour', in Hardt, Michael & Virno, Paolo (eds), *Radical Thought in Italy: A Potential Politics*, Minneapolis: University of Minnesota Press, 1997 p. 134.
- ¹⁰ Ibid., p. 137.
- ¹¹ Tiziana Terranova, *Network Culture: Politics for the Information Age*, London and Ann Arbor, Michigan: Pluto Press, 2004, p. 4.
- ¹² Hadid, op. cit., (2004).
- ¹³ Schumacher, op. cit., (2003), p. 20.
- ¹⁴ Jürgen Habermas, "Modernity—An Incomplete Project," in *The Anti-aesthetic*, Hal Foster (ed), Port Townsend, WA: Bay Press, 1983, pp. 3-15.
- ¹⁵ Hal Foster, 'New fields of architecture: Hal Foster on Zaha Hadid' in *Artforum International*, September, 2006, accessed on 30 April 28, 2009 at <http://findarticles.com/p/articles/mi_m0268/is_1_45/ai_n19492569/>.
- ¹⁶ Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, trans. Barbara Luigi La Penta. Cambridge, MA: MIT Press, 1976, p. 89.
- ¹⁷ Ibid., p. 98.
- ¹⁸ Hadid, op. cit., (2004).
- ¹⁹ Schumacher, op. cit., (2003), p. 16.
- ²⁰ Schumacher, op. cit., (2003), pp. 27-28.
- ²¹ Patrik Schumacher 'The Sky-scraper revitalized: Differentiation, Interface, Navigation', in *Zaha Hadid*, Exhibition Catalog, Guggenheim Museum Publications, New York 2006, accessed online at <<http://www.patrikschumacher.com/Texts/skyscrapers.htm>, 5 May 2009>.
- ²² Gilles Deleuze & Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi, London and New York: Continuum 1992, p. 500.
- ²³ Gilles Deleuze, 'Control and Becoming' in op. cit. (1995), p. 175. For a more recent account of 'porosity' as mode of organisational 'control', see the discussion of 'liminal porocratic institutions' in Dimitris Papadopoulos, Niamh Stephenson and Vassilis Tsianos, *Escape Routes: Control and Subversion in the Twenty-first Century*, London and Ann Arbor, Michigan: Pluto Press, 2008.
- ²⁴ Paul Virilio 'The Overexposed City', in K. Michael Hays (ed), *Architecture Theory since 1968*, Cambridge, MA, and London, England: The MIT Press, 2000, p. 540. It is also worth noting, in this context, that Deleuze and Guattari themselves drew upon the thought of Virilio in the account of 'smooth space' contained within their *A Thousand Plateaus*.

- 25 Ibid., p. 543.
- 26 Foster, op. cit., (2006).
- 27 Ibid.
- 28 Manfredo Tafuri and Francesco Dal Co, *Modern Architecture*, Volume 1, London and Milan: Faber and Faber/Electa, 1980, p. 216. Tafuri himself derived the term *reklamearchitektur* from Adolf Behne who had used it to describe the department store architecture of Eric Mendelsohn.
- 29 Ibid., p. 144.
- 30 The question of what, exactly, is to be understood by the term ‘progressive’ is also at issue here. However, rather than attempt a general definition of this, as a benchmark against which to then challenge Schumacher’s position, I take the sense of the term to be given in the contexts in which he employs it, and through the terms, such as ‘emancipation’, with which it is associated in his writing. My objective is not, after all, to challenge Schumacher’s terminological exactitude, but to critically examine his discourse and his architecture.
- 31 Brett Steele (ed), *Corporate Fields: New Environments by the AA DRL*, London: AA Publications, 2005.
- 32 Schumacher, op. cit., (2005a), p. 75.
- 33 Ibid.
- 34 Ibid., p. 76.
- 35 Ibid., p. 79.
- 36 Ibid., p. 78.
- 37 Patrik Schumacher, ‘Research Agenda: Spatialising the Complexities of Contemporary Business’, 2005(b), accessed 8 July, 2009, at <<http://www.patrikschumacher.com/Texts/Corporate%20Fields-%20New%20Office%20Environments.html>>. Note that this sentence, with its strident dismissal of all forms of protest, appears only within the version of the essay which is available online, and does not appear in its published version.
- 38 Schumacher, op. cit., (2005a), p. 77.
- 39 Ibid., p. 78.
- 40 Luc Boltanski and Eve Chiapello, *The New Spirit of Capitalism*, trans. Gregory Elliot, London and New York: Verso, 2007, p. 97.
- 41 Ibid.
- 42 Ibid., p. 80.
- 43 Karl Marx, *Capital, Volume I*, trans. Ben Fowkes. London: Penguin, 1976, p. 481.
- 44 Boltanski and Chiapello, op. cit., (2007), p. 110.
- 45 The term ‘socius’ is adopted here, as distinct from ‘society’, as the term used by Deleuze and Guattari to describe the ‘surface’ or ‘body’ on and through which the flows which constitute any mode of production are coded. Deleuze explained in a lecture in 1971: ‘What I call the socius is not society, but rather a particular social instance which plays the role of a full body. Every society presents itself as a socius or full body upon which all kinds of flows flow and are interrupted’, (The nature of flows’, Lecture Vincennes – December 14th, 1971, accessed 11 September, 2009, at <<http://intermedias.wordpress.com/2009/02/24/deleuzes-lecture-series-anti-oedipus-and-a-thousand-plateaus-2/>>. In *Anti-Oedipus: Capitalism and Schizophrenia*, Deleuze and Guattari write: ‘To code desire—and the fear, the anguish of decoded flows—is the business of the socius.’ (Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Minneapolis: University of Minnesota Press, 1983, p. 139)
- 46 Don Tapscott, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, New York: McGraw-Hill, 1996, p. 54-55.

- 47 For an account of *auftragstaktik* see, for example, Heinz Guderian, *Achtung Panzer !: The Development of Tank Warfare*, London: Cassel, 1999.
- 48 Sean J Edwards, *Swarming on the Battlefield*, Santa Monica: RAND, 2000, p. 73. 'The extreme decentralization of a network organization with semi-autonomous units calls for the mission-order systems of command (the German concept of *Auftragstaktik*).'
- 49 Ibid., p. xiv.
- 50 David S Alberts and Richard E Hayes, *Power to the Edge: Command...Control...in the Information Age*, The Command and Control Research Programme of the US Department of Defense, (open source PDF download), p. 83.
- 51 The research of Eyal Weizman, on the mobilisation of spatial models derived from the thought of the architect Bernard Tschumi, and indeed Deleuze and Guattari, by the Israeli Defence Force, offers a striking example of this instrumentalisation of supposedly progressive models of space for military purposes. See, for example, Eyal Weizman, 'Walking Through Walls: Soldiers As Architects in the Israeli-Palestinian Conflict', in *Radical Philosophy* 136, March/April 2006, pp. 8-22.
- 52 Deleuze, op. cit., (1995), p.172. See too the extensive treatment of this subject, '1227: Treatise on Nomadology—The War Machine', in Deleuze and Guattari, op. cit., (1987), pp. 351-423.
- 53 Andrew Laing, 'The future of the workplace is now', 2004, DEGW, accessed 20 August, 2008, at <http://www.degw.com/dnews/ed_5_archive_leader.html>.
- 54 Ibid.
- 55 Andrew Laing *et al.* 'Measuring Workplace Performance' accessed 21 August, 2008, at <<http://www2.corenetglobal.org/dotCMS/kcoAsset?assetInode=75645>>.
- 56 n.a. 'Space Oasis', accessed 25 August, 2008, at <<http://www.spaceoasis.co.uk>>.
- 57 Christopher Meyer and Stan Davis, *It's Alive: The Coming Convergence of Information, Biology, and Business*, New York: Crown Business, 2003, p. 33.
- 58 Tapscott, op. cit., (1996), p. 53
- 59 Kathleen Melymuka, 'Meeting of the Minds: Technology for business "swarming"' accessed 18 July, 2009, at <http://www.computerworld.com/s/article/print/83401/Meeting_of_the_Minds?taxonomyName=Desкто+Applications&taxonomyId=86>.
- 60 It is of course true that earlier, Fordist, modes of production were also, in some way, concerned with the making of the worker. One of Henry Ford's employee relations officers said of his employer, for instance: 'The impression has somehow got around that Henry Ford is in the automobile business. It isn't true. Mr Ford shoots about fifteen hundred cars out of the back door every day just to rid of them. They are the by-products of his real business, which is the making of men.' (Cited in Greg Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City*, London: Icon Books, 2010, p. 34.). What is distinctively new about post-Fordist approaches to the 'making of men' is, however, that its imperatives are not moral or disciplinary, but concerned with valorising subjectivity as an organisational component of the production process.
- 61 Maurizio Lazzarato, 'Immaterial Labour', in Michael Hardt & Paolo Virno (eds), *Radical Thought in Italy: A Potential Politics*, Minneapolis: University of Minnesota Press, 1997 p.142.
- 62 Boltanski and Chiapello, op. cit., (2007), p. 154.
- 63 Judith H. Heerwagen *et al.* 'Collaborative knowledge work environments', *Building Research & Information*, November-December 2004, 32(6), pp. 510-528.
- 64 The term 'prepersonal' is used here in its Deleuzian sense as referring to the realm in which the capacity of affecting, or being affected, operates prior to the reflection of a conscious subject. Deleuze appears to have derived the term, initially at least, from Sartre, since reference is made to a discussion of the 'prepersonal' in the latter's *Transcendence of the Ego* in a footnote to the former's *The Logic of Sense* (trans. Mark Lister with Charles Stivale, Columbia University Press, 1990, p. 114). Later, and with Guattari, the concept is also given a Spinozian inflection in *A Thousand Plateaus*, op. cit., (1992).

⁶⁵ Jon Goodbun, 'A Political Theory of Ecology in Architecture (or, Is the AA-DRL a right wing think tank?)', in *Propositions: Ideology in Transparency*, Emanuel de Sousa and Kirk Wooler, eds., London: The Architectural Association/PhD Programme Publications, 2010, p. 123.

⁶⁶ Tafuri, op. cit., (1992), p. xi.

⁶⁷ Goodbun, op. cit., (2008), p. 124. I do not wish to suggest here that Goodbun is in absolute agreement with the aims of the 'Corporate Fields' project, or is uncritical of its outcomes, however, on the contrary, as he writes later in this paper: 'Just as, in the final analysis, the DRL can't help but read their organisational mind-fields as large material objects for corporate clients, elsewhere, in places such as Ezio Manzini's Sustainable Everyday research group in Milan Polytechnic's School of Architecture and Design we find the same terms - ecology, emergence, network, collaboration and organisation - but this time researching an activist design practice in the service of largely immaterial grassroots organisations.'

⁶⁸ Michael Hardt and Antonio Negri, *Empire*, Cambridge, MA and London: Harvard University Press.

⁶⁹ Deleuze, op. cit., (1995), p. 175.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² It is worth noting that Negri himself had earlier adopted a position more akin to that expounded here by Deleuze. In his 'Capitalist Domination and Working Class Sabotage', published in 1977, Negri argues for the 'destruction' and 'breakdown' of capitalism's totalising mechanisms, and explicitly rejects the possibility of translating these mechanisms to emancipatory ends: 'I define myself by separating myself from the totality; I define the totality as other than me—as a net which is cast over the continuity of the historical sabotage that the class operates. And thus ... there is no homology, no possible immediate translatability of languages, of logics, signs, between the reality of the movement as I experience it and the overall framework of capitalist development, with its contents and its objectives.' Antonio Negri, 'Capitalist Domination and Working Class Sabotage', 1977, accessed 11 July, 2012, at <<http://libcom.org/library/capitalist-domination-working-class-sabotage-negri>>.

⁷³ Nicholas Thoburn, 'Vacuoles of Noncommunication: Minor Politics, Communist Style and the Multitude' in Ian Buchanan and Adrian Parr (eds), *Deleuze and the Contemporary World*, Edinburgh University Press, Edinburgh, 2006, p. 48.

⁷⁴ Ibid, p. 49.

⁷⁵ Schumacher, op. cit., (2005b).

⁷⁶ Steele, op. cit., (2005a), p. 96.

⁷⁷ Ibid., p. 53.

⁷⁸ Ibid., p. 94.

⁷⁹ Ibid., p. 134.

⁸⁰ Ibid., p. 32.

⁸¹ Mohsen Mostafavi, 'The Enormous File', in Steele, *ibid.*, p. 72.

⁸² Marx, op. cit., (1976), p. 621. 'It is also obvious that the fact of the collective working group ... must under the appropriate conditions turn into a source of humane development, although in its spontaneously developed, brutal, capitalist form, the system works in the opposite direction, and becomes a pestiferous source of corruption and slavery, since here *the worker exists for the process of production, and not the process of production for the worker.*' [my emphasis].

⁸³ Karl Marx & Frederick Engels, *The German Ideology*, London: Lawrence & Wishart, 1970, p. 69, cited in Schumacher, op. cit., (2005a), p. 79.

⁸⁴ Schumacher, op. cit., (2005a), p. 79.

- ⁸⁵ Marx, op. cit. (1976), p. 617.
- ⁸⁶ Ibid., p. 619.
- ⁸⁷ Eric Alliez and Michel Feher, 'Notes on the Sophisticated City', trans. David Beriss and Astrid Hustvedt, in *Zone 1/2*, Sanford Kwinter and Michel Feher (eds), New York: Urzone Inc. 1986, p. 41.
- ⁸⁸ Ridley Scott, Dir. *Blade Runner*, 1982. In the films opening sequences replicants are introduced, in the form of an entry from 2012 edition of Webster's Dictionary, as follows: 'Early in the 21st Century, THE TYRELL CORPORATION advanced Robot evolution into the NEXUS phase — a being virtually identical to a human — known as a replicant. The NEXUS 6 Replicants were superior in strength and agility, and at least equal in intelligence, to the genetic engineers who created them. Replicants were used Off-world as slave labor, in the hazardous exploration and colonisation of other planets.'
- ⁸⁹ Gail Edmondson 'BMW Keeps the Home Fires Burning', *Businessweek*, May 30, 2005, accessed 27 July, 2009, at <http://www.businessweek.com/magazine/content/05_22/b3935087_mz054.htm>.
- ⁹⁰ Ludger Pries, 'Cost competition or innovation competition? Lessons from the case of the BMW plant location in Leipzig', *Transfer* 1/06, Spring 2006, pp. 11-29.
- ⁹¹ Edmondson, op. cit., (2005).
- ⁹² David Gow 'From Trabant to BMW: the east rises again', *The Guardian*, 17 May, 2005.
- ⁹³ Pries, op. cit., (2006): 'Some innovative elements of the Leipzig labour regulation regime are related to the payment system. New output-oriented salary schemes were introduced in certain areas, with a basic salary and bonus payments of up to 21% of the basic salary if production targets are reached. There are also individual bonuses according to performance and goal attainment (with 3% of the basic salary as a general target step, and 6% and 9% as additional steps). The annual bonus payment is oriented around plant seniority – from 25% (less than a year working at BMW) up to 100% (three or more years of BMW service), with the start of production in 2005 as the starting date.'
- ⁹⁴ Ibid.
- ⁹⁵ n.a. *Die Zeit*, 13 November, 2003, cited in Vedrana Miljak and Martin Heidenreich, 'The Leipzig Economic Region', June 2004, accessed 27 July, 2009, at <<http://www.cetro.uni-oldenburg.de/de/41241.html>> : 'Flexibility is the key-word in the search for the secret of east German success. Never mind the fact that workers in the east work 100 hours more per year than their western counterparts: They are also prepared to accept inconvenient working hours. In this way BMW negotiated a „BMW-formula for work“ with the IG-Metall for its Leipzig plant. Their aim was flexible working-hours to increase the usage of the factory and thereby higher productivity. There are flexible weekly working-hours, which can vary between 38 and 44 hours depending on the number of orders, week-ends included.... In the east employees and employers are forming a kind of "community of fate".'
- ⁹⁶ n.a. 'BMW-Leipzig, Germany: Increasing the labour market participation of underrepresented groups – women', Eurofound, the European Foundation for the Improvement of Living and Working Conditions, accessed 27 July, 2009, at <<http://www.eurofound.europa.eu/areas/qualityofwork/betterjobs/cases/de02bmw.htm>>.
- ⁹⁷ Edmondson, op. cit., (2006).
- ⁹⁸ Ibid.
- ⁹⁹ The company have adopted 'continuous improvement' as something of a motto, appearing in publicity campaigns — Continuous Improvement: Perfection is not a concept, it's a compulsion — and employing 'continuous improvement managers' at its plants in the US.
- ¹⁰⁰ Phil Patton, 'Drive-Thru Office', *Metropolis*, July, 2005, accessed 29 July, 2009, at <<http://www.metropolismag.com/story/20050613/drive-thru-office>>.

- 101 Federico Bucci, *Albert Kahn: Architect of Ford*, New York: Princeton Architectural Press, 2002, p. 52.
- 102 n.a. *Realisierungswettbewerb BMW Werk Leipzig - Zentralgebäude*, 2001, p. 3.
- 103 Ibid.
- 104 Patton, op. cit., (2005).
- 105 Karl Marx, *Grundrisse: Introduction to the Critique of Political Economy*, trans. Martin Nicolaus, London: Penguin, 1973, p. 692.
- 106 Marx, op. cit., (1976), p. 1019.
- 107 Marx, op. cit., (1973), p. 705.
- 108 Ibid., p. 706.
- 109 Paolo Virno, 'Virtuosity and Revolution: The Political Theory of Exodus', in Hardt and Virno, op. cit., (1997), p. 193.
- 110 Maurizio Lazzarato, 'Immaterial Labor' accessed 13 August, 2009, at <www.generation-online.org/c/fcimmateriallabour3.htm>.
- 111 Ibid.
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- ¹⁴⁹ Roberto Finelli, 'Abstraction versus Contradiction: Observations on Chris Arthur's *The New Dialectic* and Marx's "*Capital*"', *Historical Materialism* 15, 2007, p. 63.
- ¹⁵⁰ Patrik Schumacher, op. cit., (2005b).
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- ¹⁵² The thesis of the 'social factory' was originally developed by figures within Operaism. Mario Tronti writes, in *Quaderni Rossi* no. 2, for example: 'The more capitalist development advances, that is to say the more the production of relative surplus value penetrates everywhere, the more the circuit production—distribution—exchange—consumption inevitably develops; that is to say that the relationship between capitalist production and bourgeois society, between the factory and society, between society and the state, become [sic] more and more organic. At the highest level of capitalist development social relations become moments of the relations of production, and the whole society becomes an articulation of production. In short, all of society lives as a function of the factory and the factory extends its exclusive domination over all of society.' Cited in Nick Thoburn, 'Deleuze, Marx and Politics', 2005, accessed October 16 October, 2008 at <<http://libcom.org/library/deleuze-marx-politics-nicholas-thoburn-intro>>
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TWO

PUSHING THE ENVELOPE

FOREIGN OFFICE ARCHITECTS AND THE
REINVENTION OF THE POLITICAL

What men want to learn from nature is how to use it in order to dominate it and other men.

Adorno and Horkheimer, *Dialectic of Enlightenment*

Foreign Office Architects (FOA), the architectural practice once headed by Alejandro Zaera-Polo and Farshid Moussavi¹, has long been associated with the thought of Deleuze and Guattari, above all, through their Yokohama Port Terminal, Japan, realised in 2002 [figs.1,2]. With its pleated surface articulations, undulating pathways and complex circulatory patterns, this large-scale and extensively published project has served as something of an icon for the translation into architecture of Deleuzoguattarian tropes, such as ‘smooth space’, ‘folding’ and ‘the diagram’.

Zaera-Polo and Moussavi subsequently turned in their writings to emphasise other elements within Deleuze and Guattari’s conceptual oeuvre—those of ‘molecularity’, ‘faciality’ and ‘affect’—and expanded their theoretical frame of reference to incorporate the work of figures such as Ulrich Beck, Bruno Latour and Peter Sloterdijk.² At the same time, FOA turned to the question of the political, once denounced by Zaera-Polo as ephemeral to the proper concerns of architecture, and positioned the building envelope as the organisational and representational medium through which the discipline could now acquire political agency. It is to this turn within the writings and projects of Zaera-Polo and Moussavi, along with their re-conception of the political, their claims to have advanced beyond a supposedly outmoded and regressive politics of opposition and critique, and to be engaged in a progressive reformulation of architecture, that this chapter will attend.

The first section, ‘The Matter of Organisation’, examines the argument constructed by Zaera-Polo for a ‘political ecology’—derived from a (mis)reading of Deleuze and Guattari as being straightforwardly materialist in their concerns, and through the discursive mobilisation of the ‘science’ of complexity. It is then argued that this apparently political ecology represents, in fact, the desire to ‘ecologise’ politics; to restrict its scope, that is, to questions of ‘material organisation’. This reframing of the political will be challenged, reversing the orientation of Zaera-Polo’s argument, through an

analysis of organisation as a means for power, as a process of ‘molar’ capture (to use the conceptual apparatus of Deleuze and Guattari themselves), which is explored with reference to the historical development of cybernetics and to the critique of Enlightenment instrumentality produced by Theodor Adorno and Max Horkheimer.



fig.1. *Yokohama Port Terminal*, Yokohama, Japan, Foreign Office Architects, 2002



fig.2. *Yokohama Port Terminal*, Yokohama, Japan, Foreign Office Architects, 2002

In the second section, ‘Envelope and Environment’, the question of the architectural envelope’s political performance is explored through an analysis of the architecture of FOA’s Meydan Retail Complex in Istanbul, and their Ravensbourne College in London. The argument made by FOA to be using the market to pursue an agenda which they define as progressive and advanced will be critiqued, with reference to Foucault’s account of neoliberal governmentality, so as to suggest that these projects in effect actually service the extension of the market’s expansion throughout the social realm. The Meydan Retail Complex is analysed here as an instrument through which the market might train the dispossessed of Istanbul to become ‘citizen consumers’, while Ravensbourne College is addressed as a mechanism for the opening up of ‘creative’ education to business imperatives.

Whereas the second section addresses the architectural envelope’s performance in terms of its organisation of access, circulation and connectivity, the third and final section counters the claims of FOA to be pursuing—through the design of the building envelope—a post-representational ‘politics of affect’, supposedly sanctioned by its derivation from concepts to be found within the work of Deleuze and Guattari. Drawing upon Adorno’s *Aesthetic Theory*, and his notion of ‘truth content’, I will argue, against the ‘post-linguistic’ propositions of FOA, that their architecture is inescapably signifying and conceptual, and is thus, after all, amenable to critique and interpretation. Through this critique I then argue that their architecture operates as a form of publicity, in much the same fashion as that of Zaha Hadid’s, for the modes of social organisation valorised within societies of control.

THE MATTER OF ORGANISATION

The engagement with ecological concerns is contemporary architecture’s most direct path to political effect, and this performance

largely depends on the envelope's design. A political ecology enables architecture to regain an active political role and overcome the division between nature and politics. The design of flat-horizontal envelopes can play a decisive role here by ensuring a gradated transition rather than a boundary of exclusion, both environmentally and socially, and producing a multiple concept of nature.³

Zaera-Polo's pursuit of a 'political ecology' through the articulation of the architectural envelope would appear to be a direct *volte-face* from an earlier position in which FOA opposed the presence of the political in architecture as extrinsic to its proper concerns. In the introductory essay of their *Phylogenesis: FOA's Ark*, for instance, Zaera-Polo and Moussavi write:

This attempt to classify the work defines our practice as the culture of a particular set of species across time and space, with a very specific focus on their architectural content. The consistency of the practice is a result grounded on the definition of consistent morphological diagrams rather than aesthetic, ethical or political preferences, which would have placed the consistency of the work outside architecture.⁴

Interviewed in the edition of *El Croquis* which showcased their practice the same architects argued: 'What we have been suffering lately is from architects legitimising the architecture they do by producing sociology, cultural analysis or politics, but without being able to trace the way in what way [sic] these fields generate new potentials inside'.⁵

FOA had not, however, in fact turned to embrace the very same politics that they had earlier disavowed but had rather *redefined* the political so that it was now subsumed within the same concerns for 'material organisations', complexity, emergence and fluidity which have always been the focus of their theory and practice. 'Political Ecology', in the sense in which it is used by Zaera-Polo, does not *politicise* ecology as a concern that must be considered socially, economically or critically, but instead attempts to reframe the political as a purely *environmental* matter.

In this section I will trace this de-politicisation and re-politicisation of

architecture by Zaera-Polo and Moussavi, according to what they term the ‘material organisations’ proper to architecture, in relation to the appropriation of Deleuzoguattarian thought through which these are articulated. Explored here as well are the implications of this turn in terms of architecture’s place within a technocratic managerialism of subjects, spaces and flows consistent with the practices of a society of control.

MATERIALISING DELEUZE AND GUATTARI

Deleuze and Guattari have been repeatedly recruited within architectural Deleuzism to sanction its move from a representational to a performative model; as one which advances the proposition that architecture exclude from its practice apparently extrinsic, and thus supposedly peripheral, concerns such as criticality, or the questioning of social and political conditions. What became considered intrinsic to architecture within this framework was now matter and its organisation. In their essay ‘FOA Code Remix 2000’, Zaera-Polo and Moussavi write:

This attempt to classify the work defines our practice as the culture of a particular set of species across time and space, with a very specific focus on their architectural content. The consistency of the practice is a result grounded on the definition of consistent morphological diagrams rather than aesthetic, ethical or political preferences, which would have placed the consistency of the work outside architecture.⁶

Whilst this turn to matter and its organisation has been elaborated by FOA—and more widely within architectural Deleuzism—with reference to theories of complexity, self-organisation and non-Euclidean geometry, its principal locus resides within the thought of Deleuze and Guattari. References to the philosophers are frequent in the writings of Zaera-Polo and Moussavi and, in an interview conducted in 2005, the former elaborated upon the precise significance of Deleuze to their architecture:

I was never really interested in Derrida’s work. I find it very obscure and based on its own principles, which is about the idea that reality is made out of the self-referential system of codes and signs. I was much

more excited and influenced by the work of Deleuze, precisely because of his interest in material process as the core of reality. I very much consider myself as a materialist. He was important for giving a philosophical background to my work. He was also important to my generation because of his idea of the fold, which influenced geometry [sic] of contemporary architecture.⁷

In castigating Derrida's philosophy as the construction of an 'obscure' and hermetic realm of 'self-referential signs', as, that is, one opposed to the 'materialism' of Deleuze, Zaera-Polo echoes in this essay the rhetoric of Jeff Kipnis in which the 'new architecture' is narrated as 'a move from a Derridean to a Deleuzian discourse'.⁸ But where the opposition between the two philosophers in Kipnis's text is there hinged around their capacity to think the *new*—which, according to Kipnis, Derrida's thought lacked and Deleuze's possessed—Zaera-Polo's remarks are weighted toward the validation of the *materialism* supposed to be found within the thought of Deleuze. The turn towards matter, and its organisation, which has been key to architectural Deleuzism, is addressed too, however, by Kipnis in his essay 'On the Wild Side', which appeared in *Phylogenesis: FOA's Ark*. Here, like Zaera-Polo, he articulates the turn to matter in terms of its opposition to the 'dematerialized-idealist' world of semiotics, criticality and other products of the 'cult of ideas'.⁹ Criticality, as has already been seen, is singled out as the most pernicious of these productions and is for Kipnis a 'stalled' enterprise now 'less thoughtful than mean', as well as being essentially 'violent' and 'sadistic'.¹⁰ Now, he claims, is the 'time of matter' whose primacy over ideas has been established in the origins of the universe: 'There were no signs, no ideas, no concepts, no meanings, no disembodied spirits, no dematerialized abstractions whatsoever around during the first couple of seconds after the Big Bang, nor during the first million or billion years, or, for that matter, even these days.'¹¹ The contemporary turn to matter is framed as a recognition of its inherent qualities and capacities described thus by Kipnis:

In simplest terms, the radicalization of matter requires three recognitions: that matter is from the beginning irreducibly sensate and responsive; that at every scale sensate, responsive matter organizes

itself hierarchically into discreet, irreproducible configurations with specific emergent behaviors; and that all discreet material configurations at any and every moment and any and every scale further arrange into complex ecologies.¹²

Dogmatically conceived, and essentially dualist, oppositions such as this—between matter, on the one hand, and ideas, concepts and signs, on the other—are nowhere postulated by Deleuze and Guattari themselves. Rather, as thinkers of process, they were concerned with the modes of becoming through which apparently opposed terms such as these are always interrelated. The political is not opposed to the material in their thought, and, as John Mullarkey has observed, Deleuze’s materialism assumes an ‘intriguingly politicized form.’¹³ ‘[V]alue realms such as ethics and politics’ he writes, ‘are central to Deleuze’s project and recur throughout his work on forces, affects, and bodies.’¹⁴

Matter becomes politicised, for Deleuze and Guattari, when we consider how, and by what forces, it is organised; questions that are best approached through their construction of the dyad ‘molecular/molar’.¹⁵ This dyad is used to differentiate between qualities and modes of material organisation as has been clarified by Brian Massumi:

It is crucial for understanding Deleuze and Guattari...to remember that the distinction between molecular and molar has nothing whatsoever to do with scale. Molecular and molar do not correspond to “small” and “large,” “part” and “whole,” “organ” and “organism,” “individual” and “society.” There are molarities of every magnitude (the smallest being the nucleus of the atom). The distinction is not one of scale, but of mode of composition: it is qualitative, not quantitative. In a molecular population (mass) there are only local connections between discreet particles. In the case of a molar population (superindividual or person) locally connected discrete particles have become correlated at a distance.¹⁶

Molar compositions are produced when a power is able to capture and codify the purely local relations of the molecular from its outside. This extrinsic power may be of a geological order, as when minerals are captured

by processes of sedimentation to become rock. Following Massumi this type of molar process can be termed ‘passive’. Critically, the extrinsic power of the molar may also be of a social, economic or juridical order, and hence an ‘active’ process in the sense that it is achieved by a sophisticated and self-consciously goal-oriented power directed toward the production of such ends as surplus value, discipline, control or ‘normality’. The molar compositions of these ‘active’ processes might be directed toward the production of subjectivity, where the locally composed capacities of the body are formed into aggregates—such as the ‘docile body’ of disciplinary society conceived by Foucault, or the ‘networker’ of regimes of immaterial labour—or they might be directed toward the production of social relations so that the molecular composition of the mass is formed into the molar order of social classes.

On this score, architecture cannot be conceived as an exclusively molecular practice, as one straightforwardly isomorphic with locally-connected and self-organised compositions—such as, for example, the cellular formation of a foam from a liquid. Architecture involves, of necessity, active processes of composition, including the capture of the performative capacities of material organisations to provide strength, support or flexibility within a composite structure. More significantly, its compositional processes organise space as an assemblage of enclosures, openings, boundaries and passages directed toward the production of historically and socially constituted spatial formations such as the domestic, the public, the private, the institutional or the commercial. These conditions are not only material and spatial practices but also ones made and remade in relation to the ideas through which they are conceived and reconceived. In this fashion, architecture is always implicated, to some degree, in the formation of social organisation and the production of subjectivity as a molar compositional practice which is geared toward the realisation of preconceived outcomes. To reframe the analysis of Zaha Hadid’s Central Building for BMW Leipzig in these terms, for example, the architectural composition of circulatory and associative spaces

within the complex was, as described in Chapter One, designed to encourage communication within the workforce, by refiguring the workspace as a would-be urban space, so that this would, in turn, produce conceptual and informational outcomes in the form of knowledge production, the solution of assembly-line problems, and collective identification with company goals. These would then be amenable to capture in the service of managerial objectives. Here the ‘matter’ of architecture is inextricably implicated with the social and the subjective through the collaborative work of architects and managers in reconceiving the paradigms through which these are to be organised, and the ends to which they might be directed.

The conceptual cannot then be excised from the ‘matter’ of architecture so that it might become a purely ‘materialist’ practice able to conceive of the political as absolutely extrinsic to its concerns. Even the argument for ‘materialism’, whether on the basis of its ontological primacy in the origins of the universe, or of its being somehow the proper concern of architecture, is a conceptual one, after all. This is not to argue that all materialism is ultimately reducible to the conceptual, but rather, with Deleuze, that matter and concept are co-productive forces; that architecture, for example, can be *conceived* as a material organisation whose built manifestation then operates as a real material and physical force upon subjects whose mental concepts of space and its use might in turn be shaped or re-shaped as a consequence of these molar practices. Given that the capacity to conceive and wield these forces is a power to contribute to the realisation of certain goals in the production of social and subjective formations which function in the interests of corporate or governmental agencies, both the conceptual and the material practices of architecture are directly political. Hence architecture cannot be conceived as a straightforwardly molecular and materialist practice. Material organisation is not straightforwardly or always a purely local or ‘self-organising’ operation; it can also be ‘other-organised’, instrumentally composed by and for active and conscious forces and powers. Indeed, power is, for Deleuze and Guattari, precisely the power to organise.

In ‘Capitalism: A Very Special Delirium,’ they write, ‘There is no ideology, there are only organizations of power once it is admitted that the organization of power is the unity of desire and the economic infrastructure.’¹⁷ Power does not operate from a distance as a disembodied set of ideas that in themselves determine social reality, but as a practice made immanent to this reality through its organisational capacity to deterritorialise and reterritorialise its compositions.

DE LANDA’S FLAT ONTOLOGY

The fully political implications of material organisation as an instrument of power are, however, deliberately circumvented in the discourse of architectural Deleuzism. As has already been noted, De Landa posits Deleuze and Guattari’s attachments to Marx, such as their concerns with the ‘economic infrastructure,’ as their own Oedipus complex.¹⁸ His own ‘assemblage theory’ is then ‘cured’ of this disorder so that it is able to model organisation as a matter of ‘isomorphic’ processes operating at different scales across the biological, the geological and the social. De Landa’s model allows for causal agency between the different ‘singularities’ but admits of no encompassing or enveloping force directing them toward a preconceived end:

In this ontology all that exists in the actual world is singular individual entities (individual atoms, cells, organisms, persons, organizations, cities and so on) whose main difference from each other is spatio-temporal scale. There are no totalities, such as ‘society as a whole’, but a nested set of singular (unique, historically contingent) beings nested within one another like a Russian Doll.¹⁹

These entities are held to ‘emerge’ from the local interaction of parts to form singularities whose behaviour is modified by their interaction as parts within larger wholes, which then form new singularities, and so on. Rather than conjoined by forces external to them the singularities are formed, at each level, from local interactions: ‘We need to switch to a realist view of

causes not as conjunctions but as actual connections in which one event produces another event (e.g. a collision between two billiard balls produces a change of state in the motion of the balls).'²⁰ De Landa's ontology is then resolutely 'flat', and whilst it admits of singularities emerging at different scales in the relations between parts and wholes, it explicitly discounts the possibility of a larger totality, such as capital, or the 'social machine'—as it is called by Deleuze and Guattari—which might produce from these singularities molar compositions serving its own purposes. He is then at odds not only with Marx, but also with what he conceives as the pathologically Marxian residue within Deleuze and Guattari which figures the 'capitalist system' as an 'axiomatic', as is expressed in their *Anti-Oedipus* where they write: 'The true axiomatic is that of the social machine itself, which takes the place of the old codings and organises all the decoded flows of scientific and technical code, for the benefit of the capitalist system and in the service of its ends.'²¹

Zaera-Polo and Moussavi have followed De Landa in refusing to countenance larger totalities, such as 'society', as having any 'real' substance, and in their own turn to 'materialism' they draw extensively upon his 'assemblage theory' to do so.²² As Zaera-Polo argues in his essay 'The Politics of the Envelope':

In fact, it may be good to stop speaking of power in general, or of the State, Capital, Globalization in general, and instead address specific power ecologies comprising a heterogeneous mixture of bureaucracies, markets, antimarkets, shopping malls, airport terminals, residential towers, office complexes etc., and specific exercises of power within and between these organizations. We may need to avoid abstract notions of power, such as the capitalist system, capitalist power, the power of the State, Global Capitalism and Empire, and instead focus on specific bureaucracies and economic institutions, and engage in a more concrete analysis of institutional, social, financial and spatial dynamics.²³

For Zaera-Polo and Moussavi, as for others within architectural Deleuzism, the issue of organisational power, so fundamental for Deleuze and Guattari,

has been reconceived as being vested not in the axiomatic of the ‘social machine’ but rather as located exclusively within matter itself and its intrinsic capacity to ‘self-organise’. This intrinsic organisational capacity has then been figured, borrowing from philosophies of science such as those of Ilya Prigogine and Isabelle Stengers, as one of ‘emergence’ and ‘complexity’.²⁴ Furthermore Zaera-Polo and Moussavi have then claimed that complexity, emergence and self-organisation recommend themselves as the paradigms with which contemporary architecture should align itself due both to their timeliness and their supposedly progressive qualities.

THE POLITICS OF COMPLEXITY

In an earlier essay, ‘Order out of Chaos: The material organization of advanced capitalism,’²⁵ Zaera-Polo initially appears to engage with the Marxian politics he will later disavow in drawing upon David Harvey’s account of flexible accumulation to model the contemporary relations between capital and urban form. But the wider political implications of Harvey’s model are, in that essay, immediately circumvented through the emphasis Zaera-Polo places upon the post-Fordist city in terms of its morphological novelty. The ‘restructuring of the capitalist space’, he writes, ‘unfolds a “liquefaction” of rigid spatial structures.’²⁶ The ‘spatial boundaries’ of the city, he continues, lose their importance within the new composition of capital. From this proposition Zaera-Polo then infers a consequent progressive tendency within contemporary urbanism since, ‘through this growing disorganisation of the composition of capital, the contemporary city tends to constitute itself as a *non-organic* and *complex* structure without a hierarchical structure nor a linear organisation.’²⁷ In other words, the urban now operates as a complex system whose organisation, like that of any other complex system with which it can be considered isomorphic, is composed exclusively of local interactions rather than in any way directed by a power from above, such as capital’s continual restructuring of urban space in pursuit of exchange value. From here it is but a short step for Zaera-Polo to claim as ‘subversive’, in a fashion both

prescient of his own subsequent turn to the ‘politics of the envelope’ and akin to Patrik Schumacher’s position regarding the progressive qualities of corporate practice, the role played by corporate capital within the contemporary city. ‘The complex formed by the AT&T, Trump and IBM headquarters in Manhattan’, he argues, ‘not only integrates a multiple programmatic structure, but also incorporates systematically the public space within the buildings: a subversion of the established urban boundaries between public and private.’²⁸ The urban, and its architectural forms, are subsumed by Zaera-Polo within a model of complexity such that their politics—if indeed that term can be stretched to this extent—are redefined in terms of their morphological adherence or resistance to ‘openness’ and the dissolution of boundaries. ‘To operate within the contemporary city’, Zaera-Polo declares, ‘we have to evolve the disciplines related to material practices: it may be by looking at the sciences of complexity that we understand a reality that other disciplines are no longer able to operate.’ Complexity, rather than being understood reflexively as a *model* of reality, and one originally generated from within a very specific and local set of concerns within the philosophy of science, is thereby globalised as a universally valid paradigm which itself ‘emerges’, *Zeitgeist*-like, at the close of the twentieth century. In ‘Order out of Chaos’ Zaera-Polo writes that :

At the end of the 60s, due to the rise of the late-capitalist mode of production, emerging patterns of urban organisation began to consolidate as new forms of urbanity and material organisation. These changes in the urban topographies coincided in time with the emergence of a new scientific paradigm which has come to replace the long-lasting validity of conservative systems—those based in models where systems are considered isolated and maintaining matter and energy constant—by an emerging epistemology that understand systems as vaguely delimited locations crossed by flows of matter and energy.²⁹

Later in this same essay any reference to the role of ‘the late-capitalist mode of production’ in producing urban ‘complexity’ is dropped by declaring that the ‘dynamics of contemporary urban phenomena’ represent ‘the

manifestation of emerging complex orders'.³⁰ In more recent essays, such as 'The Politics of the Envelope,' Zaera-Polo has extended the paradigm of complexity to encompass not only architecture and urbanism but also economics, politics, infrastructures, education and cultural production.³¹ All of these phenomena are, according to Zaera-Polo, now to be understood, as a consequence of their complexity, as *material* organisations so that notions such as ideology and practices such as critique—based as they are in the supposedly *de-materialised* world of concepts and ideas—are now historically redundant. In the case of politics, for example, he argues:

While traditional political practices were based on discursive forms, identities and dialectics and were subject to the permanent need to envision parallel realities and all-encompassing systems, contemporary power structures operate as physical aggregates where behavior is created through the localized complex association of molecular components.³²

For all its supposed materialism, Zaera-Polo's argument comes remarkably close to resembling some form of idealism in its claims for the historical 'emergence' of complexity as a universal paradigm and for the essentially material basis of social reality from which all conceptual, representational and critical practices must now be excluded. As Simon Jarvis has remarked concerning the tendency of any dogmatic insistence upon materialism to turn into its opposite:

Far from being in any straightforward way opposed to metaphysics, any thinking which starts out from the principle that "only matter is real" is itself dependent on a metaphysical claim. It makes, that is, a claim about the nature of the world in advance of an assessment of the means by which knowledge of the world is to be secured. Nor is this kind of problem confined to philosophical materialism. Suppose, for example, we were to decide that materialism should be regarded not as a metaphysical theory of what is real but instead as a "method." What makes a method a method is that the same procedures are followed to investigate different kinds of material. If the method remains the same whatever it is used to investigate, it can hardly be materialist at all, because it will remain an unchanging invariant, unaffected by any changes in the objects which it is to consider.

Materialism, apparently the most straightforward and commonsensical of creeds, in practice keeps turning into its opposite, into just what it was supposed not to be.³³

Zaera-Polo's claims, for the 'emergence' of complexity across the fields of science, economics, politics and cultural production as being historically coincident, and thus for an architecture which treats space according to the universalised logic of this new historical condition, also bear a striking similarity to the Hegelian idealism employed by Sigfried Giedion in his analysis of modernism, and modernist architecture, in *Space, Time and Architecture*.³⁴ Giedion wrote there that: 'From the first decade of this century on, we encounter curious parallelisms in the separate realms of thought and feeling, science and art. Problems whose roots lie entirely in our time are being treated in similar ways even though their subject matter is very different and their solutions arrived at independently.'³⁵ Whereas Giedion sought to promote an idea of modernist architecture whose treatment of 'space-time' was destined to become as consistently expressive of its epoch as that of Baroque architecture to its own time, Zaera-Polo argues that the discipline must now align its theory and practice with that of the contemporary *Zeitgeist* in terms of the spatial articulation of the principles of complexity. Giedion's methodological insistence upon the analysis of architecture 'apart from questions of economics, class interests, race, or other issues'³⁶—apart that is from the questions with which *historical* materialism would concern itself—is echoed too in remarks by Zaera-Polo in 'The Politics of the Envelope' where he cites with approval the work of Ulrich Beck, Bruno Latour and Peter Sloterdijk who have written, he notes, 'extensively about an emerging political dynamics that is no longer ruled by party lines, class, gender or race and has become mediated through technologies such as genetics and information technology.'³⁷ Like Giedion before him, Zaera-Polo either denies the reality of, or brackets as extrinsic to his concerns, those phenomena that would trouble the universality of his paradigm by revealing, in this case, the presence of forces which cannot themselves be subsumed under the model of complexity but rather are able

to mobilise it as an instrument for their own ends. Without a *historical* understanding of the specific conditions through which the tendency to ontologise the complexity of ‘material organisations’ appears, of the interests this may serve, and of the relation of this to what Deleuze and Guattari term the ‘axiomatic’ of capital, this turn to ‘materialism’ and ‘complexity’ comes to appear as if it had itself simply ‘materialised’ from the same ‘self-organising’ processes it claims to account for.

Thus the critique of this position is concerned not so much with denouncing Zaera-Polo’s arguments as erroneous or dogmatic, but rather with considering how they serve to produce both a discourse and an architectural practice which in effect serves the very force whose existence they deny—the capitalist axiomatic—in its production of subjectivities and the organisation of social reality according to the imperatives of a society of control.

DISENCHANTMENT, CYBERNETICS AND GOVERNANCE

Rather than emerging from the *Zeitgeist* as some progressively anti-hierarchical and materialist paradigm, the idea of ‘complexity’, as it is mobilised within architectural Deleuzism and the interests of the clients it serves, can in fact be understood as being a contemporary variant of a longer-term project of *cybernetic* governance orientated toward managing and producing value from organisational systems.³⁸ To address the contemporary use of ‘complexity’ within this cybernetic project, especially its architectural dimensions, first requires an historical explication of cybernetics—whose project architectural Deleuzism in certain crucial respects continues—as a practice of instrumental reason which has itself been described as part of an ongoing ‘disenchantment’ of the world within modernity. Through this explication it can be shown that ‘complexity’ was originally conceived by figures such as Isabelle Stengers as a *challenge* to instrumental reason itself, and thus continuous with the critique of the disenchantment of the world produced by Adorno and Horkheimer in their *Dialectic of Enlightenment*.³⁹ Whereas critique, figured as a ‘negative’

conceptual practice, has been opposed, within architectural Deleuzism, to complexity as a positively valorised and material one, it is useful to reframe the latter as being, at least in its origins, a conceptual practice which *shares* certain aspects of its argument with those of the critique of Enlightenment reason produced within Western Marxism. It can then be shown how, within the historically specific conditions of contemporary capitalism, architectural production, such as that of Foreign Office Architects, continues a project of cybernetic instrumentality to which its authors claim themselves opposed under the guise of their alignment with a progressively materialist *Zeitgeist*.

The ‘disenchantment’ of the world, according to Max Weber’s seminal account, derived from the puritanical worldview in which the pursuit of an objective, ascetic knowledge of the world came to be substituted for one based on a sensuous contact with nature, and from which then followed the objective rationalisation of both nature and society within Enlightenment thought.⁴⁰ Drawing upon Weber in their own account of disenchantment, Theodor Adorno and Max Horkheimer observed in their *Dialectic of Enlightenment*: ‘The programme of the Enlightenment was the disenchantment of the world; the dissolution of myths and the substitution of knowledge for fancy.’⁴¹ Elaborating on the correlation between knowledge and power within the Enlightenment, and of its orientation toward the governance of both nature and ‘man’, they continued: ‘the human, which overcomes superstition, is to hold sway over a disenchanted nature. Knowledge, which is power, knows no obstacles: neither in the enslavement of men nor in compliance with the world’s rulers ... What men want to learn from nature is how to use it in order to dominate it and other men.’⁴²

Disenchantment is then, for Adorno and Horkheimer, defined by the mastery of the object through the instrumental reason of the subject: the ‘dialectic of enlightenment’ is one that describes the means by which the subject itself is objectified within knowledge and thus, like nature, made

instrumental, through reason, as a *means* for the ends of capital:

The human being, in the process of his emancipation, shares the fate of the rest of his world. Domination of nature involves domination of man. Each subject not only has to take part in the subjugation of external nature, human and nonhuman, but in order to do so must subjugate nature in himself. Domination becomes 'internalized' for domination's sake.⁴³

It follows then that when Isabelle Stengers and Ilya Prigogine—the authors of *Order out of Chaos: Man's New Dialogue with Nature*⁴⁴—speak of the 'reenchantment' of the world they refer to the discovery of processes and phenomena which challenge the capacity of the subject to master the physical world as an object of rational knowledge. As Stengers reminds us in this context, the adjective 'complexity' does not refer to the 'discovery' of processes such as emergence or self-organisation in nature, but rather to the scientist's discursive response towards these. Complexity is not, she says, a science but a conceptual construct that 'belongs to a discourse about science.'⁴⁵ Rather than the revelation of new knowledge about the world according to the existing paradigms of rational scientific method, phenomena described as 'complex' pose a problem for that method itself: i.e. the object cannot be absolutely mastered by knowledge. Rather than being mutely obedient it poses a problem to knowledge and mastery as such.

What Stengers and Prigogine describe as the 'thermodynamics of irreversible processes', for example, are said to 'drive certain systems far from equilibrium.' In turn, they write, these processes 'can nourish phenomena of spontaneous self-organization, ruptures of symmetry, evolutions toward a growing complexity and diversity'.⁴⁶ In recognising these phenomena, the scientist is compelled to acknowledge 'a world peopled by beings capable of evolving and innovating, of beings whose behaviour we cannot render foreseeable and controllable except through enslaving them.'⁴⁷

As has been argued above, architectural Deleuzism has appeared to embrace complexity as an understanding of material organisations, but not (and this is where, without acknowledging the fact, it significantly parts company with the arguments of Stengers), as *a critical reflection upon science*. Instead, the paradigm of complexity is presented as *a normative scientific model* whose utility can be extended to architectural practice. As has also been demonstrated in the previous chapter, architects have not been alone in their adoption of complexity as a putatively scientific model of organisation for their own ends.

Military strategy, marketing, urban planning, organisational theory, policing, and management techniques have too all been transformed in recent years through their engagement with models of emergence, swarm-modelling and self-organisation. Complexity, misconceived as a scientific method rather than a challenge to that method itself, has become hegemonic within a number of disciplines. Despite the progressive discourse in which such transformations have often been presented, it has typically been the case, as it is with architecture, that the adoption of complexity in such fields has been motivated by the possibilities it offers for achieving greater levels of control within the specific conditions of contemporary social reality. The growth in communications technologies, networked patterns of social connectivity and mobility, and post-Fordist economies in which affect and immaterial labour have become new and productive sources of valorisation for capital, for example, have all afforded significant opportunities for the instrumentalisation of models of complexity as means of steering and control. In short, under conditions of increased social, technological and economic complexity, so-called complexity theory appears, in respect of these conditions, to offer the appropriate instruments by which they can be profitably managed.

Mastery and governance are reasserted, through this employment of complexity theory, where models such as self-organisation are

instrumentalised as the means to organise and control, for example, soldiers on the battlefield, workers in the office, or consumers online. Architecture has also used models of complexity to serve corporate and governmental projects in which control and mastery over complex systems are pursued. Complexity itself now becomes, through such operations, an instrument of something like a new stage of disenchantment, in complete contradiction to the sense in which it was originally understood by Prigogine and Stengers.

There thus appears to be something of a paradox in that complexity, originating in a *challenge* to mastery in one field of knowledge, now operates as a *means* to mastery in many others. One way of unravelling this paradox is, however, to recognise that it is a longer term *cybernetic* project, rather than complexity theory, which is actually at work here, and that the two terms—complexity and cybernetics—although often treated as coextensive in their meanings, ought to be clearly distinguished from one another.

Whereas complexity, as conceived by Stengers and Prigogine, is properly the expression of the capacity of an object of knowledge to confound its rational instrumentalisation, in that it confronts the observing subject with its own agency and powers of creation, cybernetics has been largely concerned with establishing mastery and control over, and through, all manner of processes and systems. As Norbert Wiener wrote of his coinage of the term in 1948 within his book *Cybernetics*: ‘We have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name Cybernetics.’⁴⁸ In his subsequent book, *The Human use of Human Beings*, Wiener elaborated:

there is a larger field which includes not only the study of language but the study of messages as a means of controlling machinery and society, the development of computing machines and other such automata, certain reflections upon psychology and the nervous system, and a tentative new theory of scientific method.

Until recently, there was no existing word for this complex of ideas,

and in order to embrace the whole field by a single term, I felt constrained to invent one. Hence “Cybernetics,” which I derived from the Greek word *kubernētēs*, or “steersman,” the same Greek word from which we eventually derive our word “governor”.⁴⁹

The reference in the term cybernetics to the world of ancient Greece is particularly telling in relation to questions of mastery and instrumentalisation. Although the term was employed by Wiener, as it is too by its more contemporary proponents, to dignify cybernetics by suggesting its classical pedigree, particularly through its allusion to Homer’s *Odyssey* and the figure of the ‘steersman’, it was in these same historical origins that Adorno and Horkheimer located the source of the disenchantment of the world which culminates in the Enlightenment. In the first excursus of their *Dialectic of Enlightenment*, ‘Odysseus or Myth and Enlightenment’, they identified ‘Odyssean cunning’ with the ‘mastery of nature’.⁵⁰ Read by Adorno and Horkheimer as a kind of primal scene for the instrumental rationalisation of the world, the story of the *Odyssey* tells of the hero’s capacity to master the old gods of myth and the seas, as well as his own crew, through the cunning of reason. The exercise of rational cunning is illustrated in the *Odyssey*, for Adorno and Horkheimer, where Odysseus outwits the Cyclops, as is the withdrawal of sensuous contact with the world when he has his crew block up their ears so as to be deaf to the call of the sirens. Furthermore, self-restraint, as a form of self-mastery, is exemplified for them when Odysseus has himself bound to the mast of his ship in the same episode. As Simon Jarvis has written of the significance of this episode for Adorno and Horkheimer:

Freedom from the blind compulsion of nature does not, in the event, remove compulsion altogether; instead it is won at the cost of self-binding social and psychological compulsion. Odysseus, the master, is also mastered and self-mastered. Domination over nature is paid for with the naturalization of social domination. Power over nature, the real advance of human freedom, is paid for with impotent subjection to the social divisions and domination which grant that power.⁵¹

The distance by which the subject needs to separate himself from nature in

order to master it as an instrument for his own ends, with all that this implies for his own self-mastery and objectification, are seen by Adorno and Horkheimer to be presaged in the *Odyssey*: 'The enthronement of the means as an end', they write, 'which under late capitalism is tantamount to open insanity, is already perceptible in the prehistory of subjectivity.'⁵²

Yet whilst they located the origins of disenchantment in the ancient world, two millennia before the Enlightenment as it is more conventionally understood, Adorno and Horkheimer were specifically concerned with its contemporary manifestations. In the mid-twentieth century, at precisely the same time that cybernetics was being established by Wiener and others as a new 'scientific' method of social and technological governance, these critical theorists of the so-called Frankfurt School were articulating their own concerns regarding the absorption and reification of the human sensorium within the technologically-driven systems through which late capitalism was advancing. Of the experience of being behind the wheel of a car within a modern traffic system, for instance, Horkheimer observed:

It is as if the innumerable laws, regulations, and directions with which we must comply were driving the car, not we. There are speed limits, warnings to drive slowly, to stop, to stay within certain lanes, and even diagrams showing the shape of the curve ahead. We must keep our eyes on the road and be ready at each instant to react with the right motion. Our spontaneity has been replaced by a frame of mind which compels us to discard every emotion or idea that might impair our alertness to the impersonal demands assailing us.⁵³

It is not difficult to recognise the analogies that might be drawn between the experience of modernity and that of the 'prehistory of subjectivity' in such passages. The driver of the car might imagine himself to be behind the wheel, the active and autonomous agent of his own mobility, but framed within the context of an infrastructural and cybernetic system of controls, it appears rather that it is he who is being steered by the system itself.

Such observations echo those made earlier by Walter Benjamin, in his essay

‘On Some Motifs in Baudelaire’, concerning the signalletic training of pedestrian movement within the modern city:

At dangerous intersections, nervous impulses flow through him in rapid succession, like the energy from a battery. Baudelaire speaks of a man who plunges into the crowd as into a reservoir of electric energy. Circumscribing the experience of the shock, he calls this man “a kaleidoscope endowed with consciousness.” Whereas Poe’s passers-by cast glances in all directions, seemingly without cause, today’s pedestrians are obliged to look about them so that they can be aware of traffic signals. Thus, technology has subjected the human sensorium to a complex kind of training.⁵⁴

Cognitively and haptically immersed within an environment of informational signal-processing, we must, imply such passages by Horkheimer and Benjamin, hand ourselves over fully to their external directives. Placed within such informational systems, the human subject’s capacity for reflective or critical thought is severely compromised. ‘On the way from mythology to logistics,’ wrote Adorno and Horkheimer, ‘thought has lost the element of self-reflection, and today machinery disables men even as it nurtures them.’⁵⁵ Even society’s rulers are subjected to the ‘restriction of thought to organization and administration’.⁵⁶

The precise goal of cybernetics, was, in fact, to refashion thought and communication as purely informational, and to integrate seamlessly the subject with contemporary technical and administrative processes through such means. Human and machine were to be joined within circuits where data was exchanged according to a mathematical model of signal processing.⁵⁷ Communication was to be stripped of any semantic or mimetic valence and reflective thought pathologised as essentially neurotic.⁵⁸

Contemporary attempts to master the processes described by science as complex, in order to make them instrumental to the achievement of specific ends, such as architectural ones, can then be understood as continuous with a longstanding cybernetic project of steering and governance—one that was

itself continuous, according to Adorno and Horkheimer, within an historically deep-seated orientation in western civilisation toward the disenchantment of the world. Yet it is important also to understand what is historically specific about current uses of complexity as a cybernetically-controlled instrument for governmental and corporate concerns.

As Katherine Hayles has discussed in her history of cybernetics, *How We Became Posthuman*, the ‘first wave’ of the new theory, in the years following the Second World War, was oriented toward the maintenance of equilibrium. Homeostasis—the reproduction of a steady state within human-technological circuits—was its paradigm, and one that followed logically from the immediate experience of unprecedented social turmoil and devastation wrought by the war. The paradigm of contemporary cybernetics, which is now in its third wave according to Hayles, is said by her to be that of ‘virtuality’.⁵⁹ Rather than seeking equilibrium it is focused, instead, upon the spontaneously productive capacity of systems as they move far from equilibrium and pass through ‘phase transitions’. New phenomena and conditions are seen as being produced through emergence, through the interactions of the numerous individual agents which comprise any larger system, and their capacity to drive it toward unforeseen outcomes or ‘singularities.’

In themselves such processes appear, as noted, to confound any attempt to master or instrumentalise them due to their resistance to top-down control and their sheer unpredictability. Yet within the changed conditions of control, accumulation and valorisation of contemporary capitalism, as already indicated, they become the resources through which information, communication and innovation can be harvested for new modes of production and valorisation.

Significantly, this latest model of cybernetics—like that of its earlier formulations—operates as a form of organisational control distributed

throughout a programmed environment, rather than as one dictated from without by an identifiably external or superior power. In this sense, the exercise of the master/slave relationship, through which the ship and its crew are steered in the *Odyssey*, whilst prescient of the instrumental production of subjectivity in general terms, is distinctively archaic. Within advanced capitalism—its environment no longer populated with external threats, but already subsumed to the logic of capital's own imperatives and produced through its own technics—control and direction are devolved directly to the immediate performance of that environment, as is illustrated by the observations of Horkheimer and Benjamin cited here. Hence the organisational principles of the capitalist axiomatic *appear* not to be hierarchically derived, but as neutral functions horizontally embedded within, and emerging from, the purely heterarchical spaces of social reality. It is precisely this claim towards servicing a newly heterarchical social order, however, on which the supposedly progressive politics of FOA are based.

ENVELOPE AND ENVIRONMENT

It is primarily through Zaera-Polo's and Moussavi's engagement with the design of the architectural envelope, as a medium for addressing the complexity of circulation patterns, that they pursue a model through which to manage the interactions of urban populations whilst latterly claiming this to be also a politically progressive dimension of their work. Whereas Hadid and Schumacher sought in their Central Building for BMW to produce a cohesive and locally de-hierarchised population of interactive agents *within* the envelope of their architecture, FOA have been especially concerned with articulating the relations between heterogenous populations *through* and *between* their building envelopes.

INTERFACE AND ASSEMBLAGE

In 'The Politics of the Envelope', Zaera-Polo identifies as problematic the tendency to encapsulate increasingly large portions of the urban

environment within architectural envelopes that effectively seal them off from their surrounding context. These envelopes are typically employed for buildings such as the shopping mall, and are exemplified, for Zaera-Polo, in their most extreme manifestation, in Norman Foster's 'Crystal Island': 'a project in Moscow that would contain 2.5 million square meters under a single envelope, the world's biggest building, approximately five times the size of the Pentagon building.'⁶⁰ Whilst these urban enclosures may be claimed to perform effectively in environmental terms, their political performance is, for Zaera-Polo, questionable due to their scale and tendency to produce social division:

The political dangers of the scale of the flat-horizontal envelopes lie in the scale of space they regulate: the fundamental difference between, say, Yona Friedman's *Ville Spatiale* and the Mall of America is that the first is not an envelope but primarily a frame, while the second is a container with a thoroughly sealed and dressed envelope. Because of its smaller grain, traditional city fabrics were perhaps better adapted to intensifying a social mix and the coexistence of diverse population groups in a space. The only way to ensure that the skin of flat-horizontal envelopes does not create a radical split between those who are included –let's say shoppers with a certain acquisitive power – and those who are excluded is to devise equally sophisticated mechanisms of permeability across the skin. And the larger the envelope becomes, the more sophisticated the interface has to be to guarantee an appropriate level of mix in the population of the envelope.⁶¹

FOA argued that their own projects in the retail sector challenged the existing typology of the mall, with its tendencies toward urban fragmentation and social exclusion, through the creation of a new 'prototype' based on the traditional urban square. Through this prototypical form, exemplified in their Watermark WestQuay project in Southampton and Meydan Retail Complex in Ümraniye, in southern Istanbul [fig.3], FOA claimed to be using retail-led development as a catalyst for urban growth that was orientated toward accommodating the 'appropriate' mix of populations and uses through its multiply-programmed and permeable envelopes. Asked in interview what differentiated their winning proposal for the Meydan Retail Complex from the other competition entries, Zaera-Polo

and Moussavi respond: ‘Most of the designs were concerned more with architectural appearance and less with urban potential. We were perhaps less concerned with producing an architecture which can simply be described in formal terms, and more with defining architecture in terms of the links and forms of public space.’⁶²



fig. 3. *Meydan Retail Complex*, Istanbul, Turkey: Foreign Office Architects, 2007

The ‘urban potential’ of the Meydan complex is understood here in its capacity to function as a socially integrative centre upon which the various populations moving through the city converge. Zaera-Polo and Moussavi argue:

Almost all public squares began as crossroads, as we can see for example in the Alexanderplatz or the Potsdamer Platz in Berlin. It was the square at the gateway to which all streets led. This was where there was the greatest density of people, who came from all directions and lingered—and in that way the crossroads gradually became a square. New squares function better when they retain the potential of a crossroads, when they lie on the natural route of a number of people—and thus are more than an arbitrary gap in the urban network.⁶³

In proposing to use retail development as the basis for urban growth Zaera-

Polo and Moussavi have clearly identified their agenda with that of the social—if not *socialist*—vision of Victor Gruen who first proposed the US suburban shopping mall, in the 1950s, as the centre for new forms of communal urban space. Gruen, they claim, ‘was interested in the way that space and the interplay of programmes function. In this respect he is closer to FOA than most other architects of his time.’⁶⁴ This agenda, and its identification with the theories of Gruen, was apparently shared too by the clients for FOA’s Meydan Retail Complex, the METRO Group. In *Meydan Shopping Square: A New Prototype by FOA*, the client argues, like Zaera-Polo, against urban developments such as the ‘gated communities’ and ‘fashionable housing enclaves’ that fragment and divide the city.⁶⁵ ‘The METRO Group Asset management’, they declare:

is now attempting a solution to this problem. And what they are planning here in the middle of Ümraniye, between a motorway junction and proliferating residential buildings, is reminiscent of the visions of Victor Gruen. A shopping centre is coming into existence here that is to be much more than a supplier to the surrounding apartment blocks. A square is planned here, a sort of tree-lined piazza with public access to all, with rows of shops around it, as well as cafés, restaurants and a cinema.⁶⁶

FOA approached the design of the Meydan Shopping Square by drawing in part upon early-twentieth century functionalist approaches to circulation, such as those employed by Margarete Schütte-Lihotzky in the design of her celebrated ‘Frankfurt Kitchen’.⁶⁷ These were scaled-up as an arrangement of the complex’s component buildings and programmes—‘casual world’, ‘sports world’, cinema, department store, etc.—around a nominal central plaza. At the same time, however, in accordance with both the ‘open systems’ paradigm of complexity with which FOA identified themselves,⁶⁸ and with the specific ambition here to have the square function as the centre of a wider urban network, the complex is made permeable to multiple access routes connecting it to the surrounding built fabric of the area, as well as to its proposed future development. Rather than being solely orientated to access by car, as in the traditional out-of-town mall, the complex is also

supposedly designed to accommodate pedestrian access so that it might function as the type of public space envisaged by both clients and architects. As Zaera-Polo and Moussavi explained:

Some people from the neighbourhood might perhaps want to come on foot or by bicycle. And if routes are created for these people, as we did with the link via the roof, the building could become more than a traditional shopping centre with a food court, where one could quickly eat an ice cream and then get back into the car. A public square could evolve which would become part of the city, or the core of a new centre. At the moment there are already four different routes to get to the site. If in the future the surrounding development is completed and the access points to the neighbouring sites that we have envisaged are realized, it could be six or seven. And through these many routes it also very quickly becomes clear that the shopping centre is not a closed complex, related only to itself. While other malls often define their roles as a private site with signs and security fences, these elements will not exist at Meydan.⁶⁹

Consistent with the orientation of third-wave cybernetics toward the management of emergent and virtual outcomes within complex systems, the Meydan complex was designed not only as an open, permeable one, but also as one adapted to modification in light of possible future developments. The buildings which currently contain the complex's different programmes can, in the future, be further fragmented to provide new access routes whilst also forming the basis for a system of blocks which can be extended outward of the square for subsequent urban growth (fig. 4). As Zaera-Polo and Moussavi explain:

The German word *Sollbruchstelle* (predetermined breaking point) has proved very helpful in explaining what we want to achieve. The blocks we have planned have three *Sollbruchstellen*. And if the neighbours show interest in the future, then it will be possible at little expense to 'break up' the blocks at these points and create new streets which extend into the context. In this way we were trying to design a complex which looks like a completed project at the access point, but contains potential in its basic structure that extends far beyond this complex.⁷⁰

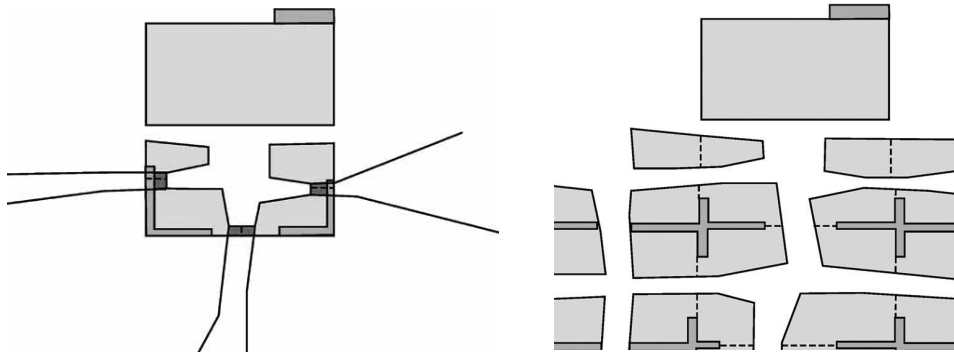


fig. 4. *Meydan Retail Complex*, Istanbul, Turkey: Foreign Office Architects, 2007, diagram of potential future block development

The envelope of the Meydan complex was thus designed not only to organise the relations between urban forms of social experience and retail development, and to provide a basis from which to generate their future unfolding, but also to articulate these relations with other material organisations such as those of ‘nature’ and technology. In his essay ‘The Politics of the Envelope’, Zaera-Polo presents his pursuit of such articulations as being informed by the *Dingpolitik* of Bruno Latour, who, he writes:

retrieves the Heideggerian notion of Ding (‘thing’ in German) to coin the neologism *Dingpolitik* as an alternative to *Realpolitik*. In the Latourian conception thing is an assemblage between humans and nonhumans, politics and nature as well as concerns and facts that is neither merely a natural object nor a socially constructed one, but an assemblage of both, the object and its attachments.⁷¹

At the Meydan complex this assemblage is configured through the design of building envelopes that collectively form an artificial topography of the sort FOA had also employed in other projects, such as in their Yokohama Port Terminal, their original masterplan for the site of the 2012 London Olympics 2012, and their Coastal Park in Barcelona. Here the same Deleuzian-inspired morphologies of smoothing and folding as were used in previous projects were now being filtered through Latour’s concept of *Dingpolitik* to form an assemblage of the natural and the social. Hence many of the building envelopes of the Meydan complex appear to emerge from

and return to the ground through a series of oblique planes suggestive of a quasi-geological formation as much as of architectural design. The terracotta-coloured paving and expanses of brickwork further reinforce the perception of the complex as one emerging from the ground, whilst the vegetation-planted roofs of the buildings intimate the topographic modulations of a landscape [figs.5,6]. These articulations were also intended to function programmatically so that the green roofs constitute another layer of circulation and access to the square, whilst also forming a public leisure space.



fig. 5. *Meydan Retail Complex*, Istanbul, Turkey: Foreign Office Architects, 2007: expanses of brickwork

A further assemblage of ‘humans and nonhumans, politics and nature’ was formed out of the relationship between the environmental management of the complex and its users. Rather than the contained and artificial environment usual in the large-scale out-of-town shopping mall, at the Meydan complex FOA used the architectural envelope as a means to mediate the existing environmental conditions—including tapping in to the geo-thermal energy below the site to provide for its ventilation, shade, shelter, lighting, and heating. Thus the complex was designed to function as a system which is permeable both to its immediate social *and* ‘natural’

environments, and as one that assembles each in dynamic relation to the other. As Zaera-Polo argues:

As public infrastructures become increasingly procured by the private sector, and the private sector becomes increasingly concerned with the public nature of retail developments, the degree of engagement between the flat-horizontal envelopes and the surrounding urban fabric intensifies. As flat-horizontal envelopes keep getting larger to provide for a burgeoning urban population and the consequent growth of consumers, goods and transient populations, an interesting dynamic powered by the contradiction between permeability and energy-efficiency emerges.⁷²



fig. 6. *Meydan Retail Complex*, Istanbul, Turkey: Foreign Office Architects, 2007: roofscape

Whereas FOA had once drawn a sharp distinction between materialism and politics that attempted to divorce the latter from the proper concerns of architecture, the political now reappears in their design as the ‘politics of the envelope’. The political is only readmitted to architecture, however, on condition that it does not refer to discourse, representation, ideology or critique, but instead to the organisation of matter and to the Latourian-inspired articulations of nature, culture, technology and environment which

architecture might be seen to assemble through its envelope. ‘We have focused’, writes Zaera-Polo, ‘on the envelope as an optimal domain to explore the politicization of architecture and, possibly, the development of a *Dingpolitik*.’⁷³

The politics of this so-called *Dingpolitik* are held to consist in their capacity for ‘making things public’⁷⁴—i.e. for bringing to light the hybrid assemblages from which ‘things’ are constituted within what Latour refers to as an ‘object-oriented democracy’.⁷⁵ According to Latour, this is how the material basis of what were thought to be purely ideological issues in the contemporary world is revealed, and where objects are afforded their rightful place as agentic forces within it:

Each object gathers around itself a different assembly of relevant parties. Each object triggers new occasions to passionately differ and dispute. Each object may also offer new ways of achieving closure without having to agree on much else. In other words, objects – taken as so many issues – bind all of us in ways that map out a public space profoundly different from what is usually recognized under the label of “the political”.⁷⁶

Latour is hence an especially useful ally for Zaera-Polo in the latter’s argument that the conception of the political in architecture needs to be shifted from its ideological, critical or representative definition toward one based upon the organisation of matter. Support for this position is drawn too from the work of the philosopher Peter Sloterdijk, a figure who, in his conception of space as a politics of ‘atmospheres’, and his concern with making explicit the connections through which these are produced, as well as his disavowal of the politics of critique, is particularly close to Latour. Of the relevance of Sloterdijk’s position to the pursuit of a ‘politics of the envelope’, Zaera-Polo writes:

As an alternative to ideology as a tool for a politically engaged architecture and utopia as its form of representation we have been testing an architecture of explication—to use the term coined by

Peter Sloterdijk—through the analysis of the architectural envelope. Within the model of *explicitation*, political practices are increasingly attached to artificial environments in which we live and with which we co-exist, where disciplines become the primary link between humans and non-humans, politics and nature.⁷⁷

THE MARKET FOR PROGRESS

The political potential of architecture is then located by Zaera-Polo within its disciplinary-specific practice and the capacity of the building envelope to organise the material relations—those existing between the ‘human and the non-humans, politics and nature’—within ‘open’ and ‘complex’ systems. Zaera-Polo further claims that it is only through this organisational practice that architecture can pursue a politics that is ‘progressive’. ‘The proposition here’, he writes, ‘is that progressive politics today is enabled through dynamic disequilibrium, not static evenness. Rather than a politics of indifference, independence and evenness, progressive politics promote connected unevenness, inducing difference and interdependence.’⁷⁸ The role of the envelope in this politics, he continues, is to perform an ‘architecture of *explicitation*’ which would be able to:

capture new political affects and processes of diversification, to communicate that certain manipulations of the ground and the roof index the politicization of nature, or to explain that the breakdown of the correlation between interior and exterior and private and public signals more advanced social structures.⁷⁹

What Zaera-Polo understands by the terms ‘progressive’ or ‘advanced’ is never itself made explicit. Yet it is obvious from the reformulation of the political being articulated here, that these terms are not intended to be identified with any leftist or socialist project, since those are elsewhere castigated as being anachronistic in their attachment to notions of critique and ideology. The ‘progressive’ would thus appear to be defined by Zaera-Polo in terms of an allegiance to a *Zeitgeist* which is itself defined in terms of a new materialism and a commitment to openness, complexity and

difference. Zaera-Polo further claims—and here his position is remarkably close to that of Patrik Schumacher—that the market is the mechanism through which ‘progressive’ values in architecture must be pursued since it is today ‘the most important medium of power distribution within the global economy.’⁸⁰ Not only is the market the ‘most important medium of power’, but, according to Zaera-Polo, it inherently tends, within its own logic, to break down hierarchical power into heterarchical forms. ‘We are witnessing’, he writes, ‘the emergence of a heterarchical order which increasingly constructs its power by both producing and using diversity.’⁸¹ Compared to older, rigidly bureaucratic and hierarchical forms of power, Zaera-Polo argues, the market ‘is probably a better milieu to articulate the current proliferation of political interests and the rise of *micro-politics*.’⁸²

Zaera-Polo’s identification of a ‘progressive’ architecture with market forces is, however, not expressed without reservations. Acknowledging the frequent criticism of the role of the private sector in urban redevelopment, he states: ‘One could argue that the privatization of the public realm by the retail sector on a planetary scale is a politically corrupt urban strategy in which large sectors of public space are given to profit-seeking operators.’⁸³ This acknowledgment is however immediately superseded by the introduction of a supra-political ‘eco-imperative’ overriding such concerns: ‘Yet as energy become [sic] a scarce resource,’ he continues, ‘we may reach a threshold where minimizing the building envelope may strongly favor the process of hybridization between the public and the private spheres.’⁸⁴ Zaera-Polo further claims that any architecture which achieves greater energy efficiency is *de facto* political in that it inevitably reduces levels of global conflict:

Fossil fuel energy sources, concentrated in selected areas of the globe, are a major source of geopolitical strife. When a building substantially reduces its energy consumption, it contributes to defusing global tension. In using renewable energy sources, a building reduces energy dependence and mitigates global warming. In order to do this it needs to engage local climatology and resources.⁸⁵

Hence the retail-led urban developments on which the services of FOA were engaged, such as the METRO Group in Istanbul or Hammerson PLC in Leicester and Southampton, are inherently politically progressive, according to the logic of this argument, since their architectural envelopes purport to enable the use of ‘renewable energy sources’. Even where this politics may currently be compromised by the facts of private ownership, ‘there is no reason’, contends Zaera-Polo, ‘why those spaces may not eventually revert to public ownership and management.’⁸⁶

Zaera-Polo’s argument, to summarise, is that architecture attains political agency—where the political is understood in terms of material organisations, that is—through the alignment of its practice with the current orientation of the market toward the breaking down of hierarchies, the production of diversity, and the creation of a micro-politics. By adopting this strategy, architecture can, through the medium of the building envelope, produce environments whose smoothing of the boundaries between inside and outside, and between the public and the private, are inherently productive of ‘progressive’ and ‘advanced social structures’. Furthermore, the ecological imperative to reduce climate change, and with it ‘global conflict’, which are served through the environmental performance of these envelopes, justifies in any case the privatisation of public space as a contingent necessity, at least in the short term.

For all his deference to the thought of Deleuze, as expressed in ‘The Politics of the Envelope’ and elsewhere, Zaera-Polo nowhere pauses to consider the challenge that the philosopher’s thesis concerning the emergence of a ‘control society’ presents to his arguments that the market, given its apparently anti-hierarchical and anti-bureaucratic tendencies, can be used as a conduit through which a progressive architecture can be channelled. In other words, Zaera-Polo does not address the question of how the movement from rigidly bureaucratic forms of state power toward more ‘open’, borderless and dispersed arrangements of social reality represents an

historical shift in the mode of power through which the capitalist axiomatic operates, and with greater effectivity, rather than an *escape from* this power as such—and that, as Deleuze postulated, the movement from a striated space to a smooth one does not deliver us from control but in fact extends its powers and its reach. Such a challenge could of course, be answered in advance if Zaera-Polo were to wholeheartedly adopt De Landa's position that global concepts such as capitalism, the state or society are merely remnants of an outmoded politics of ideology, critique and representation, and as such have no place in a properly materialist philosophy of 'social assemblages' formed from strictly local relations of influence. This position could not, however, fail to be profoundly ideological in attempting to disqualify and exclude from discourse those concepts—including ideology itself—which might reveal in whose interests social reality is currently organised, or the mechanisms through which these operate. Rather than dismiss Zaera-Polo's position as purely *ideological*, however, the architecture of FOA's retail-based developments will be analysed here, more usefully, as a specific *material practice* which, despite the spurious claims that it is orientated to the production of a progressive micro-politics, effectively operates as a molar practice which ultimately serves the interests of the social machine that Deleuze identifies as a society of control.

PRIVATISED SPACE AND THE REPRESSIVE HYPOTHESIS

The privatisation of public urban space, and the new regimes of control in which such urban spaces are implicated, has already received significant critical attention from both journalistic and academic quarters. In the former category, for instance, Anna Minton's *Ground Control: Fear and happiness in the twenty-first-century city* extensively documents the selling off of urban space to private developers whose own mechanisms of surveillance, security protocols and private security forces are now empowered to exclude undesirable individuals and undesirable behaviour—including photography, or the distribution of leaflets—from large areas of British cities such as London, Liverpool and Manchester.⁸⁷ As Minton and others have also

observed, the contemporary shopping centre is now more likely to be designed so as to appear as if it is in fact a public space, continuous with the streets and passages around it, than as a discretely contained suburban mall. But whereas Zaera-Polo describes the 'breakdown' between private and public as a sign of a 'more advanced social structure', Minton identifies such design strategies as the production of a duplicitous 'pseudo-public' space in which one unwittingly crosses the threshold into a privately controlled zone where one is then subject to its surveillance and behavioural protocols.

Such criticisms appear to have a direct bearing on the Meydan complex from whose green spaces and roofscapes visitors have been prohibited access. As David Keuning reported in an essay published in *Mark*, in 2008, 'Shopping Permitted: Meydan shopping mall in Istanbul, Turkey':

The complex may look like a carefully designed public space, yet nothing could be further from the truth. I notice this again as I attempt to climb one of the green hills and a guard call tells me off for the second time. 'It is definitely the idea that visitors can walk on the grass roofs,' Moussavi replies when I tell her about this, 'and it's strange that you were called back when climbing them. The same happened in Yokohama though. The undulating roof was intended to walk on, but soon after completion fences and notice boards appeared, saying that people were not allowed on some parts of the roof because of their personal safety. But people ignored them, even in Japan, and over time the notice boards disappeared again. Now anyone can go anywhere they want.'⁸⁸

Contrary to Moussavi's claims, visitors to the shopping complex attempting to occupy its green public spaces still find themselves reprimanded and moved on by the security guards.⁸⁹

From a more theoretically-elaborated perspective, Stephen Graham's *Cities Under Siege: The New Military Urbanism*, concurs with critiques such as those made by Minton, but also relates these directly to the notion of a Deleuzian control society:

The permeability of contemporary cities to transnational circulation means that systems of (attempted) electronic control—expanded to

match the transitional geographies of such circulation—become the new strategic architectures of city life. These increasingly supplant without completely replacing, the confined architectures or ‘disciplinary spaces’—prisons, schools, clinics, factories, workhouses, barracks—noted by Michel Foucault.⁹⁰

Such accounts of the methods of control to which citizens are increasingly subjected within new patterns of urban privatisation, and through new forms of urban development, offer a significant challenge to any notion that the market might form the means through which architecture could pursue a progressive agenda of the sort claimed by Zaera-Polo. The counter-danger is that these texts tend, however, to produce an analysis of contemporary urban developments which is biased toward what Foucault described, in another context, as a ‘repressive hypothesis’.⁹¹ Their complaint about the privatisation of urban public space is principally concerned, that is, with the ways in which it effectively restricts the movement of urban subjects, infringes upon their privacy, and proscribes certain behaviours. This repressive inflection is particularly evident in Minton’s *Ground Control*, for example, where the restrictive and controlled spaces of the privatised urban complexes of Britain and the US are compared negatively with the older piazzas and squares of many European cities which, it is implied, function more authentically as public spaces and allow their users the traditional freedoms of urban life. Hence the privatisation by the market of urban space, and the strictures this places upon the freedoms of the citizen are in such analyses appraised, somewhat simplistically and negatively, against a normative model of European urban space and its purported public functions.

GAMES WITHOUT FRONTIERS: ORDOLIBERALISM AND NEOLIBERALISM

For Foucault, and Deleuze and Guattari, however, normative models are not to be employed as a tool of critique but rather serve as its object—as is exemplified in the former’s account of the ‘docile body’ in *Discipline and Punish*, or in the latter’s attack on psychoanalysis’s oedipalisation of desire in

Anti-Oedipus. Power is not conceived in either instance simply as a means for the repression of the human subject's so-called natural dispositions, but as the power to produce, reproduce or remake dispositions which are always already historically constituted and never simply given. Hence a Deleuzian critique of the architectures of a society of control needs to understand the power of such architectures as one that is also productive, and to identify what the ends of that production might be, rather than attending only to what they proscribe. In this context the later work of Foucault on governmentality offers a useful supplement to Deleuze's own admittedly brief comments on control society.

With Foucault's first volume of *The History of Sexuality*, in which he critically addressed the repressive hypothesis in terms of sexuality, he began to reorientate the focus of his studies away from the concern with disciplinary society and toward a different conception of the relations between the subject and the state. As the Foucault scholar, Thomas Lemke, explains:

On the one hand, there is his interest in political rationalities and the 'genealogy of the state', that he investigates in a series of lectures, articles and interviews. On the other, there is a concentration on ethical questions and the 'genealogy of the subject', which is the theme of his book project on the 'History of Sexuality'.⁹²

The link between these two genealogies, continues Lemke, is to be found within the concept that Foucault terms 'governmentality':

Foucault coins the concept of 'governmentality' as a 'guideline' for the analysis he offers by way of historical reconstructions embracing a period starting from Ancient Greece through to modern neo-liberalism...The semantic linking of governing ('gouverner') and modes of thought ('mentalité') indicates that it is not possible to study the technologies of power without an analysis of the political rationality underpinning them.⁹³

Governmentality links the governing of the self to the governing of others, and thus the 'technologies of the self with technologies of domination.'⁹⁴

Of the ‘historical reconstructions’ produced by Foucault in his analyses of governmentality it is his remarks on twentieth-century variants of liberalism, made in lectures at the College de France in 1979, that are most pertinent here.⁹⁵ The insights that Foucault produced in these remarks suggest the possibility of identifying the architectural practice of FOA in projects such as the Meydan Retail Complex as being consistent with the project of neoliberalism. They further suggest the particular significance of the production and management of ‘environments’ as the means through which neoliberalism functions, and hence the significance of architectural design to this project. Finally, they clarify the function of such environments as the means with which to govern the conduct of the subject of these spaces as essentially being one which operates productively rather than through repression.

In Foucault’s genealogy of governmentality, German ‘ordoliberalism’ was identified as the immediate source for a series of propositions that were to be later developed and radicalised by American neoliberalism. Ordoliberalism originated in the work of the ‘Freiburg School’ of economics gathered around the journal *Ordo* between 1928 and 1930, including the figures of Wilhelm Röpke, Walter Eucken, Franz Böhm, Alexander Rüstow, and Alfred Müller-Armack.⁹⁶ The ideas of ordoliberalism, argued Foucault, were then promoted by this school, after the Second World War, as the governmental and economic bases that should underpin the new West German state. These ideas centred upon what Müller-Armack termed the creation of ‘the social market economy’,⁹⁷ which would be governed by a ‘*Gesellschaftspolitik*’ or ‘policy of society’ in which the regulation of the market would become the means for the regulation of society.⁹⁸ ‘Enterprise’ was thus positioned at the centre of the social, but not under the *laissez-faire* terms of earlier forms of economic liberalism. Rather the market, as the ‘regulator’ of society, should become responsible to society through a form of ‘*Vitalpolitik*’, such that it would compensate for, or ameliorate, the social conditions in which its

otherwise unchecked economic rationalisation would result. As Foucault explained:

the ordoliberal idea of making the enterprise the universally generalized social model functions in their analysis or program as a support to what they designate as the reconstruction of a set of what could be called ‘warm’ moral and cultural values which are presented precisely as antithetical to the ‘cold’ mechanism of competition. The enterprise schema involves acting so that the individual ... is not alienated from his work environment, from the time of his life; from his household, his family, and from the natural environment. It is a matter of reconstructing concrete points of anchorage around the individual which form what Rüstow, called the *Vitalpolitik*. The return to the enterprise is therefore at once an economic policy or a policy of the economization of the entire social field, of an extension of the economy to the entire social field, but at the same time a policy which presents itself or seeks to be a kind of *Vitalpolitik* with the function of compensating for what is cold, impassive, calculating, rational, and mechanical in the strictly economic game of competition.⁹⁹

As Lemke elaborates, ‘Ordo-liberals replace the conception of the economy as a domain of autonomous rules and laws by a concept of “economic order” ... as an object of social intervention and political regulation.’¹⁰⁰ The subject of this *Vitalpolitik* is supposed not to be absolutely subsumed to the logic of the market, to be merely the alienated instrument of its operations, but to find fulfillment in these as subjectivity itself becomes a matter of enterprise. This, as Foucault argued, demands, in turn, that the individual be able to move freely between different forms of social reality and experience:

The individual’s life must be lodged, not within a framework of a big enterprise like the firm or, if it comes to it, the state, but within the framework of a multiplicity of diverse enterprises connected up to and entangled with each other, enterprises which are in some way ready to hand for the individual, sufficiently limited in their scale for the individual’s actions, decisions, and choices to have meaningful and perceptible effects, and numerous enough for him not to be dependent on one alone. And finally, the individual’s life itself, with his relationships to his private property, for example, with his family, household, insurance, and retirement must make him into a sort of permanent and multiple enterprise.¹⁰¹

Foucault clearly identified here the departure from a disciplinary model of power which had traditionally operated directly upon the subject by means of repression, normalisation or exclusion towards one which bears striking similarities to the operation of a control society, whose arrival was to be announced some years later by Deleuze. Rather than acting through processes of confinement and normativity, power was now understood in terms of its capacity to multiply difference in open environments:

On the horizon of this analysis we see instead the image, idea, or theme-program of a society in which there is an optimization of systems of difference, in which the field is left open to fluctuating processes, in which minority individuals and practices are tolerated, in which action is brought to bear on the rules of the game rather than on the players, and finally in which there is an environmental type of intervention instead of the internal subjugation of individuals.¹⁰²

These ‘environmental’ types of intervention were not considered by Foucault as ‘controls’ in precisely the same sense as has since been interpreted in Deleuze’s remarks concerning societies of control.¹⁰³ They are not, as Foucault saw them, spaces of surveillance which simply expand the disciplinary panoptic beyond the walls of prison and out into society as a whole. Instead these environments are conceived within ordoliberalism and neoliberalism as producing a ‘framework’ for the individual which is ‘loose enough for him to be able to play’, and which are therefore laterally ‘open to unknowns and transversal phenomena.’¹⁰⁴

Within ordoliberalism, however, the expansion of the market into a social field of governmentality remains incomplete since, as Foucault observed, the state remains external to this environment, acting instead as a regulatory force upon it from without. Ordoliberalism is thus marked by a fundamental ambivalence since it imagines ‘a society for the market and a society against the market, a society oriented towards the market and a society that compensates for the effects of the market in the realm of values.’¹⁰⁵ Neoliberalism, in Foucault’s account, then succeeds in overcoming the

ambivalences of ordoliberalism through the radical extension of the market form throughout society so as to include governmentality itself:

American neo-liberalism evidently appears much more radical or much more complete and exhaustive. American neo-liberalism still involves, in fact, the generalization of the economic form of the market. It involves generalizing it throughout the social body and including the whole of the social system not usually conducted through or sanctioned by monetary exchanges.¹⁰⁶

Governmentality therefore no longer operates upon the market from without but becomes itself a matter of enterprise which operates through an extensive and continuous milieu. The criminal, for example, cannot be addressed as a pathological subject, but as someone who is no less concerned with enterprise than any other individual, and one whose behaviour could thus be addressed through the modulation of the milieu in which this concern might be pursued. Rather than being subjected to restraint, surveillance and correction within institutions set apart from everyday society, the criminal is now, as Foucault wrote, ‘considered to be “responsive” to possible gains and losses, which means that penal action must act on the interplay of gains and losses or, in other words, on the environment ...’¹⁰⁷

Although Foucault did not develop his analysis of environments explicitly in spatial, urban or architectural terms in the lectures at the College De France, it is not unreasonable—given his extensive studies of the spatial techniques of power elsewhere—to draw upon these to analyse the environments produced by contemporary architecture as techniques of and for neoliberal governmentality. Returning to FOA’s retail-based and mixed-use projects for which Zaera-Polo claimed ‘socially advanced’ status, these may then be approached as architectural environments whose inclusive permeability better serves a neoliberal agenda through the spatial generalisation of the market form, thereby expanding the exclusive and private enclosures of urban space which he claims to oppose in the name of the ‘progressive’.

CITIZEN-CONSUMERS

The Meydan Retail Complex is exemplary of the commercially-driven processes of urban transformation that have taken place in Istanbul since Turkey's economic conversion to the western free-market model in the 1980s. As a major force in this transformation, shopping malls—of which around 40 have been built since the first in the city in 1988—are generally financed through international investment and have served to steer the basis of the economy toward leisure, travel and tourism. In this same period the population of Istanbul has more than doubled to reach 13 million,¹⁰⁸ much of which has been absorbed into informal squatter settlements, or *gecekondular*, in which the city's dispossessed are crammed.¹⁰⁹ These squatter settlements are often the source of militant opposition to the displacement that mall-based developments produce when they are driven through these neighbourhoods as part of their continued expansion across the city. Istanbul is hence a city riven by social polarities that threaten to unsettle the economic stability on which further international financial investment depends. As Cihan Tuğal reports of the Ümraniye district, for example, in which the Meydan complex is located:

Istanbul's first Ikea and Media Markt were opened here. Transnational hypermarkets such as Carrefour and Real have been built and businesses like Bayer, Siemens and Citibank have set up their regional headquarters. Yet shopping malls and gated communities, chic restaurants and tennis clubs exist side-by-side with semi-rural lifestyles and impoverished Islamist-stronghold neighbourhoods, where calls to prayer from multiple mosques mingle with each other. Middle-class apartments look out on small plots of grass where women ... are grazing cows or washing carpets. Even if Ümraniye has left behind the signs of extreme poverty still visible in Sultanbeyli [another district in Istanbul]—schools without running water, unpaved roads—many residents still live in harsh conditions.¹¹⁰

As indicated above, the Metro Group, responsible for the Meydan development, framed their project in terms of a commitment to public access which is in contrast to the exclusive character of other malls. On the

company's webpage for the Meydan complex they write: 'The architecture of the shopping square also acts as a public space in the center of the rampant sea of houses in this district of the city. The urban planning concept picks up on the existing and predictable paths the residents will take to reach the site, and brings them to converge on the square.'¹¹¹ Such commitments to public space and open access, or at least their expression, can thus be understood in the context of the stark contrasts in wealth and access to urban infrastructures which are threatening to undermine the further development of Istanbul as a 'global city'. The strategy of the Metro group in Istanbul has been to position itself as an investor in socially-inclusive urban development rather than as a builder of consumerist enclaves for the upper-middle and middle classes. This strategy is also evident in the group's investment in the building and provision of a day care centre for the children of its workers in the garment district of Dhaka, Bangladesh, lauded by the German ambassador there as 'a most welcome display of social responsibility.'¹¹² The Metro Group are not alone in adopting this seemingly socially concerned approach to investment. Their direct counterparts in the UK, Tesco, have been committed for some time to financing the provision of public infrastructure as part of the 'package' with which its supermarkets are delivered, particularly in cases where towns and cities are supposed to be in need of regeneration.¹¹³ In Foucault's terms, such practices are exemplary of neoliberal governmentality in that private enterprise assumes responsibility for the regulation of society through the expansion of the market form throughout the social field. The aim of this governmentality is not to repress or exclude subjects regarded as problematic to its project, but to afford all access to the 'game' of the market as the means to appropriately modify their behaviour. In the case of Istanbul, its retail-led urban transformation therefore includes in its objectives the making of what Tuğal terms the 'urban citizen-consumer' in order to ameliorate the city's social and economic polarisation.¹¹⁴ Hence the development of a shopping complex such as Meydan there which presents itself both as a public space and a catalyst for urban residential growth, is

operating within the logic of neoliberal governmentality more effectively than a project whose presence only produces further conflict and patterns of exclusion.

THE ECO-IMPERATIVE

Zaera-Polo has in readiness against such arguments, however, a last line of defence for the politics of the envelope. Acknowledging that the handing over of urban space to private concerns may, after all, be undesirable, he argues that the permeability of the architectural envelope ultimately serves an ecological imperative which must, in the last instance, supersede all other concerns. If consensus cannot be found for architecture's servicing of the market economy, then surely it can be found for its ecological performance? Particularly where, as Zaera-Polo claims, energy-efficient design can be credited not only with reducing chemical emissions but also with easing global conflict.¹¹⁵

This argument is, however, flawed in the same fashion as the one that proposes that the market be used as a mechanism for the pursuit of a 'socially advanced' agenda. Ecological performance is not a concern independent of and extrinsic to neoliberal governmentality but one that has now been rendered intrinsic to its very functioning. In the progressive extension of the market form throughout society, concerns for 'the environment' have been incorporated within neoliberalism's wider environmental interventions as a means for its own legitimization. Every large-scale architectural project and urban regeneration scheme that loudly announces its 'green' credentials attempts to extend a public consensus on climate change to a consensus that its always imminently catastrophic effects are best managed through technocratic interventions of corporate urban development.¹¹⁶ Furthermore, the assemblages of nature, technology and society that FOA's building envelopes achieve in the Meydan complex are not the neutrally denotative acts of 'explicitation' or 'making things public' suggested by Zaera-Polo's allegiances to the post-critical thought of

Sloterdijk and Latour. FOA's architecture does not *reveal* an already given set of relations between 'humans, non-humans, politics and nature', but instead actively *produces* these relations in specific configurations endowed with a particular formal expression, and in the service of the market.

At the Meydan Retail Complex the close weaving of vegetated planes, earth-coloured brickwork, glazed façades and commercial signage, and the smooth fashion of their tectonic integration, implies a harmonious integration of nature, technology and commerce under the technocratic management of private enterprise. The futures of the natural, the social and the commercial are then 'explicitated' as being coextensive and unconflicted within an 'atmosphere' of enterprise.

Despite the claims made by Zaera-Polo and Moussavi to have superseded the anachronisms of signification, ideology and critique in their architecture, the Meydan complex works (or is at least designed to work)—through the experience and appearance of its built form—to communicate the desirability of corporate environmental management. This communication, operating as it is proposed to do, outside of a regular linguistic or semiotic code, works by pure connotation such that its message is not announced but suggested through the organisation of matter. Undeclared as a message, and claimed merely as the making explicit of already given facts, its operation is in fact profoundly ideological.

ENTERPRISE AND THE SUBJECT OF EDUCATION

It should not be thought, on the basis of the example of the Meydan complex, that neoliberal governmentality is solely, or even primarily, directed toward the social universalisation of consumerism. As Foucault makes clear, the generalisation of the market form is not principally directed toward the production of a consumer society, but toward one more generally founded upon enterprise:

The society regulated by reference to the market that the neo-liberals are thinking about is a society in which the regulatory principle should not be so much the exchange of commodities as the mechanisms of competition. It is these mechanisms that should have the greatest possible surface and depth and should also occupy the greatest possible volume in society. This means that what is sought is not a society subject to the commodity-effect, but a society subject to the dynamic of competition. Not a supermarket society, but an enterprise society. The *homo economicus* sought after is not the man of exchange or man the consumer; he is the man of enterprise and production.¹¹⁷

Hence it is not the exchange of commodities, claims Foucault, but the production of a competitive subjectivity, a *homo economicus*, and the volumetric expansion of an environment accommodating the mechanisms of enterprise, which are the goals of neoliberal governmentality. Both Foucault and Deleuze understood the new modes of power that emerged in the late-twentieth century as being dependent upon the production of a space open to transversal movement: for Foucault, ‘the framework of a multiplicity of diverse enterprises connected up to and entangled with each other’, for Deleuze, ‘inseparable variations, forming a system of variable geometry’. The ‘dynamic of competition’ demands an environment in which enterprise, and enterprising subjects, are given free reign to pursue their interests. Hence all of the former ‘spaces of enclosure’—the prison, the school, the hospital—must be rendered permeable to the market. Education, for example, is not only to be modelled upon the competitive realm of enterprise but also to be made continuous with it. In this regard, FOA’s design for Ravensbourne digital media and design college, advised upon by DEGW as space planners, on the Greenwich Peninsula in London, exemplifies in an advanced form the reshaping of education as an environment coextensive with enterprise [fig.7].

RAVENSBOURNE: LEARNING 2.0

Ravensbourne’s relocation to the Greenwich Peninsula in 2010 was designed to facilitate and reinforce its institutional adoption of a ‘flexible learning

agenda'.¹¹⁸ According to this agenda, the 'vision' for the new Ravensbourne college was to be one where 'space, technology and time will work together to create a new and flexible learning landscape that will support ongoing expansion and change, as well as narrowing the gap between an education and industry experience.'¹¹⁹ The adoption of 'flexible learning' was in turn driven by broader developments in higher education in Britain whereby the Department of Education and Skills and the Higher Education Funding Council for England had recommended the development of 'blended learning strategies' in universities.¹²⁰ 'Blended learning', according to Bliuc *et al*, 'describes learning activities that involve a systematic combination of co-present (face-to-face) interactions and technologically-mediated interactions between students, teachers and learning resources.'¹²¹ These 'learning activities' are more flexible and better accommodated to the needs of the contemporary student than conventional approaches, it is argued, since they enable and incorporate access to electronic learning resources, within a 'virtual learning environment', that exists outside of the regulated times and spaces of the traditional educational institution. Blended learning is considered flexible not only because it enables the student to 'time-shift' their education to a time and place of their own choosing, but because it responds to their existing priorities and predispositions, as described by DEGW in their 'User Brief for the New Learning Landscape':

The ability and motivation of students to learn has changed and will change further as economic pressures compound the effects of new media and new attitudes to learning. Today's students assimilate knowledge vicariously from broadcast and interactive media and through practical application rather than formally from books and many are easily bored by traditional teaching with little visual content. Some lack basic transferable skills in communication, group-working and written English. Most expect time-shifted delivery of learning to accommodate the part-time work that helps them manage student debt. Rapid acquisition of fashionable, marketable skills or commitments to intense personal interests (e.g. bands) can take priority over formal achievements in an academic discipline. Future students are likely to rank educational institutions by their ability to deliver employment and to accommodate diverse approaches to learning.¹²²



fig. 7. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010

Ravensbourne College has therefore sought not only to use digital media as a support mechanism for traditional learning methods, but as a means to interpellate the student and their practice within market-based forms of enterprise and competition. In the internal report on the college's 'Designs for Learning Project', its authors argue that '[w]ithin an academic environment, practice takes place in a vacuum, or, rather, an endlessly self-reflecting hall of mirrors.'¹²³ Insulated from the 'creative dialectic between creator and client (or public) that exists in the "real world"' students are said to problematically 'overvalue individual artistic or creative input, rather than the negotiated creativity of the marketplace'.¹²⁴ Students of Ravensbourne are thus required to adopt 'web 2.0 values' and use online social networks and blogging in their projects as a means to mediate 'a renewed connection with the audience, or consumers, of creative products.'¹²⁵ This practice, it is proposed, should become 'a normative component of creative education.'¹²⁶ Perfectly exemplifying the neoliberal extension of the market form throughout the social field, as well as the 'inseparable variations' of a control

society, student practice is thus to be released from the artificial enclosure of the ‘hall of mirrors’—in which the value of creativity was given within a purely educational context—into a new environment where its worth can now be valorised according to the terms and ‘realities’ of the market, and through which can be established a continuous feedback loop informing its future development.

As much as the market is now posited as the environment through which education is to be modulated, the process of education, in a complimentary movement, is proposed as a source of ideas and creativity valuable to the market and its own development. DEGW, for example, argued that the new Ravensbourne should operate as part-college, concerned with teaching and learning, part-lab, focused on experimentation and development, and as part-hub, offering new ideas and services to the market.¹²⁷ Located on the Greenwich Peninsula, in close proximity to new commercial and business development projects, Ravensbourne was envisaged not only as a receptacle for the surrounding environment’s enterprise-based values but also as a contributor to the local ‘knowledge economy’, and thereby as a catalyst for ‘urban regeneration’.¹²⁸

Whilst the connections, mediations and feedback loops between education and enterprise proposed in this model rely on digital media as their channels of communication in a so-called ‘virtual’ space, the modulation of the physical space of Ravensbourne College also plays a critical role in their realisation. The conventional college building and the university campus have been refigured in the discourse of DEGW as a ‘Learning Landscape’, whose description—in its reference to the connective qualities of landscape and the informal encounters of the urban—echoes the approach to networked spatial production produced by Zaha Hadid for BMW at Leipzig:

The Learning Landscape is the total context for students’ learning experiences and the diverse landscape of learning settings available today—from specialized to multipurpose, from formal to informal,

and from physical to virtual. The goal of the Learning Landscape approach is to acknowledge this richness and maximize encounters among people, places, and ideas, just as a vibrant urban environment does. Applying a learner-centered approach, campuses need to be conceived as “networks” of places for learning, discovery, and discourse between students, faculty, staff, and the wider community.¹²⁹

Following this model, architecture is then employed to produce the spatial complement of a ‘learning landscape’ which is designed around patterns of circulation, connectivity and informality. In the specific case of Ravensbourne College, FOA’s architecture is designed both to articulate the building’s interior as an atmosphere that will inculcate in the student the requisite connective, flexible and informal modes of conduct, and also to render the building permeable to its surrounding environment as a mechanism for the integration of education and business.

THE ‘LEARNING LANDSCAPE’ AND THE ‘UNIVERS-CITY’

According to the taxonomy of building envelopes proposed by Zaera-Polo in his ‘Politics of the Envelope’, the Meydan complex is of the ‘flat-horizontal’ or ‘ $X=Y>Z$ ’ type. FOA’s Ravensbourne College, in contrast, appears to fall broadly under the category of ‘spherical’ or ‘ $X=Y=Z$ ’, as described thus:

Spherical envelopes generally enclose a wide range of spatial types with specific functions, rather than being determined by the provision of a repetitive spatial condition, as in residential or commercial projects. Unlike other envelope types in which the border between public and private occurs on the surface of the container, the spherical type often contains gradients of publicness within. Spherical envelopes often correspond to public buildings, buildings that gather a multiplicity of spaces rather than a repetitive type of space: city halls, court houses, libraries, museums, indoor sports facilities, etc.¹³⁰

In plan, Ravensbourne College is a chevron-shaped block whose form responds to the outer curvature of the O2 (former Millennium Dome) building to which it lies adjacent [fig.8]. The main entrance is situated at the junction of the building’s two ostensible wings, and opens out onto one of its

large internal atria [figs.9,10,11]. This quasi-public space is intended as a bridge between the urban environment and activities of the Greenwich Peninsula and the college itself. Rather than one being met immediately upon entry by the kind of reception and security areas that clearly mark the thresholds of other educational institutions, here the visitor encounters an informal space which includes a ‘meet and greet’, area, a delicatessen and an ‘event’ space hosting public displays and exhibitions.

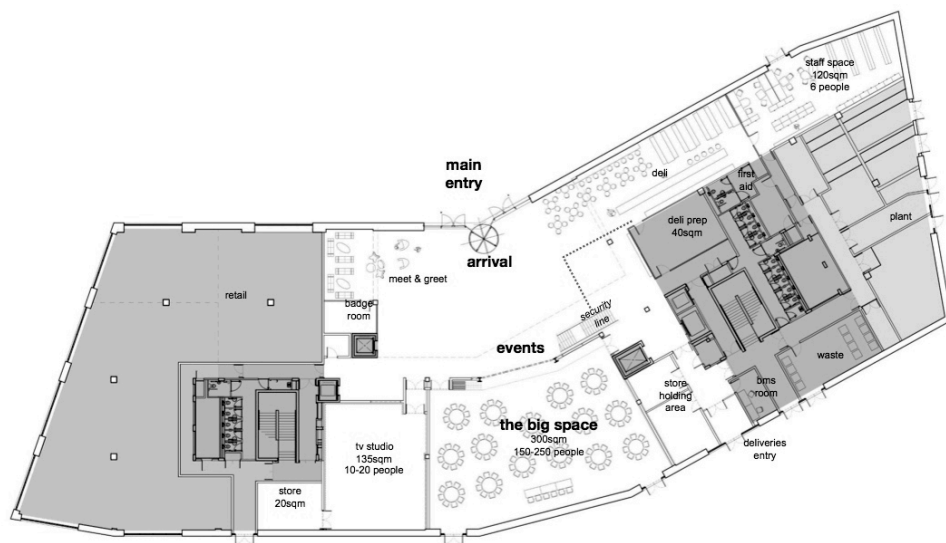


fig. 8. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: level 00

This internal atrium space, combined with the environment immediately exterior to it, constitutes what DEG—in their account of ‘univer-cities’ such as Ravensbourne—describe as a ‘third place’, which exists between home and work, and combines ‘shopping, learning, meeting, playing, transport, socialising, playing, walking, living...’¹³¹ A place then in which the activities of the market appear indissoluble from those of urban life, entertainment and education.

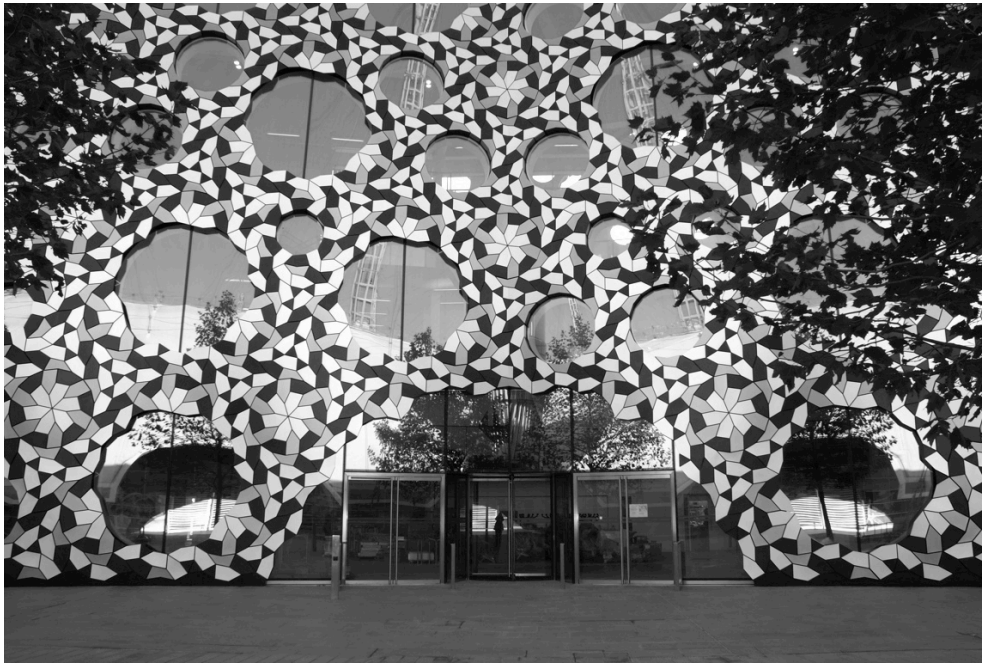


fig. 9. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: main entrance



fig. 10. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: public atrium



fig. 11. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: public atrium

From the atrium the successive floor levels of the college and the bridges spanning its two wings are exposed as if they were a cut-away section of a more conventional building. Rather than being enclosed in stairwells or embedded between a series of rooms, wire mesh-sided stairways and passages are spread into the atrium [fig.12]. These elements form a complex series of crossings and intersections at mezzanine levels whose dynamics are further animated by the movements of the building's occupants. Hence an image is presented to visitors within the public atrium of the college as a hive of activity and movement whilst, to its students and staff, the scene affords a motivational image of the public, or 'market', within which the creativity and value of their work has always to be negotiated. In this sense Ravensbourne offers an articulation of the 'gradients of publicness' to which Zaera-Polo refers and also of the 'creative dialectic between creator and client'.



fig. 12. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: stairways

The building's circulation is designed not only to serve as an image of movement, but to organise that movement according to a principle of

connective liquefaction. Ascent through the buildings floors, for example, is staggered across its two wings so as to accentuate the condition of movement over that of static occupation. As Zaera-Polo explains: ‘The idea is to produce a smoother change of plane, to liquefy the volume of the building so you don’t have this notion of being on the third floor or the fourth floor. You are always in between floors.’¹³² The plans for several of the building’s integrated levels also reveal this liquefaction of volume within the large floor and undivided floor spans [figs.13,14]. Differentiated only by mobile partitions, the arrangement of teaching studios and open-access studios zoned within these spaces suggest a degree of informal exchange and the integration of programmes within a continuously mobile and flexible whole.

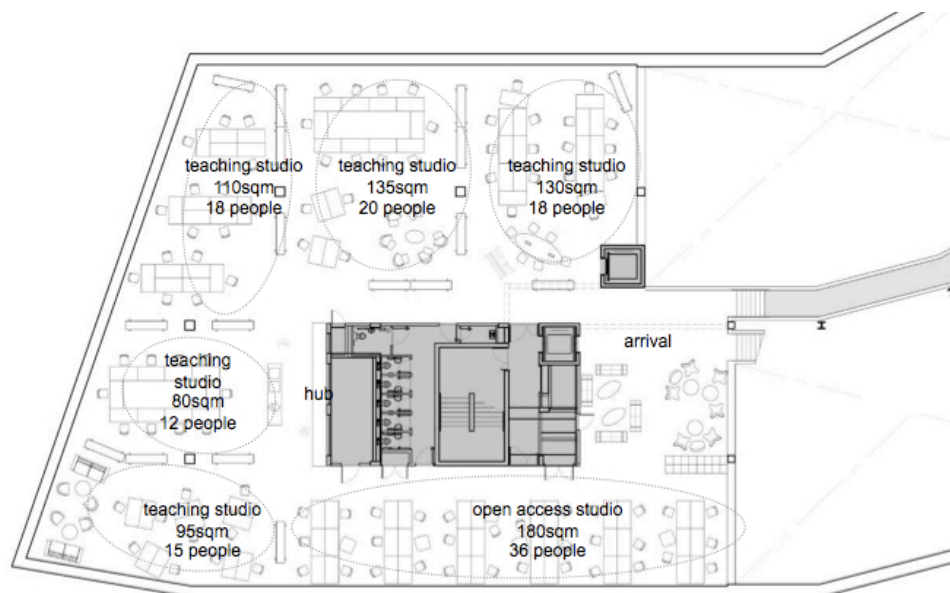


fig. 13. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: level 3a

Whilst a small number of programmatic elements are allocated spaces clearly demarcated as discrete areas within the building, the overarching principle of internal organisation is designed to preclude the establishment of any fixed patterns of occupation or the identification of certain spaces with specific programmes. This principle of deterritorialisation is consistent with the spatial concepts proposed by DEGW as appropriate to the ‘university’: ‘Traditional categories of space are becoming less meaningful as space

becomes less specialized, [and] boundaries blur ... Space types [should be] designed primarily around patterns of human interaction rather than specific needs of particular departments, disciplines or technologies.’¹³³ Lecturers, for instance, are not provided with their own private or fixed office space, but are required to use available space in open-plan offices on an *ad hoc* basis.

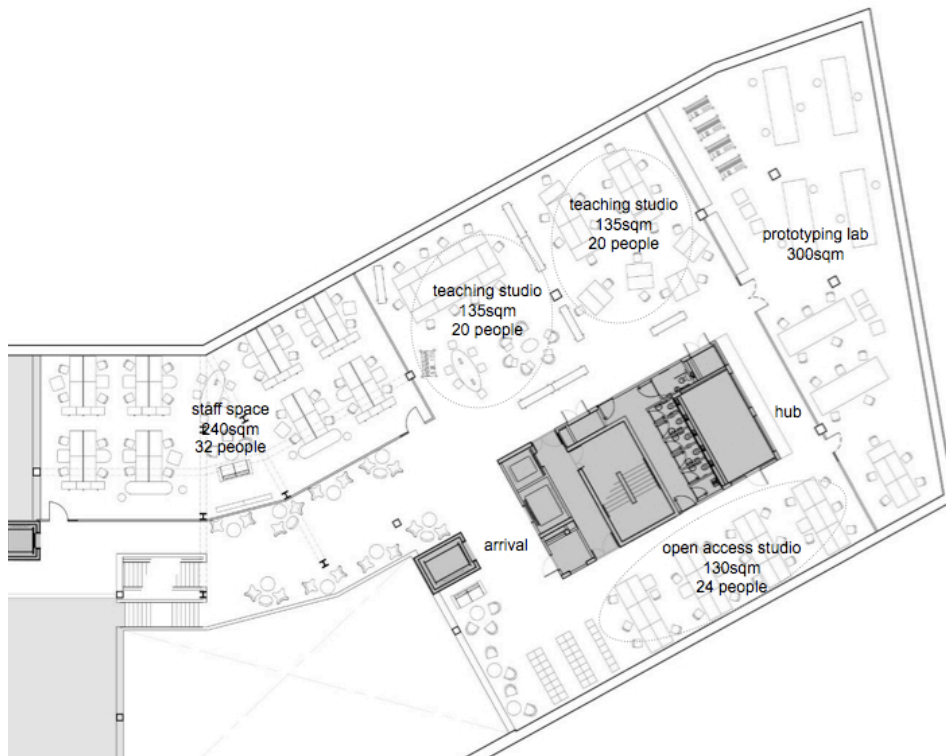


fig. 14. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: level 4b

The organisational diagram of Ravensbourne then reflects that of other spaces designed to accommodate the mechanisms of a control society in which, as Mark Fisher has argued in his *Capitalist Realism*, “Flexibility”, “nomadism” and “spontaneity” are the very hallmarks of management,’¹³⁴ and indeed the Ravensbourne college’s head of architecture, Layton Reid, has stated that he wants his students to behave as “intelligent nomads”.¹³⁵ As with the Central Building of BMW Leipzig, the ‘Learning Landscape’ becomes one in which circulation, encounter and interaction are privileged so as to maximise communicational exchange as a source of value. Also

conforming to the paradigm exemplified at BMW Leipzig, or in other contemporary office spaces, this internal ‘landscape’ is modelled after the urban environment with its intersecting activities and multiple opportunities for encounter and exchange. Critically, it is, of course, the idealised model of the urban, as the networked and extensive environment of the market form, —rather than as a space, say, of social contestation—that is reproduced within Ravensbourne. At the same time, and in contrast to the self-contained and replicant urbanism of BMW Leipzig, this urban mimesis is intended to render the building functionally coextensive with its immediate environment. The relationship between the two environments, between interior and exterior, is therefore figured as symbiotic rather than substitutive: whilst the market is introjected within the space of the building—the business ventures of students are to be ‘incubated’ and ‘hatched’ within its architecture¹³⁶—the image of market-negotiated creativity is projected outward as a source of ideas and services for business.

Ravensbourne’s organisational diagram is also, however, modelled after the ‘virtual’ space of web-surfing, blogging and social networking—web 2.0 software—that students are required to navigate as the means to valorise their creativity in market terms. Circulation within networks, flexible movement across and between activities, opportunistic exchange, engagement in multiple projects and self-promotion, are seen as the normative standards of ‘online’ conduct that are to find their correlation within the physical space of the college. In both the wings of Ravensbourne College, and in moving between them, the student is to be, just as Foucault described the ideal subject of neoliberalism, ‘an entrepreneur of himself’.¹³⁷

Spatially continuous with the business of its urban environment and analogous in operation to the ‘virtual’ spaces of enterprise, the architecture of Ravensbourne college then positions the subject of education within an environment whose behavioural protocols further extend the reach of the market form throughout the social field. In fact the architecture of the

college seems designed to facilitate the realisation of the very model of education in a society of control whose emergence Deleuze warned of:

One can envisage education becoming less and less a closed site differentiated from the workspace as another closed site, but both disappearing and giving way to frightful continual training, to continual monitoring of worker-schoolkids or bureaucrat-students.¹³⁸

Yet it is also on the outer surface of the ‘spherical envelope’, as well as its interior, with its ‘gradients of publicness’, that Zaera-Polo locates the potential for architecture’s political performance. The ‘spherical envelope’, it is claimed, has ‘representational demands’¹³⁹ placed upon it which offer architecture the potential to produce a ‘politics’ built upon the Deleuzoguattarian concepts of affect and faciality.

FACIALITY AND AFFECT

Recent developments in building technology, argues Zaera-Polo, have relieved the architectural envelope of certain of its traditional elements. ‘Freed from the technical constraints that previously required cornices, pediments, corners and fenestration,’ he writes, ‘the articulation of the spherical envelope has become increasingly contingent and indeterminate.’¹⁴⁰ Citing, as examples of this new tendency, ‘Nouvel’s unbuilt, yet influential Tokyo Opera, Gehry’s Guggenheim Museum, Future Systems’ Selfridges Department Store, OMA’s Seattle Public Library and Casa da Musica and Herzog & de Meuron’s Prada Tokyo’,¹⁴¹ Zaera-Polo contends that the envelope has now become an ‘infinitely pliable’ surface which is ‘charged with architectural, social and political expression.’¹⁴² The features of this ‘expressive’ surface, such as geometry and tessellation, have now, he continues, ‘taken over the representational roles that were previously trusted to architectural language and iconographies.’¹⁴³ Hence, architectural expression need no longer be channeled through the historical codes of its traditional modes of articulation—such as pediments, cornices, and

fenestration—but can operate through the supposedly uncoded formal, geometric and tectonic means specific to each particular building envelope. This newly discovered expressive capacity of the envelope coincides historically, claims Zaera-Polo, with a post-linguistic orientation within global capitalism: ‘As language becomes politically ineffective in the wake of globalization, and the traditional articulations of the building envelope become technically redundant, the envelope’s own physicality, its fabrication and materiality, attract representational roles.’¹⁴⁴ Drawing directly upon Deleuze and Guattari’s concept of ‘faciality,’¹⁴⁵ he models this shift of the envelope as a movement from ‘language and signification’ toward a ‘differential faciality which resists traditional protocols in which representational mechanisms can be precisely oriented and structured.’¹⁴⁶ Furthermore, this faciality is claimed as a political capacity for the surface of the envelope, but one that operates ‘without getting caught in the negative project of the critical tradition or in the use of architecture as a mere representation of politics.’¹⁴⁷ Rather, this faciality operates through *affect*:

the primary depository of contemporary architectural expression – is now invested in the production of affects, an uncoded, pre-linguistic form of identity that transcends the propositional logic of political rhetorics. These rely on the material organization of the membrane, where the articulation between the parts and the whole is not only a result of technical constraints but also a resonance with the articulation between the individual and the collective, and therefore a mechanism of political expression.¹⁴⁸

This ‘politics of affect’, as Zaera-Polo terms it, and its ‘differential faciality’, are deemed by him to be apposite to contemporary social reality not only because they accommodate its supposed post-linguistic turn, but due to their capacity to articulate the changed social relations between the part and the whole, the individual and the social, by which it is organised. As has been elaborated above, these relations are now considered, by Zaera-Polo, to be principally heterarchical as opposed to hierarchical—i.e. they are to be characterised by Latour’s ‘assemblages’ and Sloterdijk’s ‘atmospheres’, where ‘the articulation between individual and society, part and whole, is

drawn by influences and attachments across positions, agencies and scales that transcend both the individuality of the part and the integrity of the whole.’¹⁴⁹ Whereas the use of *modular* systems in architecture, under modernism, corresponded to an ideal of democracy in which the part was prioritised, as an independent variable, over the whole, *differential* faciality claims to represent their now more complex, interdependent and mutable relations.

Affect has also been assigned this representational privilege, following a similar argument to that of Zaera-Polo, by Farshid Moussavi in her *The Function of Form*.¹⁵⁰ Arguing that the contemporary city is now no longer defined by a single culture (and thus suggesting the highly dubious proposition that it *had* been so up until now), but is a space where ‘novel subcultures and identities are constantly emerging,’¹⁵¹ she argues that:

Architecture can no longer afford to structure itself as an instrument that either reaffirms or resists a single, static idea of culture. Instruments (codes, symbols, languages, etc.) simply repeat without variation. As a function rather than an instrument of contemporary culture, architectural forms need to vary in order to address its plurality and mutability.¹⁵²

Given that that this supposedly new condition is defined by multiplicity and multiculturalism, Moussavi then argues that the use of language, or any coded form of mediation, is rendered redundant since one can no longer presume the ‘universal fluency’ of architecture’s ‘audience’. Thus ‘[a]ttempts to relate built forms and people through an external medium are therefore destined to remain marginal and ineffectual.’¹⁵³ Architectural form, unmediated by any established cultural or historical codes, is then assigned the task of communicating with the ‘molecular nature of contemporary reality’.

Moussavi, like Zaera-Polo, has identified changes within capitalism as key to the development of architectural forms capable of addressing the ‘plurality

and mutability' of this reality. 'No longer exclusively an homogenizing force,' she writes, 'capitalism now contributes to the production of difference and novelty.'¹⁵⁴ Citing with approval examples such as Ragú Spaghetti Sauce, Starbucks and Volkswagen as sources of mass-customisation, product differentiation and novel hybridity, whilst also suggesting that phenomena such as these might indicate a challenge to Platonic idealism, she argues that architecture should pursue the same means in its own development of novel forms. Her position echoes that of Zaera-Polo here too in the argument that architecture can use this market-based model of development for ends other than those of the market itself. 'The fundamental challenge for architects and other producers of culture' she writes, 'is to imbue the production of forms with a diversity of goals and causes which are not solely market-driven, thereby contributing to an environment that connects individuals to multitude [sic] of choices.'¹⁵⁵

In turning to the question of exactly how it is that novel architectural forms might 'perform as a multiplicity', which is adequate to a post-linguistic, mutable and pluralistic social reality, Moussavi has also turned to Deleuze, albeit focusing directly on his accounts of affect and affection, rather than on those of faciality:

The perception of an architectural form involves two stages. First, an affect is transmitted by a form. This affect is then processed by the senses to produce unique affections — thoughts, feelings, emotions and moods. As an affect can unfold into different affections or interpretations in different beings, it embeds a form with ability to be perceived in multiple ways. Through the agency of spatial affects, in each instance an architectural form performs as a singular multiplicity — as a "function" that connects human beings to their environment as well as each other. albeit in different ways. In order to explore forms as multiplicities, designers need to focus on their affective functions.¹⁵⁶

FOA's Yokohama Port Terminal [figs.1,2] is offered by Moussavi as an example of an architecture that 'performs' as a multiplicity. The shifting sectional profile and variable geometry of this complex form are said to

result in ‘multiple percepts and affects’, including those of ‘flatness’, ‘pleating’, ‘openness’, ‘axiality’, ‘efficiency’, ‘diagonality’, ‘asymmetry’, ‘purposefulness’, ‘landscape’, ‘valley’ and ‘mountain’. These affects and percepts are held to ensure, in their variety and proliferation, that ‘the terminal is not reducible to a single interpretation or meaning.’ Since the individual’s perception of novel architectural forms—those supposed to ‘perform’ through affect alone, and making no use of linguistically-coded elements—is, she argues, conditioned by his or her particular experience, ‘the reception is inevitably different in each case, and therefore multiple.’¹⁵⁷



fig.15. *Spanish Pavilion*, Aichi, Japan: Foreign Office Architects, 20005: façade detailing

In a more formalistic sense, what are especially indicative for Zaera-Polo of the affective capacity of the envelope as a form of contemporary political expression, are the ‘emerging envelope geometries’ which ‘seem to be exploring modular differentiation as a political effect and developing alternative forms of tessellation capable of addressing emerging political forms.’¹⁵⁸ These forms of tessellation are, in turn, exemplified for him in certain of FOA’s projects, such as the Spanish Pavilion for Aichi in Japan in 2005, and their Ravensbourne College building, whose ‘modular

differentiation' is held to produce an 'atomisation of the face', a 'seamlessness' and a 'body without organs' that is expressive of 'changes in intensity rather than figures of organisation' [figs.15,16].¹⁵⁹ These geometries are supposed to have bypassed the linguistically-coded representations upon which both hierarchical social orders, and their critiques, are based, and to have arrived at a post-linguistic form of expression which is appropriate to a newly post-ideological historical condition. Expressive of this putatively heterarchical order, the once strict organisations of part-to-whole relations are now dissolved into modulations of intensity corresponding to the paradigm of the swarm, and this then represented in the envelopes of buildings which 'produce affects of effacement, liquefaction, de-striation.'¹⁶⁰

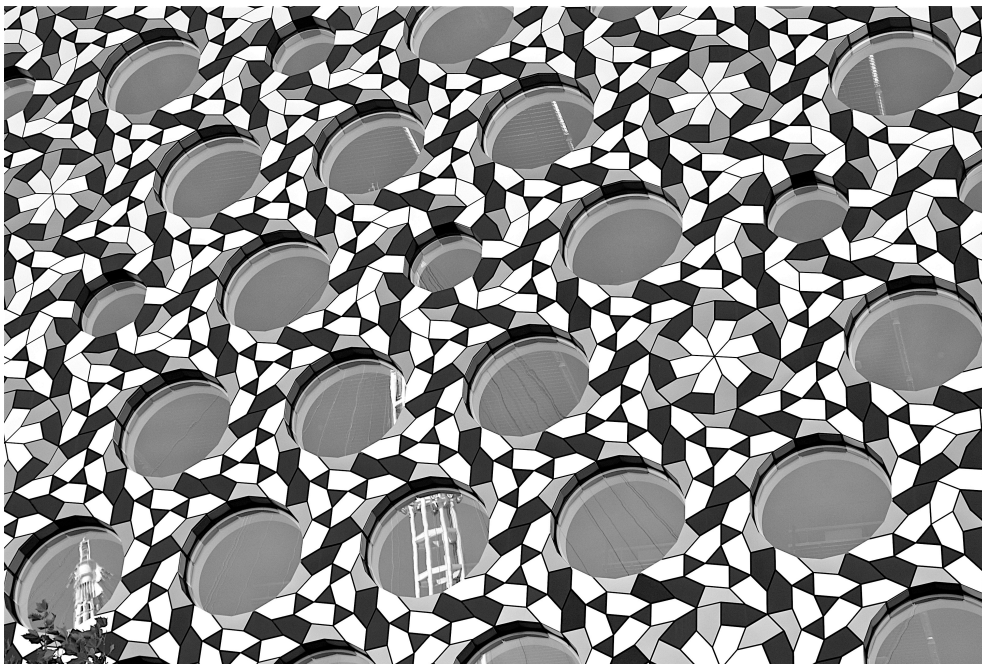


fig. 16. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: façade detailing

The envelope is then, for both Zaera-Polo and Moussavi, a form of political expression which addresses the multitudinous, differentiated and 'molecular' character of contemporary reality. Moreover, rather than being mediated through signs and codes—understood, that is, through intellectual acts of reference and interpretation—the communication of these politics is

supposed to be immediate and purely affective. Argued to be following Deleuze in its propositions, the communication between the envelope and the individual is held to be ‘prepersonal’, and thus ‘transmitted by empathy between material organisations’.¹⁶¹ It is, however, precisely this investment in faciality and affect, with its attendant claim to have rendered redundant the role of critique, that itself requires critique in order that its politics be properly explicated.

THE WHITE WALL/BLACK HOLE SYSTEM

Zaera-Polo’s recruitment of Deleuze and Guattari’s concept of faciality involves a significant distortion of the philosophers’ original formulation. In ‘Year Zero: Faciality’ (the chapter in *A Thousand Plateaus* where this concept is developed), faciality is nowhere conceived as being post-representational, post-signifying, purely affective or as having the capacity to operate as such through some modulation of its functions (such as is suggested, for example, through what Zaera-Polo, without clarification, terms a ‘differential faciality’). On the contrary, faciality is posited by Deleuze and Guattari as the intersection of two semiotic systems, those of signification and subjectification, which forms a ‘white wall/black hole system’.¹⁶² By this they understand the ‘white wall’ as the surface upon which significance is inscribed and the ‘black hole’ the gravitational field through which the subject is captured and constituted as such:

Faces are not basically individual; they define zones of frequency or probability, delimit a field that neutralizes in advance any expressions or connections unamenable to the appropriate significations. Similarly, the form of subjectivity, whether consciousness or passion, would remain absolutely empty if faces did not form loci of resonance that select the sensed or mental reality and make it conform in advance to a dominant reality.¹⁶³

As a semiotic system for the production of conformity, faciality is, for Deleuze and Guattari, in its very essence, opposed to the expression of any deviation from the form of subjectification associated with a specific

‘assemblage of power’. Whilst the *form* of subjectification is variable according to the assemblage with which it is to conform—despotic or Christian, for example—the goal of faciality as a system is always, they write, to ‘crush all polyvocality’.¹⁶⁴ Hence the term ‘differential faciality’, as is used by Zaera-Polo, is in fact oxymoronic. Nor can any faciality produce a ‘body without organs’, since, again, the two concepts are diametrically opposed within *A Thousand Plateaus*. The face, argue Deleuze and Guattari, is an ‘overcoding’ which inscribes its semiotic order on the ‘animality’ of the body and the head:

The head, even the human head, is not necessarily a face. The face is produced only when the head ceases to be a part of the body, when it ceases to have a multidimensional polyvocal corporeal code—when the body, head included, has been decoded and has to be overcoded by something we shall call the Face.¹⁶⁵

The body without organs, they continue, with its ‘polyvocal’ corporeality, can only be realised when the face is ‘destroyed’.¹⁶⁶

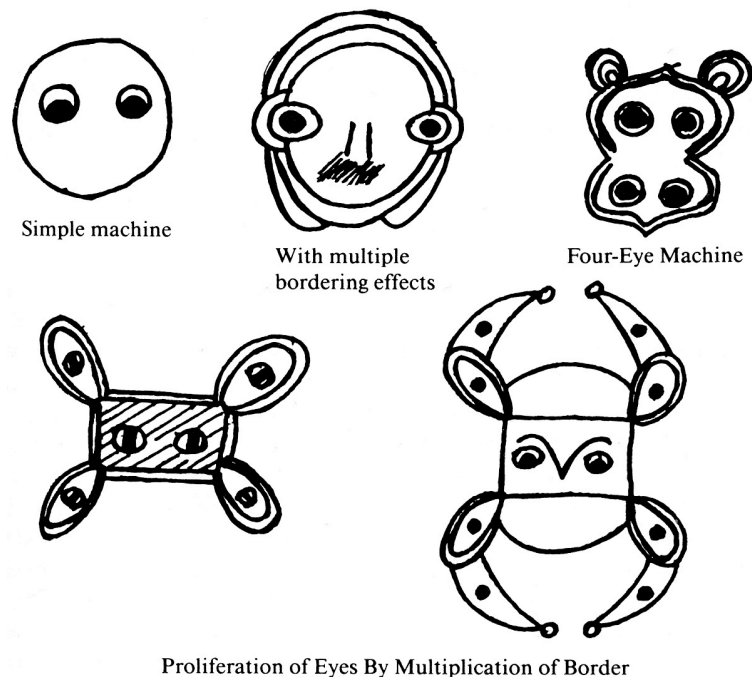


fig.17. *Terrestrial Signifying Despotic Face*, illustration from Deleuze and Guattari,

Understood as a semiotic mechanism for the production of normative modes of signification and subjectification, it is possible, however, that there is, after all, a faciality at work in the architecture of FOA, but not in the difference-valorising or post-linguistic sense in which they themselves misleadingly gloss its operation. This possibility is suggested if one compares, for example, the façade of FOA's Ravensbourne College with the illustration of the 'Terrestrial Signifying Despotic Face' employed within *A Thousand Plateaus*. Here the 'proliferation of eyes' and 'multiple bordering effects' appear echoed, on the façade, in the distribution of multiple circular windows—reading as 'eyes'/black holes—across a 'white wall' densely inscribed with linear and planar elements through which their presence is articulated. Rather than signalling, as Zaera-Polo would have it of such façades, the 'demise of the primitive figures of building *faciality*—the *white wall/black hole system* in Deleuzian terms', the Ravensbourne façade might be understood as itself a white wall/black hole system, but one whose formal articulation is now modulated for an assemblage of power in which the hive-mind of the swarm has become the orthodox form of subjectivity around which signification now gravitates. The pursuit of such a reading, however, risks reproducing the too-literal equation of faciality with the façade postulated by Zaera-Polo, and in order to more effectively critique the politics of such claims for architectural expression it is the question of affect that must be focused upon.

The account of affect that Zaera-Polo and Moussavi present, within their own discourse, at least appears to accord with the treatment of this term by Deleuze and Guattari. In *What is Philosophy?* the concept of affect is identified as a kind of *modus operandi* proper to art. Where science operates with logic, and philosophy is assigned the role of conceptual production, art is said by them to operate outside of any referential or conceptual realm as a 'being of sensation' whose capacity for affect resides in its immediate

materiality:

We paint, sculpt, compose and write with sensations. We paint, sculpt, compose and write sensations. As percepts, sensations are not perceptions referring to an object (reference): if they resemble something it is with a resemblance produced with their own methods; and the smile on the canvas is made solely with colors, lines, shadow, and light ... sensation refers only to its material: it is the percept of affect of the material itself ...¹⁶⁷

Deleuze and Guattari define affect therefore as the experience of ‘indetermination, of indiscernability, as if things, beasts and persons ... endlessly reach that point that immediately precedes their natural differentiation.’¹⁶⁸ Affect is then, as Zaera-Polo phrases it, ‘prepersonal’ and produced, according to Deleuze and Guattari, through a relationship of ‘extreme contiguity’. Hence Zaera-Polo’s proposition that the affective quality of the architectural envelope is ‘transmitted by empathy between material organisations’, or Moussavi’s that ‘the agency of spatial affects’ in architectural form perform ‘as a “function” that connects human beings to their environment’, are clearly derived from the treatment of affect presented in *What is Philosophy?*² Their proposition, however, that affect *alone* can function as a *politics*—and that it should replace all referential, linguistic or critical modes of political expression—is not, however, attributable to Deleuze and Guattari.¹⁶⁹

AFFECT AND TRUTH CONTENT

To posit a politics of pure affect is to propose that the contents of its expression cannot be grasped by thought. Any distance between subject and political expression, and hence any space in which this might be reflected upon, conceptually or critically, through a shared language, is eliminated. The social subject is thus reduced to a mere ‘material organisation’ whose affective capacities are immediately joined to those of an environment with which it is supposed to identify at some pre-cognitive level. The architect and theorist Ross Adams has commented that such ambitions in architecture

are ‘little more than the spatial compliment of an advanced neo-liberal project of creating a subject who, having fully accepted reality, has only to give himself over to his senses, immersing himself in an architecture of affect.’¹⁷⁰ The politics of affect in architecture also speak of a fantasy of control, of the possibility of an environmental steering where architects might pre-programme buildings with designs known—or supposed to be known—to yield specific forms of affect upon non-reflective subjects. This fantasy of architecture as kind of unmediated signal-processing appears, for example, in the ‘matrix’ diagram produced in Moussavi’s book, *The Function of Form* in which the articulation of architectural forms and systems are strictly correlated with the specific modes of affect in which they are held to result [fig.13]. It can also be seen in Zaera-Polo’s claim that ‘the politics of affect bypass the rational filter of political dialectic to appeal directly to physical sensation.’¹⁷¹

Treated as a means to an end in this way, affect becomes reified and is turned to a use opposite to that suggested by Deleuze and Guattari: rather than a path toward the deterritorialisation of subject positions imposed by a molar order, affect is to serve instead to reterritorialise the subject within an environment governed by neoliberal imperatives.

Still, such ambitions remain largely based upon the fantasy of ‘pure affect’. As Adorno proposed in his *Aesthetic Theory* (in an argument which would challenge the account of art offered by Deleuze and Guattari, as well as that of Zaera-Polo and Moussavi), all perception necessarily involves, although is not reducible to, reflection and conceptualisation: ‘Not *knowing* what one sees or hears bestows no privileged direct relation to works but instead makes their perception impossible. Consciousness is not a layer in a hierarchy built over perception; rather all elements of aesthetic experience are reciprocal [my emphasis].’¹⁷² Perception, for Adorno, always involves a dialectical movement between sensory reception and intellectual reflection upon that

reception; a conscious awareness of form and its movement is always co-present to the experience of form, rather than being a superfluous production ‘after the fact’ of aesthetic experience. Further, that process of reflection serves as the basis for the interpretation of what Adorno terms the ‘truth content’ of a work, by which is meant not the ‘truth’ of the artist’s intentions but an historical or spiritual truth sedimented within, but not identical to, the empirical givenness of the work.¹⁷³

Adorno’s concept of truth content is particularly apposite here since he suggests that a work’s abstraction should offer no barrier to its interpretation, and also that this interpretation might be extended beyond the realm of art to other, more everyday, objects of experience: ‘Ultimately, perhaps, even carpets, ornaments, all non-figural things longingly await their interpretation.’¹⁷⁴ Grasping the truth content of works of art, or everyday objects, Adorno continues, ‘postulates critique’. Hence, whilst FOA may claim to have transcended the representational codes of architectural language in their works, these are not, on this account, necessarily placed, as a consequence, beyond interpretation or critique. In fact, the Ravensbourne façade can readily be interpreted as a set of conceptual propositions which emerge as its truth content through the mediation of its formal and material elaboration. Truth content should not be understood, however, simply as referring to an accurate reflection or true consciousness of the “real” historical state of things. It may be, for example, as suggested by Adorno, that a work is ‘true’, ‘as the expression of a consciousness that is false in itself.’¹⁷⁵ It is in this fashion that one might understand the truth content of FOA’s design for the façade of Ravensbourne College, as the expression, that is, of an ideal understood to be, or presented as, a truth. In this sense this architecture can also be understood, as was Hadid’s for BMW, as a contemporary form of *reklamearchitektur* (advertising architecture), which acts to publicise the organisational models operative at Ravensbourne.

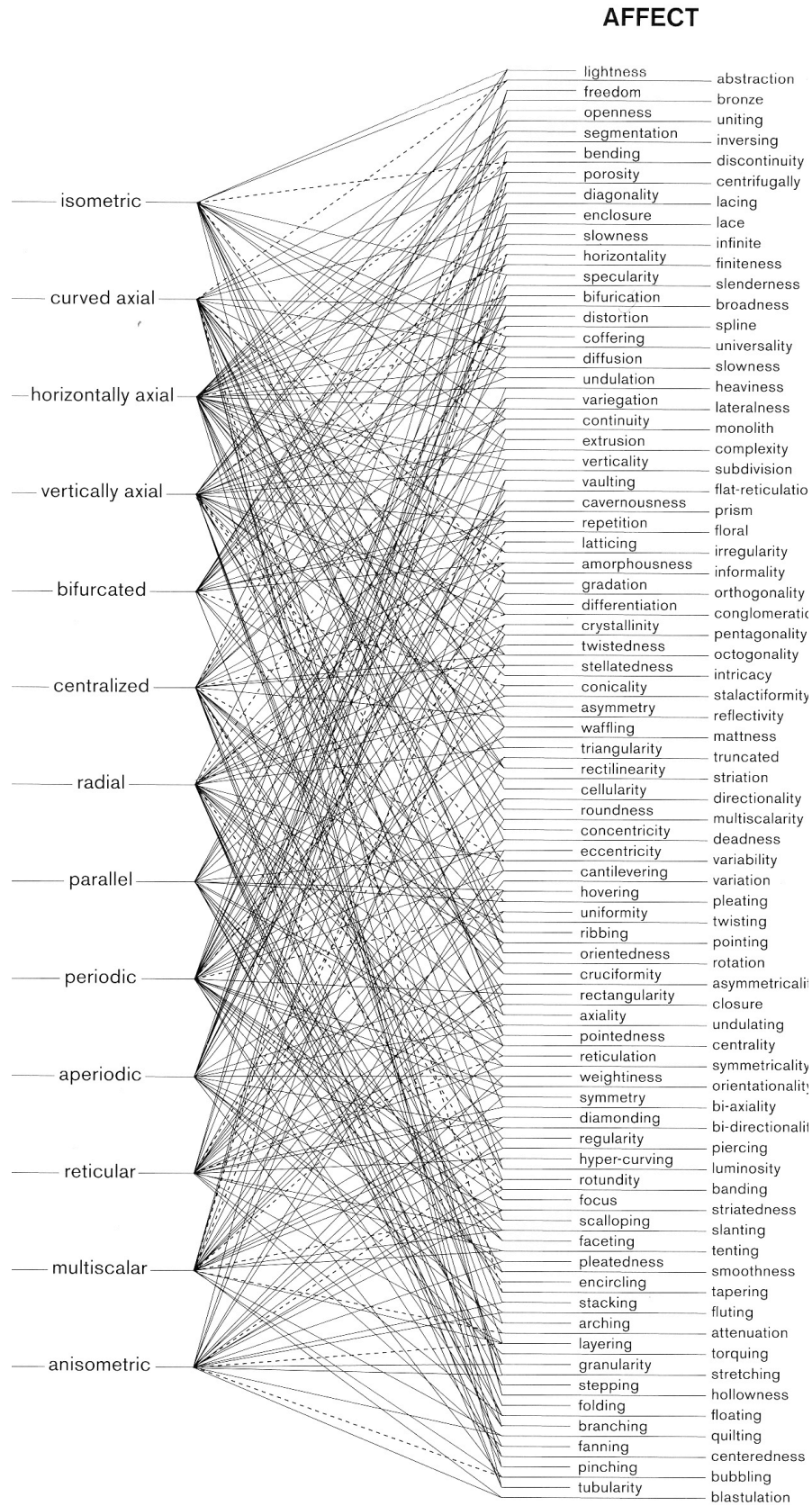


fig.18. *Matrix*, (detail) from Farshid Moussavi, *The Function of Form*

Rather than articulating the building's interior organisation, the façade of Ravensbourne College expresses a principle of organisation consistent with the connective imperatives intended to be facilitated by its architecture [figs. 19 & 20]. The smaller openings on the façade, for instance, are clustered within a hexagrid arrangement, resembling the structure of a honeycomb or an insect's compound eye, which is again connotative of both the swarm model privileged in contemporary organisational discourse, and also the notion of the college as a space in which businesses can be 'incubated' and 'hatched'. At the same time, the profusion of differently-scaled circular openings distributed across the architectural surface implies a sponge-like porosity appropriately resonant with the concept of the building as being permeable to the activities of its immediate environment. Whilst the distribution of the fenestration connotes models of connectivity and openness, it does so while suggesting an appropriately informal application of these principles. Close inspection of the façade does reveal certain moments of symmetry, repetition and alignment, but the overall impression is one of spontaneous punctuation rather than rigid adherence to a strictly defined grid. Hence the organisational principles of the institution are expressed as freely constituted rather than as inflexibly imposed.

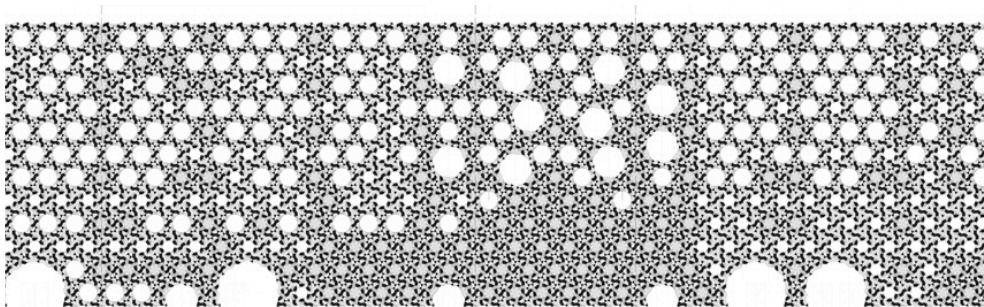


fig. 19. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: façade detailing: south elevation

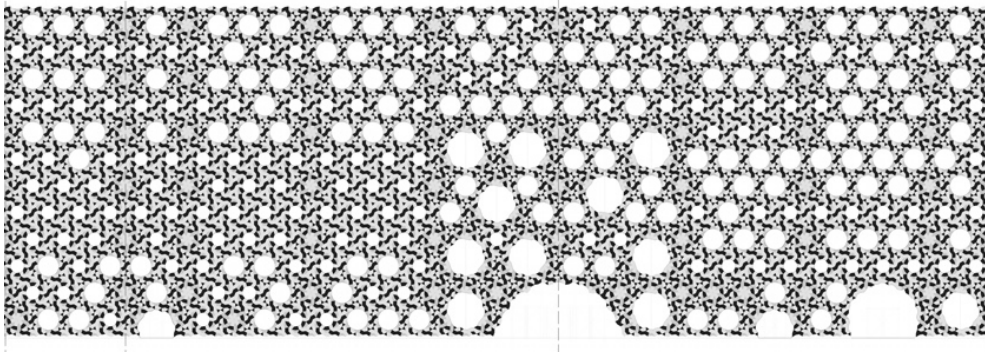


fig. 20. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: façade detailing: north elevation

The tiling of the façade is similarly expressive of organisational concepts, such the production of a coherent whole through the interaction of smaller parts [fig. 21]. Composed from a limited palette of shapes and tones, the tessellation pattern unifies the surface whilst implying the cell-like or molecular basis of its emergence through supposedly ‘bottom-up’ processes. Hence the conceptual tropes of ‘self-organisation’ and networked connectivity are valorised through the geometric expression of their productive capacities and the visual coherence of the pattern’s proliferation.

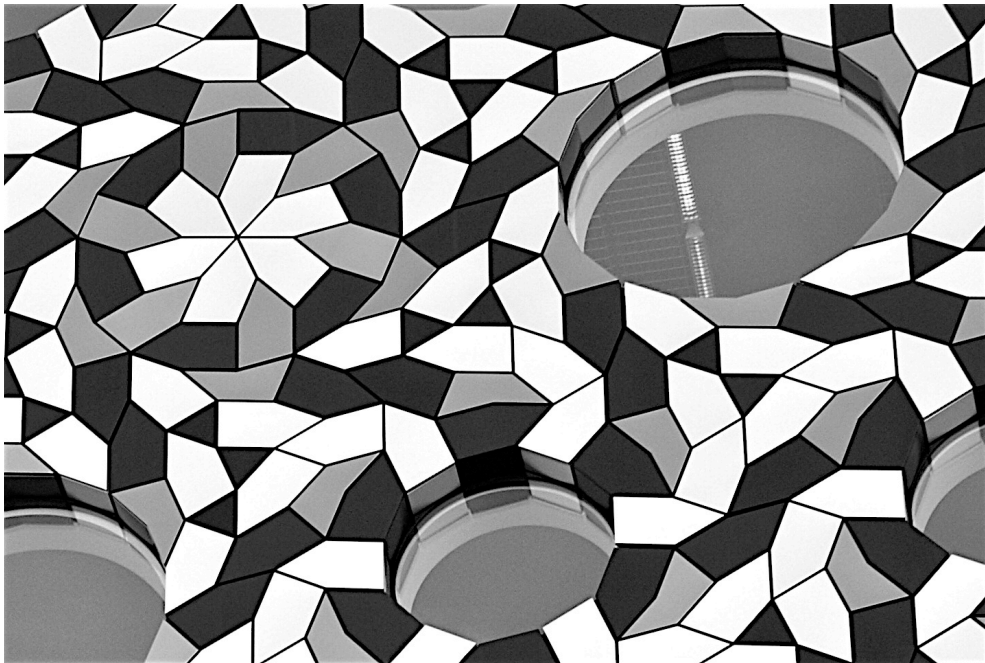


fig. 21. *Ravensbourne College*, Greenwich, London: Foreign Office Architects, 2010: façade detailing: tiling detail

Whereas the external envelope of Hadid's Central Building for BMW appeared as an elevated plan of its organisational circuits, and the smooth fashioning of their movements, the façade of Ravensbourne College appears as a cross-section revealing the relations of contiguity through which these circuits are composed, and their capacity to produce cohesion whilst accommodating multiplicity.

The composition of the Ravensbourne façade is, however, no less a matter of top-down control and decision making than is involved in any conventional act of architectural design. Whilst the tessellation of the tiles may include, as Zaera-Polo claims, an element of self-computation, the decision to use a tessellating pattern is one consciously made, as too are the decisions concerning the distribution of the fenestration. These are not, of course, solely the decisions of an autonomously operating architect, but ones mediated through negotiation and consultation with a client that was concerned to produce a new model of design education, modelled on network principles, in order to facilitate its thorough permeation with the mechanisms of the market. It is not this 'truth'—i.e. the mediation of education by the market, and the organisational principles through which it operates—that is expressed upon the surface of Ravensbourne's envelope to form its 'content', however. Rather its truth content resides in passing this mediation off as being unmediated, as a merely 'emergent' process akin to, and at one with, those which are to be found in the self-organising materials and geometries of a world whose 'complexity' is itself presented as given.

CONCLUSION

The dogmatic materialism of architectural Deleuzism, with its insistence on the ontological primacy of what it calls material organisations, and its disavowal of signs, ideas and concepts, has significant implications for both the practice of architecture and its conceptualisation of the contexts in which it operates. For FOA, this putative materialism—which, through its

emphatic assertion, actually turns out to be a form of idealism—suggests that there is no molar order, no ideological or hierarchically positioned power which is organising matter for its own ends, but simply a self-organising and localised molecularity. This conception is then taken to prescribe that architecture's role is to organise matter, by which is understood both architecture itself, and the social and natural systems with which it engages. It is through this organisational role, claims Zaera-Polo, that architecture acquires a political agency which can serve an agenda defined as 'progressive' and 'advanced'.

This investment in material organisation is however related to a longer-term cybernetic project, one orientated toward the production of self-governing social systems in which order, control and productivity result from the environmentally-conditioned interactions of subjects defined as little more than signal-processors. The pathologisation of reflective, conceptual and critical thought is common both to cybernetic models of governance and architectural Deleuzism. Far from liberating the subject from idealism, the putative materialism of architectural Deleuzism obscures, through the denial of its existence, the presence of a molar order, in the form of the capitalist axiomatic, which aims to produce and direct contemporary assemblages of nature, society and technology, as its own instruments.

Coinciding with the birth of cybernetics, the critique of capitalist rationality produced by Adorno and Horkheimer, in their *Dialectic of Enlightenment*, remains pertinent to any critique of contemporary organisational power and its instrumental production of subjectivity. Their account of the attempt of this rationality to strip the subject of any reflective or critical capacities, to render the subject its pure instrument, echoes in the cybernetic aspirations of an architecture aiming to engage with its subjects as a swarm-modelled collective of material organisations. Also significant in their account of instrumental rationality is the description of its embeddedness within the environments of everyday experience, as is suggested in Horkheimer's

reflection upon the experience of driving in the modern city. This suggests, contra the argument that hierarchical power has simply been overturned today by a liberatory heterarchical order, that instrumental rationality is now positioned throughout the social and experiential field. The archaic master/slave paradigm of power is replaced by one in which power is environmentally distributed and systemically operative, but no less instrumental in its objectives. Zaera-Polo and Moussavi's 'politics of affect', with its aspiration to programme architecture with forms designed to elicit specific and pre-determined responses in post-linguistic subjects, perfectly exemplifies the ideals of environmentally embedded modes of steering and governance.

Foucault's analysis of neoliberal governmentality shares with Adorno and Horkheimer's account of instrumental rationality, as well as with Deleuze's control society thesis, a concern with the environmental distribution and exercise of power. However, it also addresses the *object* of this power in far more specific terms than either of these. Power is not conceived primarily through the abstract terms of domination and instrumentalisation with which Adorno and Horkheimer were concerned, nor, as was the concern of Deleuze, with reference to its morphology and performance. Drawing upon his genealogies of ordoliberalism and neoliberalism, Foucault identified its goal as the extension of the market form throughout the social field, such that the processes of capitalist valorisation become simultaneously the mechanisms for the guidance of all aspects of social conduct. His model of neoliberal governmentality is then especially useful in the analysis of concrete instances of architectural practice, such as FOA's Meydan Retail Complex and their Ravensbourne College. In both cases, through an analysis of the specific points and contexts in which neoliberal governmentality employs architecture to extend its permeation of the entire social field, the architectures with which FOA suppose themselves to be pursuing an agenda beyond that of the market are revealed to be absolutely consistent with the development of that market.

Architectures such as those considered here function *within* neoliberal governmentality as its organisational and representational instruments: they serve to produce environments which are open to difference and transversal connections in which enterprise can thrive as a mechanism of both valorisation and control. Zaera-Polo is correct then to claim that the building envelope is political but deceived in the belief that this is a power that architecture might exercise *through* the market for its own ends—as if this market were simply a locally-constituted and self-organising force whose anti-hierarchical tendencies could be used to achieve the progressive goals of architects. The market is not a neutral channel but a mode of governmentality which aims, globally, toward the production of ‘open’ environments in which all are immersed in its game of enterprise. It is thus difficult to conceive of how any architecture which makes strategic allegiance with the market, and at the same time so vehemently disavows the practice of critique, can be ‘advanced’ or ‘progressive’—other than to the extent that it advances or progresses the cause of the generalisation of the market form itself.

¹ The practice was established in 1993, but closed, during the writing of this chapter, in 2011. Alejandro Zaera-Polo has set up his own practice, AZPA (Alejandro Zaera-Polo Architects), as has Farshid Moussavi, with her FMA (Farshid Moussavi Architecture).

² Whilst I shall address the writings of both Zaera-Polo and Moussavi in this chapter, much greater attention is given to those of the former, given his far greater published output within the field of architectural theory.

³ Alejandro Zaera-Polo ‘The Politics of the Envelope’, *Volume #17*, Fall 2008, p. 86.

⁴ Alejandro Zaera-Polo and Farshid Moussavi, ‘Phylogenesis: FOA’s Ark’ in Farshid Moussavi, Alejandro Zaera-Polo, and Sanford Kwinter, *Phylogenesis: FOA’s Ark*, Barcelona: Actar, 2003, p. 10.

⁵ Alejandro Zaera-Polo and Farshid Moussavi, in Fernando Márquez Cecilia and Richard Levene (eds), *El Croquis 115/116 [I], Complexity and Consistency: Foreign Office Architects. 1996 2003*, Madrid, 2003, p. 15.

⁶ Alejandro Zaera-Polo and Farshid Moussavi, ‘FOA Code Remix 2000’, in *2G International Architectural Review: Foreign Office Architects*, no. 16, 2000/IV, p. 122.

⁷ Alejandro Zaera-Polo, interviewed by Vladimir Belogolovsky for Intercontinental Curatorial Project Inc. 2005. accessed 21 June, 2010, at <<http://www.curatorialproject.com/interviews/alexandrozaeraZaera-Polo.html>>.

⁸ Kipnis, op. cit., (2001), p. 18. The contrivance of this opposition also occludes the fact that both Deleuze and Guattari *were* concerned with analysing the work of signs and codes within much of their philosophy.

⁹ Kipnis, op. cit., (2004), p. 578.

¹⁰ Ibid., pp. 569-70.

¹¹ Ibid., pp. 571.

¹² Ibid., pp. 572.

¹³ John Mullarkey, 'Deleuze and Materialism: One or Several Matters?' in *A Deleuzian Century?*, Ian Buchanan (ed), Durham and London: Duke University Press, 1999, p. 443.

¹⁴ Kipnis's assertion that meaning is to be excluded from a proper understanding of the essence of matter may also be contradicted from a number of other important perspectives that cannot be afforded sufficient space here. It should suffice to note, however, that in the thought of Gregory Bateson, a polymathic figure to whose work Deleuze and Guattari were significantly indebted, any strict division between matter and meaning did not hold true. As Jon Goodbun has written, one of the most notable contributions by Bateson to transdisciplinary thought is 'his argument that—in a real and important sense—all material processes themselves are semiotic.' Jon Goodbun, *The Architecture of the Extended Mind: Towards a Critical Urban Ecology*, Aldershot: Ashgate, 2013 (forthcoming).

Furthermore, the quantum physicist David Bohm, as with others in this field, such as Niels Bohr, disputed the very possibility of the kind of 'bottom line' basis to reality from which, as Kipnis implies, some essential truth about the universe might be extrapolated. Bohm, in particular, theorised that matter and meaning constituted something analogous to the two indivisible poles of a magnetic field in his model of 'soma-significance'. David Bohm, 'Soma-Significance and the Activity of Meaning (1985)' in Lee Nichol (ed), *The Essential David Bohm*, London: Routledge, 2003, pp. 158-182.

¹⁵ See 'The Molecular Unconscious', in Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem and Helen R. Lane, New York: Viking Press, 1977, pp. 283-95.

¹⁶ Brian Massumi, *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari*, Cambridge, MA: MIT, 1992, pp. 54-55.

¹⁷ Gilles Deleuze and Félix Guattari, 'Capitalism: A Very Special Delirium,' in *Chaosophy*, Félix Guattari, Sylvère Lotringer (ed), Los Angeles, CA: Semiotext(e), 1995, p. 56.

¹⁸ For a more extensive critique of DeLanda's de-Marxification of Deleuze and Guattari than can be offered within the space of this text, see Eliot Albert, 'A Thousand Marxes', in *Mute*, Autumn 1998, accessed 8 July, 2010, at <<http://www.metamute.org/en/A-Thousand-Marxes>>.

¹⁹ Manuel DeLanda, 'Deleuzian Interrogations: A Conversation with Manuel De Landa, John Protevi and Torkild Thanem,' accessed, 8 July, 2010, at <<http://www.difference.org/DeLanda-Protevi.pdf>>.

²⁰ Ibid., This is most likely an allusion to David Hume's use of the collision of billiard balls to illustrate his arguments concerning cause and effect within his *An Enquiry Concerning Human Understanding*, Oxford and New York: Oxford University Press, 2000 (1748).

²¹ Deleuze and Guattari (1997), op. cit., p. 233.

²² See, for example, Alejandro Zaera-Polo 'The Politics of the Envelope', *Volume #17*, Fall 2008, where he writes: 'The emerging social structures theorized by De Landa, using Deleuze's theory of assemblages, to posit trans-scalar social entities from sub-individual to transnational that characterize globalized societies and their heterogeneous populations are coincident descriptions of emerging forms of social and political organization that cannot be expressed by modular grids. Assemblages are non-essentialist, historically contingent actual entities (not instances of ideal forms) and non-totalizing (not seamless totalities but collections of heterogeneous components). In these emerging social assemblages, individuals, groups and other possible actants are primarily defined by relations of exteriority and need to engage with different assemblages without losing their identity. The relationship between an assemblage and its components is complex and non-linear: assemblages are formed and affected by heterogeneous populations of lower-level assemblages, but may also act back upon these components, imposing restraints or adaptations in them.' p. 90. And: 'As Manuel De Landa states, it may be necessary to entirely replace the term Capitalism by the terms markets and antimarkets in order to be able to address the complexity of the current system of economic integration'. p. 100n.

²³ Ibid., p. 101.

²⁴ Isabelle Stengers and Ilya Prigogine, with a forward by Alvin Toffler, *Order out of Chaos: Man's New Dialogue with Nature*, Toronto/New York: Bantam Books, 1984.

²⁵ Alejandro Zaera-Polo, 'Order out of chaos: The material organization of advanced capitalism', in *Architectural Design Profile*, 1994, 108, pp. 24–29.

²⁶ Ibid., p. 25.

²⁷ Ibid., p. 26.

²⁸ Ibid., p. 28.

²⁹ Ibid., p. 25.

³⁰ Ibid., p. 28.

³¹ Zaera-Polo (2008), op. cit.

³² Ibid., p. 103.

³³ Simon Jarvis, 'Adorno, Marx, Materialism', in *The Cambridge Companion to Adorno*, Tom Huhn (ed), Cambridge and New York, Cambridge University Press, 2004, p. 80.

³⁴ Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, fifth edition, Cambridge, MA: Harvard University Press, 2008 (1941).

³⁵ Ibid., p. 14.

³⁶ Ibid., p. 22.

³⁷ Zaera-Polo (2008), op. cit. p. 80.

³⁸ In arguing that cybernetics be understood as a *project of governance*, with complexity as merely the model through which it currently understands its object, there is some danger of implying that all work and thought within the field of cybernetics is essentially defined by this technocratic project. I do not believe this to be the case, I would like to clarify, and, as Jon Goodbun has described at length, there is also a 'maverick' tradition of cybernetics and cyberneticians whose work has operated outside of, and in some ways against, the military and corporate interests with which this field is more conventionally associated. Jon Goodbun (2013), op. cit.

³⁹ Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. John Cumming, London: Verso, 1979.

⁴⁰ Borrowing the phrase from Friedrich Schiller, Max Weber wrote, in his essay 'Science as Vocation', that 'The fate of our times is characterized by rationalization and intellectualization and, above all, by the "disenchantment of the world"'. *From Max Weber: Essays in Sociology*, trans. H. H. Gerth and C. Wright Mills (eds), New York: Oxford University Press, 1946, p. 155.

⁴¹ Adorno and Horkheimer, op. cit., p. 3.

- 42 Ibid., p. 4.
- 43 Max Horkheimer, *Eclipse of Reason*, London/New York: Continuum, 1974, p. 64.
- 44 Stengers and Prigogine, op. cit.
- 45 Isabelle Stengers, 'Complexity: A Fad?', in Isabelle Stengers, *Power and Invention: Situating Science*, trans. Paul Bains, Minneapolis and London: University of Minnesota Press, 1997 p. 3.
- 46 Stengers and Prigogine, op. cit., p. 38.
- 47 Ibid.
- 48 Norbert Wiener, *Cybernetics*, Cambridge, MA: MIT Press, 1976, p. 19.
- 49 Norbert Wiener, *The Human Use of Human Beings*, New York: Da Capo Press, 1954, p. 15.
- 50 Adorno and Horkheimer, op. cit., p. 57.
- 51 Simon Jarvis, *Adorno: A Critical Introduction*, Cambridge and Malden, MA: Polity Press, 1998, p. 27.
- 52 Ibid., p. 54.
- 53 Horkheimer, op. cit., p. 67.
- 54 Walter Benjamin, 'On Some Motifs in Baudelaire,' in *Illuminations*, Hannah Arendt (ed), trans. Harry Zorn, London: Pimlico, 1999, p. 171.
- 55 Adorno and Horkheimer, op. cit., p. 37.
- 56 Ibid., p. 36.
- 57 Warren Weaver and Claude Elwood Shannon, *The Mathematical Theory of Communication*, Urbana: University of Illinois Press, 1949.
- 58 N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*, Chicago and London: The University of Chicago Press, 1999, p. 65.
- 59 Ibid., pp. 7-24.
- 60 Zaera-Polo (2008), op. cit., p. 84.
- 61 Ibid.
- 62 Alejandro Zaera-Polo and Farshid Moussavi, 'Foreign Office Architects: A Conversation', in Michael Cesarz and Manina Ferreira-Erlenbach (eds), *Meydan Shopping Square: A New Prototype by FOA*, Berlin: Jovis, 2007, p. 57.
- 63 Ibid.
- 64 Ibid., p. 61.
- 65 Ibid., p. 11.
- 66 Ibid., p. 15.
- 67 Ibid., p. 44.
- 68 'The particular interest in envelopes as political devices is that they constitute the element that confines a system and regulates the flow of energy and matter in and out of it. If traditional politics were based on equilibrium and closed systems, the contemporary mechanisms of social and economic integration suggest the need for open systems.' Zaera-Polo (2008), op. cit., pp. 104-5.
- 69 Ibid., p. 59.
- 70 Ibid., p. 55.
- 71 Zaera-Polo (2008), op. cit., p. 76.

⁷² Ibid., p. 82.

⁷³ Ibid., p. 77.

⁷⁴ 'Making Things Public: Atmospheres of Democracy' is the name of an exhibition curated by Bruno Latour and Peter Weibel at ZKM Karlsruhe in March 2005. It is also the title of the book of the exhibition edited by Latour and Weibel, Cambridge, MA: MIT, 2005.

⁷⁵ Bruno Latour, 'From Realpolitik to DingPolitik: Or How to Make Things Public,' in Latour and Weibel, op. cit., p. 4.

⁷⁶ Ibid., p. 5.

⁷⁷ Zaera-Polo (2008), op. cit., p. 101. Zaera-Polo defines Sloterdijk's 'explicitation' in the same essay as follows: 'Explicitation is the term used by Sloterdijk as an alternative process to revolution and emancipation. The history of explicitation is made increasingly intelligible in the spheres and objects to which we are attached. The categories of the French revolution and left and right, both with their particular techniques of classification and of positioning, no longer correspond to the order of things that is no longer hierarchical but heterarchical. Whether we talk about carbon footprints, deregulation, genetically modified foods, congestion pricing or public transport, these issues give rise to a variety of political configurations that exceed the left/right distinction. The left/right divide still exists, but has been diluted by a multitude of alternative attitudes.' p. 79.

⁷⁸ Ibid., p. 104.

⁷⁹ Ibid.

⁸⁰ Ibid., p. 103.

⁸¹ Ibid., p. 104.

⁸² Ibid., p. 103.

⁸³ Ibid., pp. 85-6.

⁸⁴ Ibid., p. 86.

⁸⁵ Ibid.

⁸⁶ Ibid. No further explanation of how this process might take place, under what circumstances, or in what sense we are to understand the term 'revert' here, is offered by Zaera-Polo.

⁸⁷ Anna Minton, *Ground Control: Fear and happiness in the twenty-first-century city*, London: Penguin, 2009. See too, for example, Paul Kingsworth, 'Cities for Sale' in *The Guardian*, 29 March, 2008, accessed 10 August, 2010, at <<http://www.guardian.co.uk/society/2008/mar/29/communities>>.

⁸⁸ David Keuning, 'Shopping Permitted: Meydan shopping mall in Istanbul, Turkey (Foreign Office Architects)' *Mark*, Feb/Mar 2008, accessed, 10 August, 2010, at <[http://www.davidkeuning.com/article.php?\\$lang=en&\\$w=i&\\$t=1371&\\$a=25](http://www.davidkeuning.com/article.php?$lang=en&$w=i&$t=1371&$a=25)>.

⁸⁹ Professor Murray Fraser, visiting the shopping complex in December 2011 with students of University College London's Bartlett School of Architecture, for example, reported, in personal correspondence with the author, that he 'was told off by a security guard for walking on the grass roof, which is what you are meant to do!'

⁹⁰ Stephen Graham, *Cities Under Siege: The New Military Urbanism*, London and New York: Verso, 2010, p. 63.

⁹¹ Michel Foucault, *The History of Sexuality*, trans. Robert Hurley, New York: Vintage, 1980.

- ⁹² Thomas Lemke, 'Foucault, Governmentality, and Critique', in *Rethinking Marxism*, Volume 14, Issue 3 September 2002, p. 50.
- ⁹³ Ibid.
- ⁹⁴ Ibid., pp. 51-2.
- ⁹⁵ Michel Foucault, *The Birth of Biopolitics: Lectures at the College De France, 1978-79*, Michel Senellart (ed), trans. Graham Burchell, Basingstoke/New York: Palgrave MacMillan, 2008.
- ⁹⁶ Thomas Lemke, 'The Birth of Bio-Politics—Michel Foucault's Lecture at the Collège de France on Neo-Liberal Governmentality', in: *Economy & Society*, Vol. 30, No. 2, 2001, p. 192.
- ⁹⁷ Foucault (2008), op. cit., p. 144.
- ⁹⁸ Ibid., p. 146.
- ⁹⁹ Ibid., p. 242.
- ¹⁰⁰ Lemke (2001), op. cit., p. 193.
- ¹⁰¹ Foucault (2008), op. cit., p. 241.
- ¹⁰² Ibid., pp. 259-60.
- ¹⁰³ The lectures in which Foucault delivered his remarks concerning the creation of these 'environments' were of course made some years before the rise of electronic and digital mechanisms of surveillance to which Deleuze and Guattari begin to allude in their later work. This does not negate the value of his perspective, however, since it serves to emphasise the productive aspects of the environments referred to here, in regard to subjectivity, as a corrective to more prevalent perspectives fixated upon the infringements of mechanisms of surveillance upon civil liberties that operate in these spaces.
- ¹⁰⁴ Foucault (2008), op. cit., p. 261.
- ¹⁰⁵ Ibid., p. 242.
- ¹⁰⁶ Ibid., p. 259.
- ¹⁰⁷ Ibid.
- ¹⁰⁸ 'Istanbul in Numbers', accessed 12 August, 2010, at <<http://www.greatistanbul.com/numbers.htm>>.
- ¹⁰⁹ Cihan Tuğal, 'The Greening of Istanbul' in *New Left Review*, 51, May/June 2008, p. 65.
- ¹¹⁰ Ibid., p. 78.
- ¹¹¹ 'Meydan - New Shopping Square in Istanbul', accessed 12 August, 2010, at <http://www.meydan.metro-mam.com/servlet/PB/menu/1025929_l2_yno/1281705334186.html>.
- ¹¹² 'Germany's Metro Group opens child day care centre in Bangladesh', accessed 12 August, 2010, at <http://www.german-info.com/gsa_shownews.php?pid=595>.
- ¹¹³ See, for example, Anna Minton, "'This town has been sold to Tesco': Are towns built by the UK's leading supermarket the future of urban development?" in *The Guardian*, 5 May, 2010, accessed 12 August, 2010, at <<http://www.guardian.co.uk/society/2010/may/05/urban-development-tesco-towns>>, 12 August, 2010, and the website for the protest group 'Inverness Tesco Town?' accessed at <<http://www.tescotown.uk>>.
- ¹¹⁴ Cihan Tuğal, op. cit., p. 78.
- ¹¹⁵ Zaera-Polo (2008), op. cit., p. 86.

¹¹⁶ Ross Adams, to whose ideas I am indebted in this context, describes what I refer to here as the ‘always immanent’ nature of ecological crisis as an obscure ‘non-event’: ‘Perhaps the most terrifying aspect of climate change confronting us, one which is rarely uttered in the public discussions and political rhetoric surrounding the issue, is precisely its status as a non-event. Its only character seems to be one of permanent *becoming*.’ (‘Approaching the End: Eden, and the Architectural Iconography of the Catastrophe To Come’ in *Log 19*, Spring/Summer, 2010).

¹¹⁷ Foucault (2008), op. cit., p. 147.

¹¹⁸ Jeanette Johansson-Young, ‘The BIG picture: A case for a flexible learning agenda at Ravensbourne’, internal publication of Ravensbourne College, 2006. Accessed 20 August, 2010 at <http://intranet.rave.ac.uk/quality/docs/LTR060203-flexlearn_4.pdf>.

¹¹⁹ Ibid.

¹²⁰ Department of Education and Skills, ‘The future of higher education’, 2003, accessed 20 August, 2010 at <www.dfes.gov.uk/hegateway/strategy/hestrategy/pdfs/DfES-HigherEducation.pdf>; HEFCE, ‘HEFCE strategy for e-learning’, 2005, accessed 20 August, 2010 at <www.hefce.ac.uk/pubs/hefce/2005/>.

¹²¹ A.M. Bliuc, P. Goodyear and R.A. Ellis, ‘Research focus and methodological choices in studies into students’ experiences of blended learning in higher education’ *The Internet and Higher Education*, Vol. 10 No. 4, 2007, pp. 231-44, cited in Paul Harris, John Connolly and Luke Feeney, ‘Blended learning: overview and recommendations for successful implementation’, *Industrial and Commercial Training*, Vol. 41 No. 3, 2009, p. 156.

¹²² DEGW, ‘User Brief for the New Learning Landscape’, 2004, cited in Johansson-Young, op. cit.

¹²³ Miles Metcalfe, Ruth Carlow, Remmert de Vroorne, and Roger Rees, ‘Final Report for the Designs on Learning Project’, internal publication of Ravensbourne College, 2008, p. 3.

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ Ibid., p. 4.

¹²⁷ John Worthington/DEGW, ‘Univer-Cities in their Cities: Conflict and Collaboration’, paper presented at OECD Education Management Infrastructure Division, Higher Education Spaces & Places for Learning, Education and Knowledge Exchange, University of Latvia, Riga: 6-8 December, 2009, accessed at <<http://www.oecd.lu.lv/materials/john-worthington.pdf>>, August 21, 2010. p. 31.

¹²⁸ Ibid., p. 30.

¹²⁹ Shirley Dugdale, ‘Space Strategies for the New Learning Landscape’, *EDUCAUSE Review*, vol. 44, no. 2, March/April 2009, accessed at <<http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume44/SpaceStrategiesfortheNewLearn/163820>>, 21 August, 2010.

¹³⁰ Zaera-Polo (2008), op. cit., p. 87.

¹³¹ Worthington/DEGW, op. cit., p. 14.

¹³² Alejandro Zaera-Polo, quoted in Graham Bizley, ‘FOA’s peninsula patterns for Ravensbourne College’ BD Online, 29 July, 2009, accessed at <<http://www.bdonline.co.uk/practice-and-it/foa's-peninsula-patterns-for-ravensbourne-college/3144928.article>>, 22 August, 2010.

¹³³ Worthington/DEGW, (2009), op. cit., p. 16.

- 134 Fisher, op. cit., p. 28.
- 135 As recorded at Ravensbourne's Media briefing by the author, 9 September, 2010.
- 136 Lucy Hodges, 'Ravensbourne college gets ready to move in to eye-catching new premises' in *The Independent*, Thursday, 15 July 2010, accessed 22 August, 2010, at <<http://www.independent.co.uk/news/education/higher/ravensbourne-college-gets-ready-to-move-in-to-eyecatching-new-premises-2026802.html>>.
- 137 Foucault (2008), op. cit., p. 226.
- 138 Gilles Deleuze, 'Control and Becoming', in Gilles Deleuze, *Negotiations, 1972-1990*, trans. Martin Joughin, New York; Chichester: Columbia University Press, 1995, p. 175.
- 139 Zaera-Polo (2008), op. cit., p. 87.
- 140 Ibid., p. 89.
- 141 Ibid.
- 142 Ibid.
- 143 Alejandro Zaera-Polo, 'Patterns, Fabrics, Prototypes, Tesselations' in *Architectural Design, Special Issue: Patterns of Architecture*, Volume 79, Issue 6, pages 18-27, November/December 2009, p. 22.
- 144 Zaera-Polo (2008), op. cit., p. 88.
- 145 See Gilles Deleuze and Félix Guattari, 'Year Zero: Faciality', in *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi, London and New York: Continuum, 1992, p. 198.
- 146 Zaera-Polo (2008), op. cit., p. 89.
- 147 Ibid., p. 90.
- 148 Ibid., p. 89.
- 149 Ibid.
- 150 Farshid Moussavi, *The Function of Form*, Barcelona and New York: Actar/Harvard University Graduate School of Design, 2009.
- 151 Ibid., p. 7.
- 152 Ibid., p. 9.
- 153 Ibid., p. 13.
- 154 Ibid.
- 155 Ibid., p. 18.
- 156 Ibid., pp. 19-20.
- 157 Ibid., p. 34.
- 158 Zaera-Polo (2009), op. cit., p. 23.
- 159 Ibid., p. 25.
- 160 Ibid.
- 161 Ibid., p. 27.
- 162 Deleuze and Guattari (1987), op. cit., p. 167.
- 163 Ibid., p. 168.
- 164 Ibid., p. 180.
- 165 Ibid., p. 170.
- 166 Ibid., p. 171.
- 167 Gilles Deleuze and Félix Guattari, *What is Philosophy?*, trans. Graham Burchell and Hugh Tomlinson, London and New York: Verso, 1994, p.166.

¹⁶⁸ Ibid., 173.

¹⁶⁹ A 'politics of affect' has been discussed by Nigel Thrift, but he does not claim that this now does, or should, replace all other forms of political expression. See his, *Non-Representational Theory: Space, Politics, Affect*, London: Routledge, 2007.

¹⁷⁰ Ross Adams, personal correspondence with the author, 1 August 2010.

¹⁷¹ Zaera-Polo (2009), op. cit., p. 25.

¹⁷² Theodor Adorno, *Aesthetic Theory*, Gretel Adorno and Rolf Tiedermann (eds), trans. Robert Hullot-Kentor, London and New York: Continuum, 2002, p. 338.

¹⁷³ Ibid., p. 129. Adorno writes, 'What transcends the factual in the artwork, its spiritual content, cannot be pinned down to what is individually, sensually given but is, rather, constituted by way of this empirical givenness. This defines the mediatedness of the truth content. The spiritual content does not hover above the work's facture; rather, artworks transcend their factuality through their facture, through the consistency of their elaboration.'

¹⁷⁴ Ibid., 128.

¹⁷⁵ Ibid., 129.

THREE

A VERY SPECIAL DELIRIUM

KOOLHAAS AND THE ARCHITECTURE OF
CAPITAL

There isn't the slightest operation, the slightest industrial or financial mechanism that does not reveal the dementia of the capitalist machine and the pathological character of its rationality (not at all a false rationality, but a true rationality of this pathology, of this madness, for the machine does work, be sure of it). There is no danger of this machine going mad; it has been mad from the beginning, and that's where its rationality comes from.

Deleuze and Guattari

On the evidence of the references in his writings to ‘surfing’ and to ‘smooth space’,¹ and of the explorations in his architecture of the continuous surface, Rem Koolhaas may perhaps be understood as something of a pioneer of architectural Deleuzism.² It may also be noted that his arguments for the ‘progressive’ potentials to be found for architecture within corporate capital precede those of the architectural Deleuzians, a number of whom Koolhaas taught or employed within his own practice, Office for Metropolitan Architecture (OMA). However, the relationships that may be plotted between Koolhaas and the philosophy of Deleuze and Guattari are significantly different to those of figures such as Hadid, Schumacher or Zaera-Polo. The discourse of Koolhaas may also be differentiated from that of architectural Deleuzism in its refusal to model architecture as a purely ‘operative’, asignifying and autonomous practice. For these reasons Koolhaas, I will argue, rather than being thought of as straightforwardly pioneering architectural Deleuzism’s *appropriation* of Deleuze and Guattari, is better understood—at least in terms of much of his earlier writing and architecture, and up until certain of the more recent projects of OMA—as suggesting the possibility of an architecture that shares an *affinity* with the latter’s philosophy in its conception and perspectives.

This chapter’s first section, ‘Elective Affinities’, thus focuses upon the concerns, methods and strategies that can be identified as common to Deleuze and Guattari and Koolhaas. The first respect in which such an affinity can be identified lies in their shared conception of capital as a *deliriously* productive force. ‘Delirious’ is, of course, the term employed by Koolhaas to characterise the process of Manhattan’s metropolitan development in the first half of the twentieth century.³ The mechanisms of capital through which the space of Manhattan is quantitatively parcelled in its gridiron, and multiplied in its skyscrapers are, in their consequences,

anything but rational. From the spatial abstractions of these mechanisms are produced, through the investments (financial and libidinal) of developers, entrepreneurs and architects, a concrete realisation of intensive difference. The multiple forms and programmatic juxtapositions of Manhattan's architecture, together with the masses teeming through its congested spaces, combine, for Koolhaas, to produce a truly delirious metropolitan condition.

Deleuze and Guattari also identify capital as a unique composition of rationality and madness. 'Everything is rational in capitalism', they say, 'except capital or capitalism itself. The stock market is certainly rational; one can understand it, study it, the capitalists know how to use it, and yet it is completely delirious, it's mad.'⁴ Capital's delirium lies, for Deleuze and Guattari, in an inherent necessity to decode, to deterritorialise, all historically established orders—including those it has itself previously established—and to continually invest in the creation of new organisational conditions.

Neither Koolhaas nor Deleuze and Guattari treat the delirium of capital, in itself, as necessarily problematic. On the contrary, for both parties this psychopathological condition is a potent force for the production of difference. For Koolhaas the programmatic adjacencies and conditions of congestion manifest in Manhattan serve as the inspiration for his own project of intensification and indeterminacy over modernist efficiency: that of architectural 'Bigness'.⁵ For Deleuze and Guattari the deterritorialising mechanisms of capital have 'only' to be pushed beyond the limits of capital itself in order to fully liberate the libidinal desires with which it is invested.

Common to both Koolhaas and Deleuze and Guattari, too, are their strategies for driving further the production of radical difference already latent within capital. Koolhaas has embraced, as a means to this end, forms of collage—juxtaposition, quotation, discontinuity—*as well as* continuities, flows and modulations in his architecture. Distinct from architectural

Deleuzism's one-sided insistence upon fluidity and smoothness, Koolhaas's approach here echoes Deleuze and Guattari's understanding of the necessarily dynamic relationship between flows *and* 'schizzes' (cuts), between the smooth *and* the striated, at work in any assemblage. Deleuze and Guattari's own search for a means through which radical difference can be produced is exemplified for them in Antonin Artaud's 'Body without Organs', or 'BwO', as they also refer to it. This 'body' is never finally coded, or territorialised, according to a normalising imperative, but remains always virtually open to new relations of flows and schizzes through which difference is actualised. Furthermore, both draw upon avant-garde and surrealist paradigms in order to elaborate the methods through which difference may be generated: for Deleuze and Guattari the BwO, for Koolhaas, Salvador Dali's 'paranoid critical method', or 'PCM'.

The elaboration of these affinities in the essay's first section is undertaken not so as to collapse the richness of Koolhaas's thought and work within a Deleuzian, or Deleuzoguattarian, framework, but in order to establish a common ground between them through which the question central to the concerns of this chapter can be meaningfully articulated. Namely, does Koolhaas's pursuit of delirium, through the methods alluded to above, produce an architectural condition for the production of subjectivity which differs significantly from that produced by architectural Deleuzism? In other words, can the architecture of Koolhaas/OMA do otherwise, through its engagement with an approach to organisational concerns close to that of Deleuze and Guattari, than to straightforwardly acculturate the subject to the conditions of networked, flexible and communicative performativity demanded of it by a society of control?

In pursuit of this question this chapter's second section, 'The Great Spiral', will address Koolhaas's longstanding concerns with the relations between circulatory continuity and architectural disjunction. Beginning with an analysis of certain of Koolhaas/OMA's unbuilt projects, such as the Jussieu

Library, Paris (1992), and the Yokohama Masterplan, Japan (1992), the development of the continuous ramp within the practice will be addressed as an architectural device which both establishes the possibility of continuous circulation drawn upon extensively by Zaha Hadid Architects, Foreign Office Architects, Reiser and Umemoto, and others, whilst also containing an element of disjunction generally absent in the projects of these latter figures. Turning then to the essay 'Bigness: The Problem of Large', the significance of the relations between programme, circulation and containment will be further analysed through a close reading of this key Koolhaasian text. Finally, this section will attend to the built projects which may be taken as realisations of the tenets of 'Bigness'. In order to effect a direct comparison with the projects of architectural Deleuzism, through which this chapter's central concern can be explored, the focus here will fall upon the Kunsthall, Rotterdam (1992), and Casa da Musica, Porto (2005), and the contrasts between these and their respective typological counterparts in the practice of Zaha Hadid such as the MAXXI Museum, Rome (2010).

The two previous chapters on Hadid and FOA engaged with the role played by their architecture in providing for certain of the social and cultural formations—industrial and office labour, shopping and education—through which a society of control, or, in its Foucauldian inflection, neoliberal governmentality, reproduces itself. Consistent with this approach the third and final section of this chapter, 'Remaking the Public: CCTV and the Image of Labour' addresses Koolhaas/OMA's China Central Television (CCTV) complex in Beijing (scheduled for completion in 2012) in terms of media, communication and citizenship within the specific social and historical context of post-reform China.

The CCTV headquarters is considered here as emblematic of a reversal of the tenets of Bigness towards a new (proto)typology of the 'hyperbuilding' in which the objective of a 'metropolitan architecture' is replaced with that of an infrastructural urbanism. This turn, I argue, has significant implications

in regard to the production of subjectivity, whilst also bringing Koolhaas remarkably close to architectural Deleuzism—in both his architectural and his discursive strategies—so that, for example, there are significant parallels to be drawn between the hyperbuilding and the replicant urbanism of a project such as Hadid's Central Building for BMW Leipzig. In order to challenge Koolhaas's claims to be revisiting in the CCTV project his early interests in communism and communist architecture, I turn to elucidate a number of accounts of the relationship between post-reform China, neoliberalism, and neoliberal governmentality. From this analysis emerges the significance of imperatives within the People's Republic of China for social 'stabilisation', the 'reeengineering' of the worker, and the 'remaking' of the public, as well as the place of the media, and CCTV specifically, within these processes. These imperatives are then used as the optics through which to understand the operation of the CCTV headquarters, focusing particularly upon its zoned departmental organisation, its use of stacked 'generic' floor plates, and the function of the 'Visitors Loop' as an instrument of social induction.

ELECTIVE AFFINITIES

Capitalism is 'a very special delirium', say Deleuze and Guattari, since its relation to the coding of desire is historically unprecedented. Whereas, they argue in *Anti-Oedipus*, '[t]he prime function incumbent upon the socius, has always been to codify the flows of desire, to inscribe them, to record them, to see to it that no flow exists that is not properly dammed up, channeled, regulated,' the 'capitalist machine', uniquely, 'finds itself in a totally new situation: it is faced with the task of decoding and deterritorializing the flows.'⁶ The 'primitive territorial' and 'despotic' machines that precede that of capitalism had based their social orders on regulative codes—myths, religions, taboos, rituals—through which all flows, all desires, were captured and ordered within a stable social assemblage. Capitalism, by contrast, depends upon the destruction of all such previously existing codes in order

to thrive. Critically, it does not replace the codes of the older social machines with its own one, but rather makes of decoding, and deterritorialisation, a permanent fixture and recurrent instrument of its own social production. This is so because capitalism operates on the basis of an axiomatic—the money form, and its abstract principles of investment and speculation—that is inherently geared to the overcoming of all limits to its own realisation. Capitalism, write Deleuze and Guattari, ‘is the only social machine that is constructed on the basis of decoded flows, substituting for intrinsic codes an axiomatic of abstract quantities in the form of money.’⁷

In the same movement of decoding through which the axiomatic of capital operates, desire is also set loose from the codings which had, in previous regimes, regulated and constrained it. Hence the capitalist machine is characterised by the release of flows, of both money and desire. The ‘generalized decoding’ inherent to capitalism, write Deleuze and Guattari, converts the ‘surplus value of code into a surplus value of flux.’ The particular ‘madness’ of capital, according to Deleuze and Guattari’s account, rests then on its tendency always to open itself to the reinvestment of this destabilising ‘surplus flux’ in order to follow the axiomatic of the money form, which, simultaneously, threatens to produce its own undoing. Capitalism ‘liberates the flows of desire, but under the social conditions that define its limit and the possibility of its own dissolution, so that it is constantly opposing with all its exasperated strength the movement that drives it toward this limit.’⁸ ‘By substituting money for the very notion of a code,’ argue Deleuze and Guattari, capitalism ‘has created an axiomatic of abstract quantities that keeps moving further and further in the direction of the deterritorialization of the socius.’⁹

The specifically delirious form of capitalism’s ‘madness’ is a concern central both to Deleuze and Guattari within *Anti-Oedipus* and to Koolhaas in his *Delirious New York*. But before proceeding to address the subject of delirium in depth, I want first to tease out further the significance of the notion of

abstraction (raised above in relation to the axiomatic of capital and the money form), so as to establish the role it plays, for both Deleuze and Guattari, and for Koolhaas, as a mechanism for the production of difference.

THE ARCHITECTURE OF MONEY

Deleuze and Guattari drew significantly upon Marx in developing their arguments concerning the production of social relations engendered by the money form of capitalism and the ‘madness’ of this ‘machine’. At the conclusion of *Anti-Oedipus* they wrote:

The capitalist machine does not run the risk of becoming mad, it is mad from one end to the other and from the beginning, and this is the source of its rationality. Marx’s black humor, the source of *Capital*, is his fascination with such a machine: how it came to be assembled, on what foundation of decoding and deterritorialization; how it works, always more decoded, always more deterritorialized; how its operation grows more relentless with the development of the axiomatic, the combination of the flows; how it produces the terrible single class of gray gentlemen who keep up the machine.¹⁰

It is, of course, the case that one of Marx’s central concerns in *Capital* was to demonstrate that the money form served as a mechanism through which social relations were produced; that commodity relations were responsible for the production of the ‘terrible single class of gray gentlemen’ in the form of the *bourgeoisie*. Under capitalism ‘persons’, wrote Marx, ‘exist for one another merely as representatives and hence owners, of commodities. As we proceed to develop our investigation, we shall find, in general, that the characters who appear on the economic stage are merely personifications of economic relations ...’¹¹

Deleuze and Guattari are also following the Marx of *Capital*, and the *Grundrisse*, in their attention to the specifically *abstract* nature of this production. In the second chapter of *Capital*, ‘Exchange’, Marx expounds a history of the exchange of commodities, as a practice appearing, firstly, at

the ‘boundaries’ where different ‘primitive’ cultures encountered one another, and then, inexorably, becoming ever more central to later societies as an internalised and ‘normal social process.’¹² The intensification of exchange, and its increasing centrality to all social relations, renders its earlier mechanisms, such as barter, inadequate to the comparative evaluation of commodities, and thus leads to the necessity of increasing the development and extension of the value form throughout society. This need is answered, continues Marx, by a ‘special article’, one that ‘acquires the form of a universal equivalent’ through which the value of various commodities can be mediated.¹³ This ‘special article’ is money, or, more precisely, the ‘money form’. Although money is also described by Marx as a ‘commodity’, it is set apart from other commodities since it is the one which enables all others to be evaluated in relation to one another, according to a general standard, so as to facilitate their effectively calculated exchange.

Crucially, the development of the money form involves an abstraction from the concrete qualities of commodities in order to calculate their value in monetary terms. Marx writes:

The price or money-form of commodities is, like their form of value generally, a form quite distinct from their palpable bodily form; it is, therefore, a purely ideal or mental form. Although invisible, the value of iron, linen and corn has actual existence in these very articles: it is ideally made perceptible by their equality with gold, a relation that, so to say, exists only in their own heads. Their owner must, therefore, lend them his tongue, or hang a ticket on them, before their prices can be communicated to the outside world.¹⁴

Marx’s concern with the process of abstraction, as the operation through which money produces a form of general social equivalence, has been central to the development of theories of ‘real abstraction’. As Alfred Sohn-Rethel wrote in his *Intellectual and Manual Labour: A Critique of Epistemology*: ‘The unproclaimed theme of *Capital* and of the commodity analysis is in fact the real abstraction uncovered there.’¹⁵ Rather than conceiving of capitalism, and its commodity relations, as *veiling*, or *alienating* us from some

essential ‘human condition’, and thus implying that capitalism somehow produces forms of subjectivity and social relations which can be considered, objectively, as ‘false’, real abstraction emphasises that what capitalism produces, through abstraction, is an absolutely ‘real’ set of social relations and forms of thought. In other words, the work of abstraction is not thought as the negation of the concrete, but as the ground from which certain forms and relations are, under capitalism, constituted.¹⁶

Whilst Sohn-Rethel’s concern in *Intellectual and Manual Labour* centred upon how the money form had, historically, produced forms of thought, which themselves were responsible for the division of labour between the intellectual and the manual, later accounts of the significance of abstraction within capitalism have turned to address its place within the production and mediation of social and cultural forms, of which those concerned with architecture and the metropolis are especially pertinent here.

As has been highlighted by David Cunningham,¹⁷ Georg Simmel’s seminal essay of 1903, ‘The Metropolis and Mental Life,’¹⁸ has served as a central point of reference within a number of efforts to think the relations between abstraction, architecture and the metropolis. In that essay, Simmel remarked:

To the extent that money, with its colourlessness and its indifferent quality, can become a common denominator of all values, it becomes the frightful leveller; it hollows out the core of things, their peculiarities, their specific values and their uniqueness and incomparability in a way which is beyond repair. They all float with the same specific gravity in the constantly moving stream of money.¹⁹

Simmel identified the prime location for the abstractions of money within the modern metropolis, writing that, ‘The metropolis has always been the seat of the money economy because the many-sidedness and concentration of commercial activity have given the medium of exchange an importance which it could not have acquired in the commercial aspects of rural life.’²⁰

Cunningham notes that Manfredo Tafuri, in his *Architecture and Utopia*, employs a more or less direct quotation from Simmel in order then to address the mediation of social and cultural forms by the money form: ‘The objects all floating on the same plane, with the same specific gravity, in the constant movement of the money economy: does it not seem that we are reading here a literary comment on the Merzbild?’²¹ It is in the later work of Fredric Jameson, however, argues Cunningham in this essay, that the specifically architectural mediation of the money form, and its metropolitan context, are most suggestively engaged with. Jameson’s essay ‘The Brick and the Balloon,’²² writes Cunningham, indicates that:

Simmel’s writings on the metropolis are ‘fundamentally an account of the increasing abstraction of modern life, and most particularly of urban life’; a conjunction between the cultural and the economic that, I want to suggest, provides us with the outline of a rather different understanding of abstraction to that prevalent within most mainstream architectural discourse. As Jameson continues, ‘Simmel’s essay places us on the threshold of a theory of modern aesthetic forms and of their abstraction from older logics of perception and production’. And the key to such a theory would, quite simply, be the abstract ‘logics’ of capital and the money form itself.²³

Further into ‘The Architecture of Money’ Cunningham locates within Jameson’s ‘The Brick and the Balloon, as an instance of how such ‘modern aesthetic forms’ may be abstracted from ‘older logics of perception and production’, the latter’s account of ‘extreme isometric space’, in which ‘not only the contents but also the frames are now freed to endless metamorphosis.’²⁴ Jameson is referring in this essay both to the Miesian ‘free plan’, and to its ‘extreme development’ within certain postmodern architectures, as aesthetic forms in which the money form’s regime of equivalence becomes ‘delirious’.²⁵

Jameson’s ‘The Brick and the Balloon’ thus begins to answer, in this respect, to Cunningham’s own concern with the ways in which the abstract relations central to the metropolis, as the ‘seat of the money economy’, are productive

of ‘ever-changing, paradoxically sensuous and concrete forms once embedded and embodied within the whole range of experiences of contemporary metropolitan culture.’ Cunningham, in pursuit of this concern, has worked, in the ‘Architecture of Money’, and also in his essay ‘The Concept of Metropolis: Philosophy and Urban Form’,²⁶ against a broad current and tradition of thought that, whilst acknowledging the productive ‘reality’ of abstraction, nevertheless has evaluated it negatively.

The ‘levelling’ action of money upon metropolitan experience is described by Simmel, after all, as ‘frightful’. In an earlier essay, ‘A Chapter in the Philosophy of Value’,²⁷ Simmel considers ‘real abstraction’, from a seemingly Hegelian perspective, as threatening to divide the ‘essential’ nature of experience, posited as a ‘unified interrelationship’, into a ‘multiplicity of independent series’ and ‘one-sided’ perspectives such as those of economic equivalence. For Sohn-Rethel the abstractions upon which exchange relations are based, though ‘real’, imply a ‘negation of the physical realities of use’.²⁸ The ‘real abstraction of exchange’, he writes, ‘has as its distinguishing mark the total exclusion of empirical content’, and stands ‘outside the realm of sense perception’. The result, he argues, is the reification of experience and the division of intellectual from manual labour from which a class-based social hierarchy emerges. Henri Lefebvre and Antonio Negri, for all their acknowledgment of the reality of abstraction, and its implications for the ‘production of space’, appear to argue that abstraction itself must be negated in order to achieve the realisation of difference, or ‘differential space’. As Cunningham observes, their thought ‘still seems tied to a futurally projected idea of difference that would somehow lie beyond abstraction per se.’²⁹ The earlier work of Jameson is also, he writes, marked by ‘a distinction between some true “feeling of concreteness, of filled density of being” [that] may be straightforwardly counterposed to that of an “abstractness and impoverishment of experience” in an evidently evaluative way.’³⁰

Jameson's considerations, in 'The Brick and the Balloon', of how abstraction may be mediated within architectural forms which themselves operate at some remove from immediately economic criteria, and which become 'delirious', appears then significant both within the context of Cunningham's concerns and those pertinent to this chapter, i.e., how it is that difference may be produced *from*, rather than *against*, the abstractions essential to the operation of exchange within capitalism.

However, Cunningham indicates a significant qualification with regard to the argument of 'The Brick and the Balloon', concerning Jameson's contention that is only with the arrival of late-twentieth century finance capital that its abstractions offer themselves to architectural mediation in this fashion. This, he argues, 'vastly exaggerates the qualitative character of the increase in abstraction to be found in the recent stage of "finance capital", and obfuscates the fact that 'in its "essence", money is always already utterly abstract in form.'³¹ Whilst concurring with Cunningham's critical assessment, I would also add a further qualification, in that Jameson, in the essay in question, appears only able to conceive of an architecture which *mediates* abstraction as an architecture *of* abstraction. Its 'form', in other words, in its 'extreme isometrics', somehow comes to *mirror* a 'content' itself concerned with measurement, equivalence and generality. The questions of how difference is actually produced within such an architecturally isometric space, of how this differentiation is rendered sensuous, even 'delirious', and of whether an architecture mediating abstraction need necessarily be itself formally abstract, remain moot within Jameson's essay. Through Deleuze and Guattari's conception of desire, and Koolhaas's exploration of delirium, these questions are, I will argue, amenable to being addressed more directly.

THE INVESTMENTS OF DESIRE

Deleuze and Guattari's treatment of abstraction, and its place within capitalism, accords with the accounts of 'real abstraction' addressed above only insofar as they too understand it as *productive*. But whereas Simmel,

Sohn-Rethel, Lefebvre, and others, tended to understand abstraction as predominantly producing a *negation* of difference and the sensuous, Deleuze and Guattari understand capitalism as productive of the *realisation* of these.³² This is so because of the way in which they insist upon specifying capitalism as defined not by mechanisms of exchange but by those of speculation and investment.

Some form of mercantile capitalism has always comprised an element of all civilisations since the development of the money form, say Deleuze and Guattari, yet always in relation to a socius territorialised according to a code which is not its own. Under these circumstances:

The merchant is continually speculating with the maintained territorialities, so as to buy where prices are low and sell where they are high. Before the capitalist machine, merchant or financial capital is merely in a relationship of alliance with noncapitalist production; it enters into the new alliance that characterizes precapitalist States—whence the alliance of the merchant and banking bourgeoisie with feudalism.³³

Capitalism comes into its own, so to speak, only when it has deterritorialised the existing social machines—sovereignty, feudalism, aristocracy—of which it has up until then only been an adjunct, and replaced their codes with its own axiomatic. ‘In brief’, say Deleuze and Guattari, ‘the capitalist machine begins when capital ceases to be a capital of alliance to become a filiative capital. Capital becomes filiative when money begets money, or value a surplus value ...’ Only ‘under these conditions’, they continue, is it ‘that capital becomes the full body, the new socius or the quasi cause that appropriates all the productive forces.’³⁴ It is at this point that the evaluative capacity of the money form is no longer restricted to calculating equivalence in the service of exchange, but rather becomes centred on the production of value in and of itself. In support of this claim Deleuze and Guattari cite the following passage from *Capital*:

value in process, money in process, and, as such, capital ... Value ... suddenly presents itself as an independent substance, endowed with a motion of its own, in which money and commodities are mere forms which it assumes and casts off in turn. Nay more: instead of simply representing the relations of commodities, it enters now, so to say, into relations with itself. It differentiates itself as original value from itself as surplus-value; as the father differentiates himself qua the son, yet both are one and of one age: for only by the surplus-value of £10 does the £100 originally advanced become capital.³⁵

Marxian economists, wrote Deleuze and Guattari, had tended to focus only upon Marx's account of the money form as a mode of *general equivalence*, at the expense of the analysis he developed, in *Capital*, of the pursuit of surplus value, as an end in itself, through *investment* and *speculation*. This model of the money form within capitalism, they wrote, had not paid sufficient attention to the significance of 'banking practice, to financial operations, and to the specific circulation of credit money—which would be the meaning of a return to Marx.'³⁶

In other words—at least according to Deleuze and Guattari —attention had fallen within Marxian theories of economy upon the 'simple' circulation of commodities, or 'selling in order to buy', expressed by Marx in the formula 'C-M-C' (where 'C' stands for commodity and 'M' for money), rather than the form of circulation 'M-C-M', or 'buying in order to sell'.³⁷ Marx, however, is clear in his expression of what is significant within the circulation of value for itself:

In simple circulation [C-M-C] the value of commodities attained at the most a form independent of their use-values, i.e., the form of money; but that same value now in the circulation M-C-M, or the circulation of capital, suddenly presents itself as a self-moving substance, which passes through a life-process of its own, and for which money and commodities are both mere forms.³⁸

For Marx, capital, as value, becomes 'self-valorising' through its 'self-movement'. 'It has', he wrote, 'acquired the occult ability to add value to itself. It brings forth living offspring, or at least lays golden eggs.'³⁹ It is

precisely this ‘self-moving’ and ‘self-valorising’ mechanism that Deleuze and Guattari define as the deterritorialising axiomatic of capital. Hence the abstraction within capital with which they are concerned is not one of reductive equivalence but one of creative investment. ‘We are no longer in the domain of the quantum or of the quantitas’, they write in *Anti-Oedipus*, ‘but in that of the differential relation as a conjunction that defines the immanent social field particular to capitalism, and confers on the abstraction as such its effectively concrete value, its tendency to concretization.’⁴⁰ What Deleuze and Guattari add to Marx’s model of capital as a self-moving, self-valorising subject, is, as has been indicated above, the claim that through this subject, as a constant companion in its drive for profit, flows desire. Every investment within capital is thus conceived by Deleuze and Guattari as simultaneously financial *and* libidinal. Furthermore, it is because this ‘fantastic machine’ operates as it does, in producing deterritorialised and fluid relations of synthesis, that it is able to generate difference from within its abstract operations.

Without itself necessarily being conceived as such, it is within Koolhaas’s *Delirious New York* that we can locate an illustration of how such investments produce architectural and metropolitan conditions of difference—formally, concretely, and sensually—through the self-valorising, self-moving and abstract mechanisms immanent to the fabric of capitalism.

MANHATTANISM

The account of the act of superimposing upon the island of Manhattan, in 1805, ‘The Grid’—a matrix of ‘13 x 156 = 2,028 blocks’—with which *Delirious New York* begins, is not, according to Koolhaas, to be read as ‘a negative symbol of the shortsightedness of commercial interests.’⁴¹ Rather this abstract operation, with its ‘indifference to topography’, is in fact ‘the most courageous act of prediction in Western civilization: the land it divides, unoccupied; the population it describes, conjectural; the buildings it locates, phantoms; the activities it frames, nonexistent.’⁴² ‘The Grid is, above all,’

claims Koolhaas, ‘a conceptual speculation.’⁴³ Whilst it might neutralise the existing topographical context of Manhattan, by parcelling it into interchangeable blocks, and thus appear to negate the possibility of spatial difference within the metropolis upon which it speculates, the grid is in actuality, for Koolhaas, a generator of difference and invention. ‘The Grid’, he writes, ‘makes the history of architecture and all previous lessons of urbanism irrelevant. It forces Manhattan’s builders to develop a new system of formal values, to invent strategies for the distinction of one block from another.’⁴⁴

In parcelling the territory of Manhattan into orthogonal blocks, the Commissioner’s Plan provides a quantitatively rational evaluation of land so as to facilitate its sale to the developers whose investment it projects. At the same time, it establishes the conditions whereby each investor’s project will be precisely circumscribed by the streets and avenues of which the grid is composed. Contained within the block, the value of the land can only be maximised for the investor through its vertical extrusion into the multiple stories of the skyscraper, an ideal itself only realisable through the technology of Elisha Otis’s elevator.

The development of Manhattan’s built environment might thus appear as the result of financial investment seeking to realise maximum value through rational calculation and technological efficiency. For Koolhaas, however, business, rationality and efficiency are merely the ‘alibis’ developed to obscure from conscious awareness the ‘unconscious’ drives invested in what he terms ‘Manhattanism’.⁴⁵ The ‘foetal’ origins of Manhattanism, with its ‘Culture of Congestion’ and ‘Technology of the Fantastic’, can be found, he argues, in the beaches and amusement parks of Coney Island.

In the last decades of the 19th century the beach at Coney Island, recounts Koolhaas, becomes for those ‘escaping’ Manhattan every Sunday, ‘the most densely occupied place in the world.’⁴⁶ He notes that rather than releasing

its visitors from the congested conditions of the metropolis Coney Island multiplies them: 'Instead of suspension of urban pressure, it offers intensification.'⁴⁷ This experience of intensive congestion constitutes for Koolhaas a founding condition of Manhattanism which its entrepreneurs, developers and architects will seek to replicate and cultivate on the island in the twentieth century as a 'Culture of Congestion'. Coney Island's intensity derives not only from congestion, however, but also from the technology employed within the rides, amusements and spectacles which physically mobilise and visually dazzle the visitors to its Luna Park, Dreamland and Steeplechase Park. This 'Technology of the Fantastic' will, according to Koolhaas, also migrate to the island in the twentieth century as a founding element of Manhattanism. Together, then, the Culture of Congestion and the Technology of the Fantastic constitute for him the foundation of a unique model of urbanism invested with unconscious desires parading as rational business plans. Crucially, it is on Manhattan, and through the abstraction of the grid with which its territory is parcelled for speculative investment, that this model is given the greatest scope for development.

From this perspective, the extrusion of the space of the site in the multiple stories of the skyscraper is not only, or not even primarily, a multiplication of land value, but a multiplication of *worlds*, on the model of the fantastic spaces of Coney Island. The potential of the skyscraper, writes Koolhaas, is to 'reproduce the earth and to create other worlds.'⁴⁸ Furthermore, the skyscraper is realisable, as a structure, and inhabitable, as a series of 'worlds', only through the technologies developed within the amusement parks of Coney Island which are made now to appear merely practical in their new context:

To support the alibi of 'business', the incipient tradition of Fantastic Technology is disguised as pragmatic technology. The paraphernalia of illusion that have just subverted Coney Island's nature into an artificial paradise—electricity, air-conditioning, tubes, telegraphs, tracks and elevators—reappear in Manhattan as paraphernalia of efficiency to convert raw space into office suites.⁴⁹

Rather than providing for a *unified world* of business, however, the multiple stories of the skyscraper, and the technologies which enable its existence, produce a series of *disconnected worlds* of which business is only one amongst many. In reference to the proposals for the first 100-storey skyscraper, Koolhaas reports that ‘filling the interior with business alone is inconceivable.’⁵⁰ Instead, the skyscraper becomes a ‘laboratory’—‘the ultimate vehicle of emotional and intellectual adventure’⁵¹—in which to experiment with the ‘Culture of Congestion’. The skyscraper, for Koolhaas, exists as a radically disjunctive space of multiple and isolated programmes that maximises difference, within its envelope, to the extent that each block reproduces, within itself, the complexity of the metropolis to become a ‘City within a City’:

On each floor, the Culture of Congestion will arrange new and exhilarating human activities in unprecedented combinations. Through Fantastic Technology it will be possible to reproduce all ‘situations’ – from the most natural to the most artificial – wherever and whenever desired.⁵²

Koolhaas defines the experience of disjunction within the skyscraper as a kind of ‘frenzy’, a ‘vertical schism’ accommodating ‘all possible change’. Only on the exterior of the envelope containing this frenzy is it possible for the skyscraper to present a semblance of unified identity and an image of coherence. Yet, confined within its own block, each one becomes an island whose identity is defined, differentially, in relation to the others that surround it:

Since all Manhattan’s blocks are identical and emphatically equivalent in the unstated philosophy of the Grid, a mutation in a single one affects all others as a latent possibility: theoretically, each block can now turn into a self-contained enclave ... That potential also implies an essential isolation: no longer does the city consist of a more or less homogenous texture – a mosaic of complementary urban fragments – but each is now alone like an island, fundamentally on its own. Manhattan turns into a dry archipelago of blocks.⁵³

Through the juxtaposition of these islands, and the disparate forms of the architecture which distinguishes the identity of each, difference is again maximised and multiplied, just as it is between the multiply-programmed floors of each building.

Koolhaas's account of Manhattanism, then, effectively exemplifies Deleuze and Guattari's proposition that the mechanisms of abstraction immanent to capitalism generate difference and unleash desire. The urban grid superimposed on the island of Manhattan deterritorialises its extant conditions and reterritorialises these within its own abstract matrix. This matrix, whilst projecting the rational calculation of land value to facilitate sale and investment, establishes at the same time the conditions from which a process of intensive differentiation will be initiated.

The unconscious drives directed toward a 'Culture of Congestion' and the 'Technology of the Fantastic' are a constant accompaniment to the ostensibly rational projects of the entrepreneurs, businessmen and architects developing Manhattan in the first half of the twentieth century. Every financial investment in Manhattanism is at the same time a libidinal one. As Koolhaas writes, 'The businessmen have to agree: Manhattanism is the only place where efficiency intersects with sublime.'⁵⁴ Furthermore, the schizoid subjectivity and inherent irrationality that Deleuze and Guattari attribute to capitalism, as a social machine, is evidently in operation within the project of Manhattanism. Its architects, he writes, 'have developed a schizophrenia that allows them simultaneously to derive energy and inspiration from Manhattan as an irrational fantasy and to establish its unprecedented theorems in a series of strictly rational steps.'⁵⁵

Whilst Koolhaas dwells in some depth, in *Delirious New York*, upon a series of individuals that might be considered in some sense as the authors of Manhattanism—Richard Starrett, Hugh Ferriss, Harvey Wiley Corbett,

Raymond Hood, *et al*—its invention is not theirs, but, like the production of capitalism itself, that of an *axiomatic* working through them as its mere personifications. Manhattanism is, it may be said, a form assumed by the ‘self-moving subject’ of capital, with the businessmen and architects, even the skyscrapers and hotels of Manhattan, only the agents of its expression, of *rendering its abstraction concrete*. Certainly Koolhaas’s remarks on the Empire State Building suggest as much:

While the Empire State is being planned, the European avant-garde is experimenting with automatic writing, a surrender to the process of writing unhindered by the author’s critical apparatus.

The Empire State Building is a form of automatic architecture, a sensuous surrender by its collective makers—from the accountant to the plumber—to the process of building.

The Empire State is a building with no other program than to make a financial abstraction concrete—that is, to exist.⁵⁶

BODIES WITHOUT ORGANS AND THE PARANOID CRITICAL METHOD

Koolhaas’s account of Manhattanism thus converges with the philosophy of Deleuze and Guattari in conceiving of the investments of capital as superficially rational in their monetary aspects, but subversively irrational in their libidinal ones. For neither party are the resulting schizophrenia and delirium problems requiring resolution. Instead each locates an opportunity within the psychopathology unique to the productions of the capitalist social machine; its ‘very special delirium’. For Deleuze and Guattari this is the possibility that the flows of desire unleashed by capitalism will drive it towards its own undoing, that they will take it beyond the threshold of any possible future reterritorialisation. For Koolhaas, it is the possibility of an architecture which, rather than rationally ordering programmes so as to serve the wider metropolis, produces *within itself* a deliriously metropolitan synthesis of fantastical technology, spontaneous encounter and intensive differentiation: a ‘metropolitan architecture’.

The mutual enemy of Koolhaas and Deleuze and Guattari is the civilising

force of European culture which would recast these deterritorialised flows of desire within its own delimited codes of classicism, humanism and rational order. What Freud originally uncovered in his psychoanalysis, argued Deleuze and Guattari in *Anti-Oedipus*, was ‘the domain of free syntheses where everything is possible: endless connections, nonexclusive disjunctions, nonspecific conjunctions, partial objects and flows.’⁵⁷ The liberating and revolutionary potential of this discovery had though, they argued, been immediately annulled by casting it within the ‘edifying’ system of Western classical mythology. Desire and its flows of free connective syntheses were constrained within the Oedipal triangle of ‘daddy-mommy-me’ so as to be adjudged through the simple binary of normal or pathological. Psychoanalysis, argued Deleuze and Guattari, ‘instead of participating in an undertaking that will bring about genuine liberation’ was ‘taking part in the work of bourgeois repression at its most far-reaching level, that is to say, keeping European humanity harnessed to the yoke of daddy-mommy and making no effort to do away with this problem once and for all.’⁵⁸ The revolutionary potential vested in the flow of desire could only be realised, as they saw it, through the rejection of a metaphysical *psychoanalysis* in favour of an immanent *schizoanalysis*:

a revolution—this time materialist—can proceed only by way of a critique of Oedipus, by denouncing the illegitimate use of the syntheses of the unconscious as found in Oedipal psychoanalysis, so as to rediscover a transcendental unconscious defined by the immanence of its criteria, and a corresponding practice that we shall call schizoanalysis.⁵⁹

Analogously, the possibilities suggested to Koolhaas within Manhattanism are, he argues, misconceived by European modernist architecture, personified in the figure of Le Corbusier, as merely pathological. ‘To the European humanist/artist’, he writes, ‘this creation is only chaos, an invitation to problem solving : Le Corbusier responds with a majestic flow of humanist non sequiturs that fails to disguise the sentimentality at the core of his vision of Modernity.’⁶⁰ For Koolhaas, the alternative that Le Corbusier

proposes for Manhattan—a widely dispersed, decongested grid of Cartesian skyscrapers—entirely misses the potentials of Manhattanism’s Culture of Congestion and its intensive programmatic juxtapositions. ‘Le Corbusier’s Skyscraper means business only’, he observes, ‘[it] preclude[s] occupation by any of the forms of social intercourse that have begun to invade Manhattan, floor by floor.’ ‘The glass walls of his Horizontal Skyscraper’, he continues, ‘enclose a complete cultural void.’⁶¹

Both Deleuze and Guattari, and Koolhaas alike, resist, through their recourse to techniques and models adopted from Surrealism, these tendencies towards normative rationalisation. In pursuit of their schizoanalytic project, Deleuze and Guattari drew upon Antonin Artaud’s concept of the ‘body without organs’ or ‘BwO’. Rather than literally ‘organless’, this body stood for them as one without a fixed organisation, or, in their own terms, as one which does not succumb to a process of territorialisation which would render it the mere instrument of the *socius*. The BwO, they say ‘causes intensities to pass; it produces and distributes them in a *spatium* that is itself intensive.’⁶² It is ‘nonstratified, unformed, intense matter’ and is defined by ‘axes and vectors, gradients and thresholds, by dynamic tendencies involving energy transformation.’ The BwO is a body that would enable the desires unleashed by capital to flow, and remain in a fluid process of becoming, without ever being contained within a mechanism of reterritorialisation such as that of psychiatry’s Oedipus Complex.

It is to the surrealism of Salvador Dali and his ‘Paranoid Critical Method’, or ‘PCM’, that Koolhaas turns in his resistance to the modernist discourse of architectural and metropolitan ‘efficiency’ represented by the figure of Le Corbusier. As discussed above, surrealism had experimented, Koolhaas notes, with ‘automatic’ writing, as a process of artistic production ‘unhindered by the author’s critical apparatus’, and one he proposes as analogous to that of architectural production within Manhattanism,

exemplified for him in the construction of the Empire State Building. In the PCM, however, he identifies a further development within surrealism that, rather than surrendering the ‘critical apparatus’ to the unconscious, will make the critical faculties the conscious directors of its products. ‘Dali’, he writes ‘proposes a second-phase Surrealism: the conscious exploitation of the unconscious through the PCM.’⁶³ The PCM, he continues, ‘is defined by Dali mostly in tantalizing formulas: “the spontaneous method of irrational knowledge based on the critical and systematic objectifications of delirious associations and interpretations ...” ’⁶⁴

In *Delirious New York* the PCM is both the subject of Koolhaas’s analysis *and* his method. He writes that Dali’s PCM ‘promises that, through conceptual recycling, the worn, consumed contents of the world can be recharged or enriched like uranium’,⁶⁵ and that through its method ‘the world can be reshuffled like a pack of cards whose original sequence is a disappointment.’⁶⁶ It is, at the same time, through this method that Koolhaas himself identifies, within Manhattanism, the elements that will inform his own theory and practice of a ‘metropolitan architecture’, ‘recycling’ and ‘reshuffling’ the island’s unconscious productions of circulatory congestion and programmatic complexity.

The Koolhaas who wrote *Delirious New York* thus shares with Deleuze and Guattari an understanding of the productive power of the abstract mechanisms of capital, particularly in terms of its unleashing of unconscious libidinal forces. He has in common with them, as well, the valorisation of these forces and his opposition to their normative rationalisation. Furthermore, both the architect and the philosophers developed a method, drawing upon models and techniques derived from surrealism, through which the free associations and connective syntheses of desire might be elaborated and intensified. Where for Deleuze and Guattari it was through Artaud’s *Body without Organs* that their project of schizoanalysis would be pursued, it was, for Koolhaas, through the *Paranoid*

Critical Method that an architecture of delirium might be consciously produced.

These commonalities have been explored not so as to frame the writings and architecture of Koolhaas as straightforwardly Deleuzoguattarian. Rather, they establish the grounds upon which the question key to this chapter can be articulated. That is, if architectural Deleuzism cynically employs the philosophy of Deleuze and Guattari as an instrument for the realisation of the control society whose emergence the philosophers themselves warned of, can an architecture appearing to have a genuine affinity with their thought suggest the possibility of a different set of relations between architecture and the production of subjectivity? Can the architecture of Koolhaas and OMA, in other words, be said to provide for the possibility of free synthesis, the *delirium* of the metropolis, rather than the *management* of subjectivity which serves the marketisation of the entire social field?

The exploration of these questions is complicated by the fact that the architecture of Koolhaas/OMA cannot in any straightforward fashion be simply opposed to that of practices such as FOA or ZHA. Zaha Hadid, for example, was a student of Koolhaas at the Architectural Association in the mid-1970s and then became a partner in OMA in 1977 (before leaving to establish her own office in 1980), and Alejandro Zaera-Polo worked at OMA in the early-90s. Furthermore, certain of the tropes central to architectural Deleuzism, such as the production of a smooth space of continuous surfaces, and an antipathy toward representation and critique, have been identified as originating with Koolhaas by figures such as Zaera-Polo and Jeff Kipnis. Hence, any attempt to distinguish the architecture of Koolhaas from that of architectural Deleuzism, which is concerned with the question of the production of subjectivity in doing so, needs to engage at the same time with these claims on the significance of Koolhaas's architecture.

THE GREAT SPIRAL

In an edition of the journal *El Croquis* devoted to the work of Rem Koolhaas/OMA,⁶⁷ Zaera-Polo, its guest editor, proposes in an interview with Koolhaas that: ‘I would rather see your last projects like machines ... rather than as “representative” constructions. In many ways this aim to represent is part of those linguistic paradigms we are trying to escape from.’⁶⁸ Despite the fact that in his response Koolhaas maintains that there is both a machine-like *and* a representational element to his architecture, Zaera-Polo maintains his intent to enlist the architect to his own anti-representational agenda in the essay that follows this interview. In *OMA 1986 - 1991: Notes for a Topographic Survey*, he writes that:

Only after OMA’s recent development, we have the understanding of Koolhaas’s schizophrenic dedication to both Leonidov and Coney Island as a conscious or unconscious part of a very precise agenda his first experiments with the language of modernity are no more than a self-destructive strategy which is aimed at the elimination of any linguistic approach. It is a programmed extermination of representative architecture by the pure exhaustion of its two possible fronts: signifier and signified.⁶⁹

Likewise, in a subsequent edition of *El Croquis* on the work of Koolhaas/OMA,⁷⁰ Jeff Kipnis writes, in his essay ‘Recent Koolhaas’, that ‘[l]ike many of Koolhaas’s works, the Kunsthal is a coherent synthesis—not a collage—of several well-known Modern precedents.’⁷¹ In his refusal to find in this project any evidence for the differential relations of reference implied by the term ‘collage’, he joins Zaera-Polo in attempting to shape the reception of Koolhaas in non-representational terms. Furthermore, Kipnis’s insistence on the ‘coherent synthesis’ of Koolhaas’s architecture fails entirely to recognise the latter’s longstanding concerns, in both his writing and his architectural projects, with the mobilisation of the principles of opposition and contradiction as the fundamental components of a ‘metropolitan architecture’. Lara Schrijver, noting that ‘[t]he projects of OMA tend to call

attention to oppositions rather than subdue them',⁷² has observed of these concerns in the work of OMA/Koolhaas, and their relationship to the ideas of O.M. Ungers, with whom he studied at Cornell in the early-70s:

The acknowledgement and incorporation of contradictions is a theme that runs throughout the work of both Ungers and Koolhaas. In part, this interest in conflicting ideas is a response to an increasingly heterogeneous reality that architecture is simply confronted with. Yet both architects not only refer to this as a cornerstone of the metropolitan condition, but also employ a specific concept to harness and utilise these contradictions in their designs. For Koolhaas, it is the oxymoron, while for Ungers, it is the *coincidentia oppositorum*.⁷³

STRATEGIES OF DISJUNCTION

The presence in the architecture of OMA of oppositional and contradictory elements will be addressed below. What should be noted at this point, however, is the obvious presence of heterogeneous representational and referential components in a number of their architectural projects from the period of the late-80s and early-90s to which Polo is referring in his essay. The purely non-linguistic and 'operative logic', which he claims of OMA's Zentrum für Kunst und Medientechnologie (ZKM, 1992), in Karlsruhe, for example, is difficult to sustain in respect of a number of the project's significant features. Incorporated within the building's south wall is a 'robot'; a mechanical 'void space that runs the entire height of the building to allow stage sets, electronic devices, projectors, art, containers, capsules to move up and down or to be locked in place to create new conditions on particular floors.'⁷⁴ Whilst this device is evidently machinic, its function is also conceived as semiotic: 'Behind a corrugated polyester skin, these movements become signals of activity to the *Autobahn* traffic.'⁷⁵ Another wall of the building was designed to operate as an 'electronic billboard' [fig.1] from which 'activities of the center leak out and are projected in real time alternating with commercial messages, railway network bulletins, CNN, etc.'⁷⁶ Rather than eliminating referentiality, then, this project suggests a convergence of the machinic and the signalectic that confirms Koolhaas's interest in each of these operations, as well as in their interrelations.

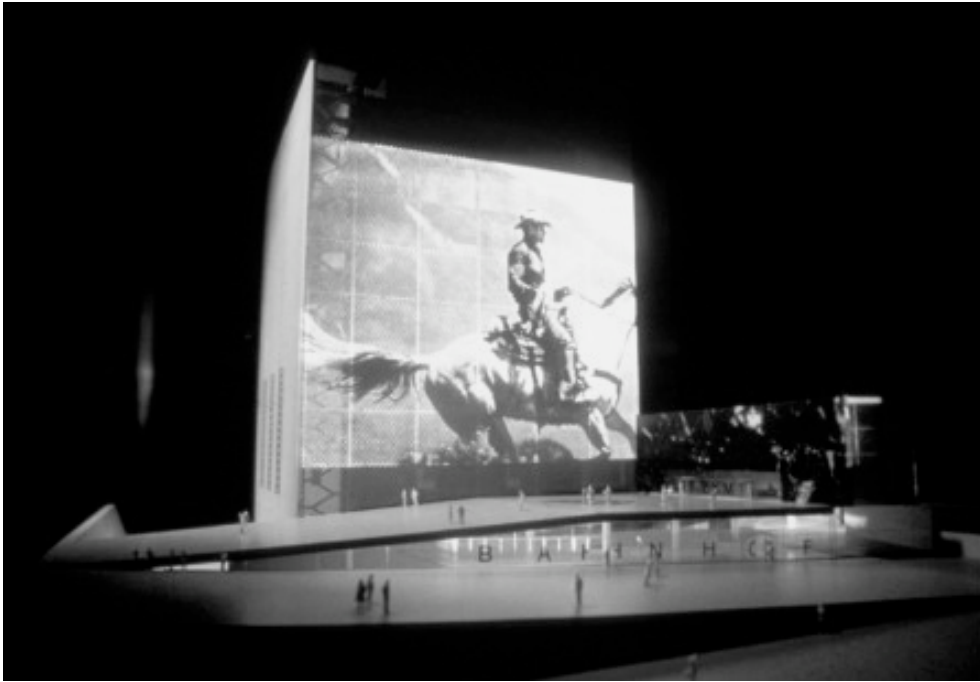


fig. 1. *Zentrum für Kunst und Medientechnologie*, Karlsruhe, Germany, Office for Metropolitan Architecture, 1992: media wall

Even more explicit in its employment of referential and representational elements is the architecture of the Kunsthall in Rotterdam (1992). The entrance to the building is indicated by an oversized and freestanding arrow, whose array of sequentially illuminated bulbs suggest the preferred direction of movement to the visitor [fig.2]. This object is at once both an indexical sign of orientation and one that represents, through its material coding, the world of pop art and the neon urban signage of Las Vegas. Given Koolhaas's own interest in Robert Venturi, Denise Scott Brown and Steven Izenour's *Learning from Las Vegas*, the arrow also reads, to anyone familiarised with such knowledge, or at least with the codes of 20th century architectural theory, as a reference to the relationship between urbanism, semiotics and architecture that was foregrounded in this publication. As a heavily coded and intertextually complex sign this feature of the Kunsthall, far from 'exhausting' the powers of the signifier and signified, playfully multiplies and intensifies their operation. The I-beam perched atop the section of the roof facing the boulevard that runs by the Kunsthall does something similar [fig.

3]. Picked out in an orange sharply distinguishing it from the black of the roof on which it sits, and thus emphasising its detachment from any obvious structural function, the beam is raised, from its association with the structural transparency and sober expressivity of Mies van der Rohe, to the level of a pop fetish.



fig. 2. *Kunsthall*, Rotterdam, Netherlands: Office for Metropolitan Architecture, 1992:
entrance



fig. 3. *Kunsthall*, Rotterdam, Netherlands: Office for Metropolitan Architecture, 1992:
projecting roof-beam



fig. 4. *Neue Nationalgalerie*, Berlin, Germany: Ludwig Mies Van der Rohe, 1968



fig. 5. *Kunsthal*, Rotterdam, Netherlands: Office for Metropolitan Architecture, 1992

The plinth which extends from the building toward the boulevard, suspended over the service road to which it runs parallel, combines with the overhanging roof to produce an effect of spatial compression recalling that achieved by Mies in, for example, the porticos of his Neue Nationalgalerie in Berlin (1968) [figs.4,5]. Combined with the fully-glazed facade of the Kunsthall, the suspended plinth would appear to suggest the straightforward deployment of what Kipnis terms a ‘Modern precedent’ by Koolhaas. This suggestion is, however, complicated by the fact the structure of the portico also operates referentially. Not only does it serve as a kind of quotation of Miesian ‘universal space’, but the array of supports used for the roof—a concrete pilaster, a cruciform column recalling those used by Mies in his Barcelona Pavilion, cross-bracing and an exposed steel beam—connotes that their function is also to serve as something like an exhibition of archetypes of 20th-century architectural construction. The space in which these beams are situated thus doubles as both a quotation of the Miesian portico and as a kind of *in situ* gallery.

The Kunsthall’s doubling of architectural elements as structures *and* signs, its play of intertextuality, and its promiscuous combinations of high modernism, pop and postmodernism are not well accounted for by the description ‘coherent synthesis’, and are irreconcilable with the claim that in such buildings Koolhaas has ‘eliminated’ linguistic codes. Albeit without being reducible to its compositional methods, the juxtapositions and disjunctions established in the experience of the Kunsthall, even before entering it, suggest properties common, at least in their effects, to certain forms of collage.

It is important to the post-critical agenda common to both Zaera-Polo and Kipnis, as elaborated in the preceding chapter, that architecture be valorised according to its purely material, asignifying and affective qualities; that architecture be free of ‘dematerialized’ and abstract concepts and without representations. This classification cannot easily be squared with the work of

Koolhaas but, nonetheless, there is within the discourse of architectural Deleuzism an attempt to recruit him to their cause. Koolhaas himself has, however, since made clear his differences with an architectural position represented for him by Sanford Kwinter, Zaera-Polo, Ben van Berkel and Greg Lynn, and articulated this precisely around issues of signification. Interviewed by Sarah Whiting, in 1999, he states:

I remember being critical of their claim, then, that they had gone beyond form to sheer performance, and their claim that they had gone beyond the semantic into the purely instrumental and strictly operational. What I (still) find baffling is their hostility to the semantic. Semiotics is more triumphant than ever - as evidenced, for example, in the corporate world or in branding - and the semantic critique may be more useful than ever: the more artificialities, the more constructs; the more constructs, the more signs; the more signs, the more semiotics. For me, PhotoShop is ultimately as revolutionary as a new tool or as a morphing program that is supposedly signfree. There is already evidence that the topological language is a sign. It seems a potential tragedy that, once again, architectural discourse is hostile to a phenomenon at the moment of its greatest use.⁷⁷

Koolhaas's subsequent involvement with the Prada fashion label exemplifies his interest in branding and the possibilities of intervention within its semiotic field of operation. In his conversion of a section of the Soho Guggenheim to a store for Prada in Manhattan, for example, the museum's original signage was retained in the new store so as to suggest the coalescence of art and shopping as forms of metropolitan experience.

Koolhaas's mobilisation of signs and images, and of the language of architecture itself as self-reflexive and intertextual, suggests a very different relationship between subject and spatial environment than that posited by the supposedly 'post-linguistic' architecture of affect proposed by FOA. Whereas Zaera-Polo and Moussavi seek to produce an architecture that 'appeal[s] directly to physical sensation,'⁷⁸ and that elicits affects and affections unmediated by any linguistic or conceptual framework, the experience of the architecture of Koolhaas is, in examples such as those

referred to above, evidently mediated by semantic elements and the coding of architecture itself as a self-reflexive language.

It is not merely the presence of the linguistic and the semantic that has distinguished Koolhaas's architecture from that of architectural Deleuzism, but also the fashion in which these have been mobilised. The combinatorial strategies of disjunction and juxtaposition, so alien to the fluid and integrative concerns of architectural Deleuzism, are evident throughout his oeuvre. Not only is this exemplified in projects such as the Kunsthall or the Prada store in New York, but in publications such as *Delirious New York*, of whose structure Koolhaas writes in the book's introduction, 'this book is a simulacrum of Manhattan's Grid: a collection of blocks whose proximity and juxtaposition reinforce their separate meanings.'⁷⁹ OMA/AMO's *Content*, published in 2004, was designed, in the format of a magazine, to document 'a split ... the maximum stretch between two opposite forces, realization and speculation performed by OMA and AMO.'⁸⁰ John Berger observed some time ago, in his *Ways of Seeing*, that the magazine format can produce the most shocking coexistence and proximities of publicity images to factual reportage. As an example of this he cited a page from the *Sunday Times Magazine* that featured a news photograph of humanitarian crisis in Pakistan placed above an advertisement for toiletries featuring a semi-naked young woman.⁸¹ Koolhaas's intention in *Content* appears to be to consciously mobilise the kind of shock effects produced by such juxtapositions. An illustration of wallpaper designs for his Prada store, for example, is placed immediately before a piece by Eyal Weizman on urban planning as a 'tool of military conflict.'⁸² Similarly, at one of the 'ANY' architectural conferences, he recalls in an interview with David Cunningham and Jon Goodbun, he was 'almost literally thrown out' for the provocation of combining in a single lecture the subjects of Prada and the informal settlements of Lagos.⁸³

A SHOCK TO THOUGHT

Such strategies of disjunction suggest Koolhaas's continued employment of

the Paranoid Critical Method to achieve the ‘delirium of interpretation’⁸⁴ promised by Dali’s surrealist technique. It is important, in terms of questions of perception, to emphasise here that the experience of delirium is the product of an interpretative act on the part of the subject, rather than the passive reproduction of a pre-programmed affect as sought by Zaera-Polo and Moussavi. It is not only the experience of difference that is vital to this process, but also the *shock effect* produced by this difference which then acts as an impetus to conscious and critical reflection. Koolhaas has referred to the ‘shock value’ of Dali’s PCM as significant to his own interest in its potentials, but this interest in shock effects can also be located within other early twentieth century avant-garde movements, such as the montage cinema of Sergei Eisenstein, in ways highly pertinent to the theorisation of the production of subjectivity in relation to Koolhaas’s architecture. Speaking of his own sympathies towards such movements, in contrast to their more contemporary counterparts, he has said:

The programmatic hybridizations/proximities/frictions/overlaps/superpositions that are possible in Bigness—in fact, the entire apparatus of montage invented at the beginning of the century to organize relationships between independent parts—are being undone by one section of the present avant-garde in compositions of almost laughable pedantry and rigidity, behind apparent wildness.⁸⁵

The montage cinema practiced and theorised in the 1920s by Eisenstein distinguished itself, from what would become known as Hollywood’s ‘continuity style’, as one whose shot-to-shot relations were based on a principle of dynamic conflict: ‘montage is an idea that arises from the collision of independent shots—shots even opposite to one another’, as Eisenstein wrote.⁸⁶ In this ‘dialectical montage’ heterogeneous and contrasting shots were combined to form a sequence requiring the active participation of the filmic spectator in order, actively and intellectually, to realise their meaning. Eisenstein argued that signifying elements, through their presentation in dynamic relationships, counted for more than the sum of their individual properties: ‘the combination of two hieroglyphs of the simplest series is to be

regarded not as their sum, but as their product ... each, separately, corresponds to an object, to a fact, but their combination corresponds to a concept ...'⁸⁷ This conceptual production, argued Eisenstein, was the product of the movement of thought, within the subject, in response to the movement of the film, without. Film could only be raised to this intellectual power, moreover, on the condition that the movement of the image was composed of a succession of identifiably distinct elements superimposing themselves upon the perception of the subject, rather than blended into a seamless continuum in which narrative facts were merely accumulated. Whilst the conflicts between each shot—graphic, planar, volumetric, temporal, etc.—produced, in the first instance, a 'purely physiological effect—from the purely optical to the emotional,' this perception had the capacity to achieve 'intellectual dynamization' with 'the same conflict tension serving the ends of new concepts—of new attitudes, that is, of purely intellectual aims.'⁸⁸ Following Eisenstein, Deleuze argues that the automated movement of the cinematic apparatus, with its mobilisation of montage effects, uniquely engages the nervous system in such a way as to stimulate thought. 'It is only when movement becomes automatic' he writes in *Cinema 2: The Time-Image*, 'that the artistic essence of the image is realized: producing a shock to thought, communicating vibrations to the cortex, touching the nervous and cerebral system directly.'⁸⁹ Rather than hoping to bypass rational thought so as to achieve supposedly immediate affective communication, as in the formal/aesthetic strategy of much architectural Deleuzism, montage is oriented to the production of shock effects in which perception serves to provoke thought, as well as reflection upon on that process through which thought itself is realised: the 'cinematographic image must have a shock effect on thought, and force thought to think itself as much as thinking the whole.'⁹⁰ Before turning to consider the question of 'the whole', and its thought, that Deleuze refers to here, it is worth first locating certain instances in the architecture of Koolhaas that exemplify his own employment of shock effects and heterogeneous juxtapositions, and that thus align his aesthetic strategies with those of the Paranoid Critical Method and montage cinema.



fig. 6. *McCormick Tribune Campus Center, Campus of the Illinois Institute of Technology, Chicago:* Office for Metropolitan Architecture, 2003

Perhaps the most striking example of formal and programmatic juxtaposition in all of Koolhaas's architecture is that between the Exelon tube wrapping an elevated rail track and the McCormick Tribune Campus Centre, at the Illinois Institute of Technology in Chicago (2003), appearing to crumple beneath its weight. [fig.6]. This collision of elements typifies the architect's concern to intensify and make manifest to thought and experience the delirium already latent within metropolitan conditions. Koolhaas, speaking of the existing campus, observes: 'The encounter between the lone Mies box and the rocket of the passing EL trains is as absurd as Lautremont's encounter between the umbrella and the sewing machine: a surrealist pastiche.'⁹¹ The apparent collision of the train line and the campus only exacerbates, as a shock effect, the existing absurdity of their proximity in the metropolitan condition whose objects all float 'on the same plane, with the same specific gravity'.⁹² The shock effect is not confined to the external appearance of the campus, but is carried through into its interior. Whilst the Exelon tube significantly dampens the noise and vibrations of the EL trains passing overhead, these are still felt within the building and signified by the exposure of the tube's underside through a section cut from its ceiling, as well as through the presence of the double system of columns supporting the tube and the rail track which populate its interior space [fig.7].



fig. 7. *McCormick Tribune Campus Center, Campus of the Illinois Institute of Technology, Chicago:*
Office for Metropolitan Architecture, 2003: interior

Koolhaas's treatment of circulation similarly exacerbates, within the architectural envelope, the experience of heterogeneous encounter. Whereas architectural Deleuzism has concerned itself almost exclusively with the instrumental management of fluidly-modelled mobility, Koolhaas's architecture is composed of flows *and* breaks, with movement *and* its interruption. As was argued in chapter two, the architecture of Hadid is characterised by the desire to *master* complexity, whereas that of Koolhaas appears, in examples such as the McCormick Tribune Campus Centre, concerned to *intensify* and *multiply* it. The contrast between the two approaches is further clarified in comparing certain of the plans of each practice.

Hadid's vector diagram for the BMW Central Building in Leipzig organises the relations between the plant's factory buildings into a neatly bundled series of parallel trajectories. Movement through the building is projected as an uninterrupted movement of laminar flows, with changes of direction achieved through gentle curves within the paths plotted for the company's employees. The intersection of trajectories within this diagram, and any friction that results from these, are precisely calculated to elicit communication as a form of feedback instrumentalised in servicing the overall efficiency of the factory's operations. This approach to circulation and its management, of bundling snaking pathways through the site of a smooth-spaced architecture, is evident within other projects by Hadid, such as the MAXXI Museum in Rome (2010) and the University of Economics and Business Vienna Library and Learning Centre (2012), [figs.8,9]. In contrast, Koolhaas's McCormick Tribune Campus Center for the Illinois Institute of Technology [fig.10], a project that, like the BMW Central Building, is positioned centrally within a larger complex of buildings, takes a markedly different approach to the question of circulation. The angular network of walkways that cut through the McCormick Center result from mapping the existing direct routes between the key buildings of the IIT campus passing through its proposed site.⁹³ Rather than prescribed by the architect according to a managerial diagram, the circulation of the Center is derived from a found pattern, which is then used to generate an arrangement of intersections, interruptions and voids within its built space. Even in a project such as the Casa da Música in Porto (2005, fig. 11), with its large and regular box-shaped concert hall at its centre, circulation is characterised by abrupt turns and the spatial friction caused by sharply intersecting architectural volumes.

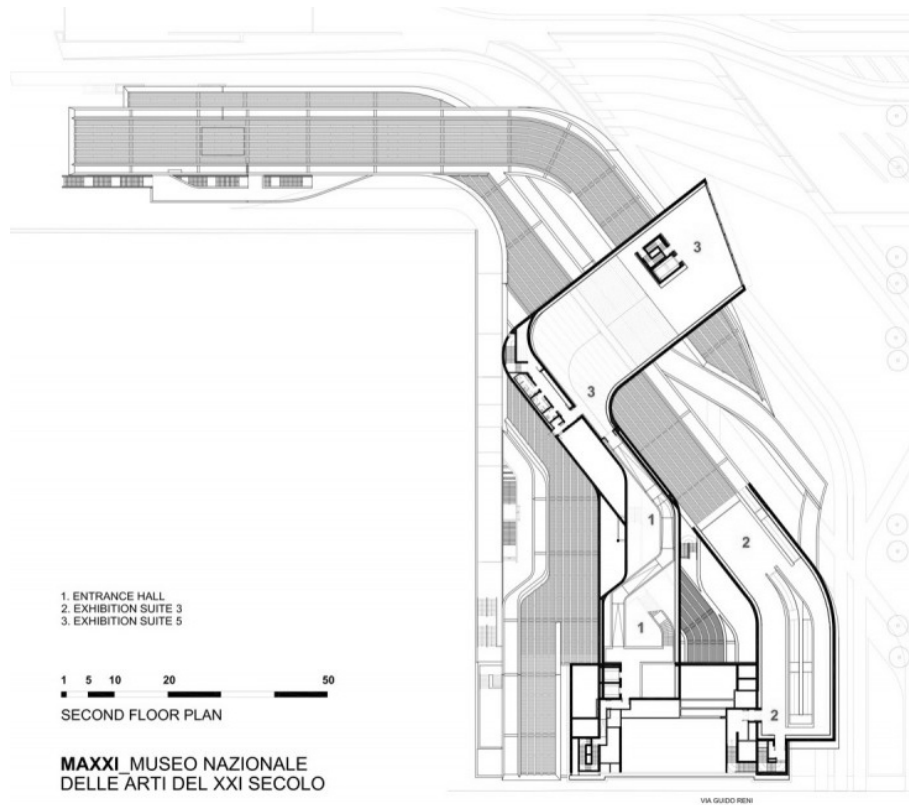


fig. 8. *MAXXI Museum*, Rome: Zaha Hadid Architects, 2010: second floor plan

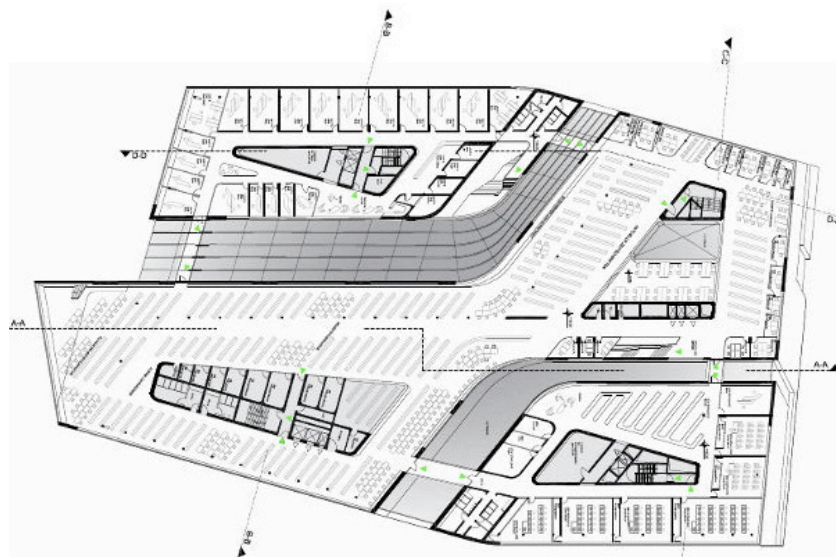


fig. 9. *University of Economics and Business Vienna Library and Learning Centre*, Vienna: Zaha Hadid Architects, 2012: level 5 plan

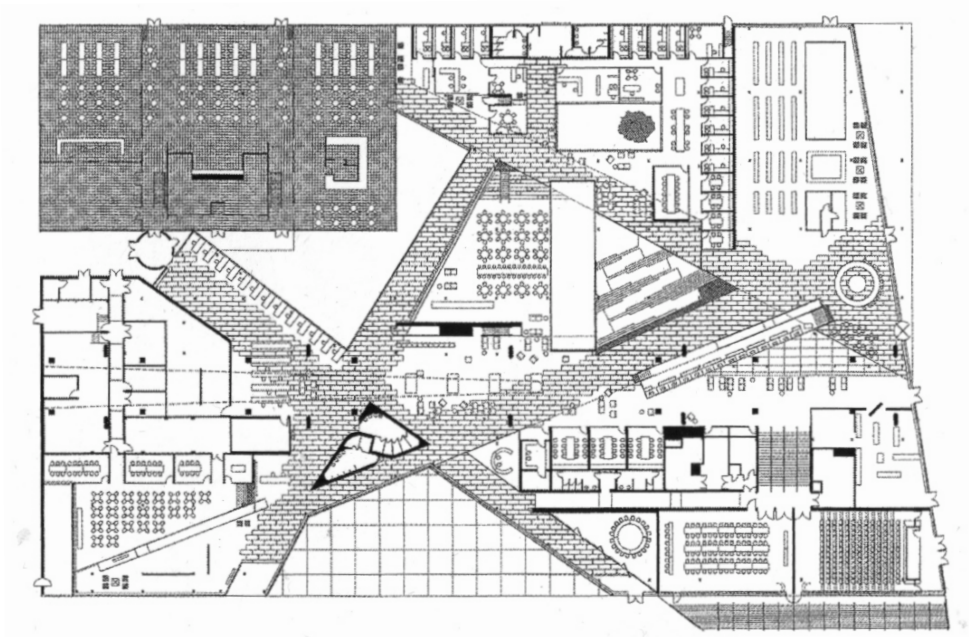


fig. 10. *McCormick Tribune Campus Center, Campus of the Illinois Institute of Technology, Chicago*: Office for Metropolitan Architecture, 2003: plan

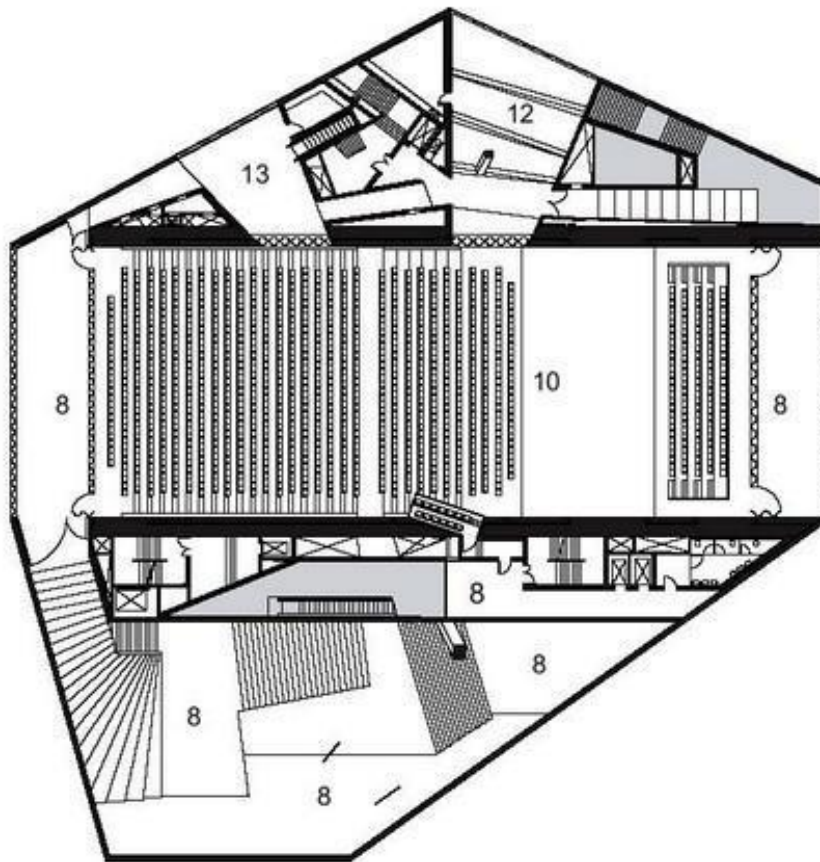


fig. 11. *Casa da Música, Porto*: Office for Metropolitan Architecture, 2005: upper level plan

These circulatory paths frequently figure acutely angled wall joints which have the effect of fragmenting one's experience of the space into a series of sharply juxtaposed conditions. In executing the 180-degree turn from the top of the Kunsthal's auditorium to ascend its adjacent stairway, for example, one is presented with a kind of split-screen image in which the two spaces are held in distinct counterpoint to one another [fig.12]. The montage-like compositions generated by this type of circulatory pattern, and the perceptual shocks they produce, are evident as well in other projects, such as the McCormick Tribune Campus Center. At certain points the passages through the Center slice through sections of counterposed programmes—such as the dining areas and sunken workstations—thus offering multiple perspectives on the Center's varying functions [fig. 13]. At the Casa da Música the circulation is especially labyrinthine, with often narrow and low-ceilinged corridors opening abruptly onto specific programmatic zones, from whose point of exit, in a further corridor, or even a boxed-in elevator, only a fragment of the next zone might be glimpsed [figs.14,15,16]. Such effects appear to confirm in his architecture what Koolhaas claims in writing of Bigness: 'Where architecture reveals, Bigness perplexes; Bigness transforms the city from a summation of certainties into an accumulation of mysteries. What you see is no longer what you get.'

⁹⁴Whereas spaces such as those of Ravensbourne College or the BMW Central Building render 'transparent' the articulation of their parts within an homogenous whole, an architecture such as that of the Casa da Música makes the nature of these relations enigmatic. Whereas the buildings of architectural Deleuzism aim to elicit fluid and subliminally motivated patterns of circulation, those of Koolhaas, in the examples discussed here so far, demand conscious and reflective navigation.



fig. 12. *Kunsthal*, Rotterdam, Netherlands: Office for Metropolitan Architecture, 1992:
auditorium and stairway

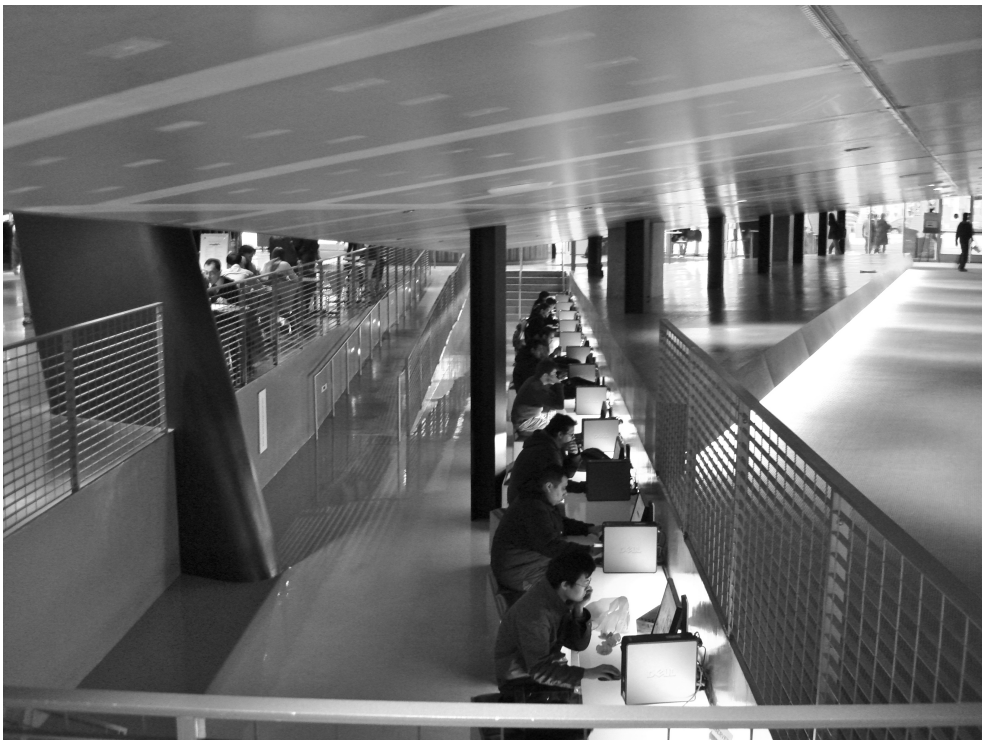


fig. 13. *McCormick Tribune Campus Center*, Campus of the Illinois Institute of Technology, Chicago:
Office for Metropolitan Architecture, 2003: interior



fig. 14. *Casa da Música*, Porto: Office for Metropolitan Architecture, 2005: corridor

The impression created by Koolhaas's architecture of a whole constituted from a montage of 'independent parts' is also furthered by his deployment of materials. Whereas Zaha Hadid architects have sought to produce in projects such as the BMW Central Building and the MAXXI museum a sense of seamless continuity through the use of a limited palette of materials, so that, in the words of Schumacher, 'the eye never comes to rest', in the architecture of Koolhaas the eye's movement encounters a fragmentation of space through a heterogeneous combination of materials and finishes. Often these are, as Koolhaas has described them, 'abject' in their cheap and ordinary material qualities, such as the corrugated polycarbonate sheeting used for the ticket office and reception area of the Kunsthall or the unpainted sheetrock panels of the McCormick Tribune Campus Center's ceiling [figs.17,18]. The everydayness of these materials is often set in contrast to other material 'languages' and their associative connotations—those of modernist/brutalist concrete, or highly polished floor tiles, for example—so that spatial elements such as floors, ceilings, passageways and rooms are set in distinct and qualitative contrast to one another.



fig. 15. *Casa da Música*, Porto: Office for Metropolitan Architecture, 2005: corridor



fig. 16. *Casa da Música*, Porto: Office for Metropolitan Architecture, 2005, escalator



fig. 17. *Kunsthal*, Rotterdam, Netherlands: Office for Metropolitan Architecture, 1992:
corrugated polycarbonate panels



fig. 18. *McCormick Tribune Campus Center*, Campus of the Illinois Institute of Technology, Chicago:
Office for Metropolitan Architecture, 2003; unpainted sheetrock panels

These features of Koolhaas's architecture—the semiotic coding, the collision of forms, the complex patterns of circulation and the juxtaposition of materials—confront the subject with phenomena to interpret, navigate and negotiate. Rather than cushioned from the shocks of everyday life within the soothing contours and transparent space of a landscaped environment, the subject is exposed to an intensification of the heterogenous composition of contemporary experience, with its shock effects, and the demands that these make upon perception, thought, and action. If Hadid is the heiress to the shock-absorbing and commercialised expressionism of Erich Mendelsohn, then Koolhaas, in the architectures addressed above, is the inheritor of an early-20th century avant-garde whose aesthetic strategies aimed toward the achievement of self-reflective and critically alert conditions of reception. It is to Walter Benjamin, however, in respect of the themes of shock and the masses, as well as to a theory of mimesis, that his thought and practice might most productively be related.

In his essay 'On Some Motifs in Baudelaire', Benjamin analysed the relations between the figure of shock and the metropolitan masses in its treatment by Baudelaire and other literary figures of the 19th century, such as Poe and Proust. In doing so he charted the historical movement from Poe's 'man of the crowd' to Baudelaire's *flâneur*, and, finally, to the contemporary mass subject fully habituated to the optical and haptic sensory conditions of the modern city:

Whereas Poe's passers-by cast glances in all directions, seemingly without cause, today's pedestrians are obliged to look about them so that they can be aware of traffic signals. Thus, technology has subjected the human sensorium to a complex kind of training.⁹⁵

In their subjection to this training the consciousness of the masses acts as 'a screen against stimuli'⁹⁶ so that rather than entering into inner experience as *Erfahrung*, they remain on the 'screen' of consciousness as *Erlebnis*. As Esther Leslie explains in her *Walter Benjamin: Overpowering Conformism*:

Optical experiences and haptic, tactile ones are the stuff of modern urban life. They are all forms of assault on the body...Benjamin presents shock as a necessary prophylactic, a psychic shell of consciousness that protects the organism against stimuli and the threat of excessive energies. Shocks that are registered on this shell are seen to be less traumatic, since it is able to act as a buffer. The modern unskilled worker, claims Benjamin, is sealed off from experience as '*Erfahrung*'. Such experience is now atrophied – it is *Erlebnis*. *Erlebnis* is experience as a series of shocks, it is disruptive – and where once, in the nineteenth century, it appeared as the experience of the adventurer, now, in Benjamin's time, it appears as fate.⁹⁷

Benjamin also observed that this historically and technically conditioned new mode of experience corresponded to that in which the masses experienced cinema. In 'On Some Motifs in Baudelaire' he wrote:

There came a day when a new and urgent need for stimuli was met by film. In a film, perception conditioned by shock was established as a formal principle. What determines the rhythm of production on a conveyor belt is the same thing that underlies the rhythm of reception in the film.⁹⁸

However, Benjamin's analyses of the new means of technological reproduction—film and photography—also explored the possibility that these offered to the mass spectator a different relationship to the experience of the metropolis than one which simply trained its habits of perception. It is this possibility that is addressed in the famous 'The Work of Art in the Age of Mechanical Reproduction' essay. Benjamin's argument in this essay was not the rather superficial one often extracted from it, that technological reproduction democratises the image in making it more available to the masses, but that the very conditions of reception, and thus the possibilities for experience and thought, were transformed through the new media. 'The film' he wrote, 'has enriched our field of perception'⁹⁹, and has achieved a 'deepening of apperception.'¹⁰⁰ The techniques and possibilities specific to film offer a new perspective upon experience, one that expands the perceptual field of the masses:

By close-ups of the things around us, by focusing on hidden details of

familiar objects, by exploring common-place milieus under the ingenious guidance of the camera, the film, on the one hand, extends our comprehension of the necessities which rule our lives; on the other hand, it manages to assure us of an immense and unexpected field of action. Our taverns and our metropolitan streets, our offices and furnished rooms, our railroad stations and our factories appeared to have us locked up hopelessly. Then came the film and burst this prison-world asunder by the dynamite of the tenth of a second, so that now, in the midst of its far-flung ruins and debris, we calmly and adventurously go traveling.¹⁰¹

Rather than an impediment to ‘natural’ human perception, the technics of image reproduction suggested to Benjamin, in a fashion that echoed the polemics of Dziga Vertov’s ‘Kino-eye’, its post-human extension. Through the use of close-ups, enlargements and slow-motion, for example, ‘a different nature opens itself to the camera than opens to the naked eye—if only because an unconsciously penetrated space is substituted for a space consciously explored by man.’¹⁰² It was especially in the formal technique of montage, with its shock-like combinations and juxtapositions, however, in which the revolutionary potential of film to offer to perception a reconfiguration of the world was seen to reside. Through montage and the cinematic apparatus the masses were no longer *subjected* to the experience of the metropolis, trained to adapt to its rhythms, but rather found themselves in a position to *master* and *reflect* upon these conditions of experience. As Susan Buck-Morss, in her *The Dialectics of Seeing*, writes of Benjamin’s thought in this regard:

Technological reproduction gives back to humanity that capacity for experience which technological production threatens to take away ... Both the assembly line and the urban crowd bombard the senses with disconnected images and shocklike stimulæ. In a state of constant distraction, the consciousness of the collective acts like a shock absorber, registering sense impressions without really experiencing them: Shocks are ‘intercepted, parried by consciousness,’ in order to prevent a traumatic effect. Film proves the audience with a new capacity to study this modern existence reflectively, from “the position of an expert.”¹⁰³

It is specifically in the *mimetic* function of filmic montage¹⁰⁴—in its capacity

to *remake* as well as to *reproduce* the world through a process of ‘nonsensuous similarity’ (identified by Benjamin with the ludic sensibilities of children’s play)—that its potential lies. To quote Miriam Hansen in her essay ‘Benjamin, Cinema and Experience’:

The cinema’s promise of collectivity resides less in the miraculous conversion of economically motivated quantity into political quality suggested in the Artwork Essay, than in the shock-like configuration, or re-figuration, of social documents - images, sounds, textual fragments of an alienated yet common experience. The revolutionary potential of montage thus hinges not only upon the formal rehearsal of the shock-effect but also, and perhaps primarily, upon the mimetic power of its elements, the ‘complicity of film technique with the milieu.’¹⁰⁵

In contrast to Simmel, for whom the metropolitan subject’s capacity for experience terminated in the blunted sensibility of the blasé attitude, with its indifference to all but monetary values and their intellectual calculation, Benjamin conceived of the conscious ‘screen’ of *Erlebnis* as but a stage in an unfolding historical dialectic through which a new, technologically-mediated, mimetic sensibility might be brought forth. As is well known, it was from a viewpoint that was both retrospective and contemporary—in his analyses of the arcades and department stores of Haussmann’s Paris and the avant-garde cinema of the 1920’s, for example—that Benjamin sought out those conditions whose dormant potential to transform everyday life and its conditions of experience might be reanimated. In this respect, as well as others, the work of Koolhaas, if not directly following that of Benjamin, is remarkably close to it in its methods and perspectives.

MAXIMUM DIFFERENCE

It is within the recent history of New York—in the amusement parks of Coney Island, and in the first skyscrapers of Manhattan—that Koolhaas located, in his ‘retrospective manifesto’, the latent potentials of a Culture of Congestion and a Technology of the Fantastic which, though subsequently repressed by the rational orthodoxy of European modernism, would be revived in his own architecture; in the programmatic congestion central to

his theory of Bigness, and the fantastical technology of, for instance, the Prada Store in Manhattan or the Prada Transformer in South Korea. Like Benjamin, Koolhaas is concerned with the potentials of a technologically-mediated reproduction of metropolitan conditions, and the montage aesthetic through which its shock effects might be reworked and remastered. With his essay 'Bigness, or the problem of Large', Koolhaas turned the 'retrospective manifesto' of Manhattanism produced in his *Delirious New York* into a prescriptive programme for a future architecture. At its outset Koolhaas identified the neglected potentials for remaking the 'social world' that had been released through new modes of spatial and architectural production:

One hundred years ago, a generation of conceptual breakthroughs and supporting technologies unleashed an architectural Big Bang. By randomizing circulation, shortcircuiting distance, artificializing interiors, reducing mass, stretching dimensions, and accelerating construction, the elevator, electricity, airconditioning, steel, and finally, the new infrastructures formed a cluster of mutations that induced another species of architecture. The combined effects of these inventions were structures taller and deeper—Bigger—than ever before conceived, with a parallel potential for the reorganization of the social world—a vastly richer programming.¹⁰⁶

Just as Benjamin identified the end of the auratic apperception of the work of art with the coming of its mechanical reproducibility, and with this the possibility for new modes of experience in which the world could be remade and remastered by the metropolitan subject, Koolhaas identified the arrival of a similar transformation in architectural production and experience engendered by the technologies of Bigness. Architecture could no longer be practiced or experienced as an 'art' in the era of its mechanical dependency:

The elevator—with its potential to establish mechanical rather than architectural connections — and its family of related inventions render null and void the classical repertoire of architecture. Issues of composition, scale, proportion, detail are now moot. The 'art' of architecture is useless in Bigness.¹⁰⁷

Architecture, its status as an ‘art’ compromised by the numerous technological and infrastructural supports on which it now depended, achieved through the increased scale which these enabled for it a new relationship to its urban context. The blunt rhetoric in which Koolhaas stated the terms of this new relationship—‘Bigness is no longer part of any urban tissue. It exists; at most, it coexists. Its subtext is fuck context’—has, to some extent, the effect of suggesting that Bigness simply rejects its urban context and, with it, the public life of the city celebrated as its essential property by figures such as Jane Jacobs or Richard Sennett. Koolhaas’s argument was, however, that the street could no longer be identified as the principal locus of the public realm:

The exterior of the city is no longer a collective theater where ‘it’ happens; there’s no collective ‘it’ left. The street has become residue, organizational device, mere segment of the continuous metropolitan plane where the remnants of the past face the equipments of the new in an uneasy standoff.¹⁰⁸

If the public realm had become dislocated from the street—‘eroded by the onslaught of the media, pressures from the virtual, multiple privatizations, the end of the street, the plaza, etc’—then architectural Bigness would offer it some kind of refuge in which its collective and complex conditions could be both sustained and reinvented. Bigness ‘generates a new kind of city,’ wrote Koolhaas, ‘in the quantity and complexity of the facilities it offers, it is itself urban.’¹⁰⁹ Bigness has in common with forms of replicant and managerial urbanism, as practiced by Hadid, FOA and others, the proposition that the urban be somehow reproduced *within* the space of architecture. Bigness differs from these models, however, in that rather than seeking to manage the connective and collective qualities of the urban in pursuit of a prescribed outcome—the production of a ‘self-organising’ workforce, or an ideal of the ‘public’ facilitating enterprise and consumerism, for instance—it promises to pursue difference as an end in itself:

Bigness depends on regimes of freedoms, the assembly of maximum difference. Only Bigness can sustain a promiscuous proliferation of events in a single container. It develops strategies to organize both their independence and interdependence within a larger entity in a symbiosis that exacerbates rather than compromises specificity.¹¹⁰

As Pier Vittorio Aureli has pointed out, in his *The Possibility of an Absolute Architecture*, Koolhaas's (as well as that of his one-time OMA partner Elia Zenghelis's) thinking of the relationship between the architectural artefact and its place in the metropolis is significantly indebted to that of O.M. Ungers and his conception of the 'city-within-the-city' and the metropolis as 'a site of radical discontinuity'.¹¹¹ 'One can argue' writes Aureli,

that such an approach to the city—an approach inspired by Ungers's Grünzund Süd project—became the conceptual basis for *Delirious New York*, which uses the the most critical urban conditions as the basis for a city project. In following this link between Ungers and the early work of Koolhaas and Zenghelis, we can see the fundamental development of Ungers's city-within-the city concept as the germ of Koolhaas and Zenghelis's Exodus, or the Voluntary Prisoners of Architecture (1972).¹¹²

In *Delirious New York* Koolhaas argued that the each block on the Manhattan grid operated as a 'City within a City', maximising difference through its programmatic juxtapositions. 'Bigness', and the projects informed by its theorems, such as the Casa da Música, the Kunsthall or the McCormick Tribune Campus Center, also seek the production of difference. However, in Koolhaas's engagement with the 'regime of complexity' inherent to Bigness, with its relations between 'independence and interdependence,' and where 'programmatic elements react with each other to create new events,' difference is pursued through architectural means beyond that of the floor-to-floor disjunctions of Manhattanism.

In their ramped and oblique surfaces, projects such as the Kunsthall and the McCormick Tribune Campus Center begin to complexify the relationship between programme and circulation, and, in doing so, recall the

experiments in ‘habitable circulation’ pursued by Claude Parent and Paul Virilio’s practice, ‘Architecture Principe’, in the late-60s and early-70s. The capacity of these surfaces to reproduce, within the architectural envelope, the connective complexity of urban experience is further developed in the spiral trajectories of OMA/Koolhaas projects such as the Dutch Embassy in Berlin (2004), and the Seattle Public Library (2004). In joining circulation to programme and inhabitation the ramped surfaces of these projects suggest, rather than the experience of absolute disjunction as one moves via escalator from floor to floor, and from programme to programme, a continuous trajectory in which various programmatic relations unfold for the visitor in a film-like sequence revealing their relations of ‘independence and interdependence.’ The potential of these architectural devices to achieve a mimetics of urban experience are made explicit in Koolhaas/OMA’s own description of their competition project for the Deux Bibliothèques Jussieu in Paris (1992) [figs. 19,20]:

These new surfaces—a vertical, intensified landscape—are then ‘urbanized’ almost like a city: the specific elements of the libraries are reimplanted in the new public realm like buildings in a city. Instead of a simple stacking of one floor on top of the other, sections of each floor are manipulated to connect with those above and below.

In this way a single trajectory traverses the entire structure like a warped interior Boulevard. The visitor becomes a Baudelairean flaneur, inspecting and being seduced by a world of books and information and the urban scenario.

Through its scale and variety, the effect of the inhabited planes becomes almost that of a street, a theme which influences the interpretation and planning of the Boulevard as part of a system of further supra-programmatic urban elements in the interior: plazas, parks, monumental staircases, cafes, shops.¹¹³



fig. 19. *Deux Bibliothèques Jussieu*, Paris: Office for Metropolitan Architecture, 1992:
competition project model

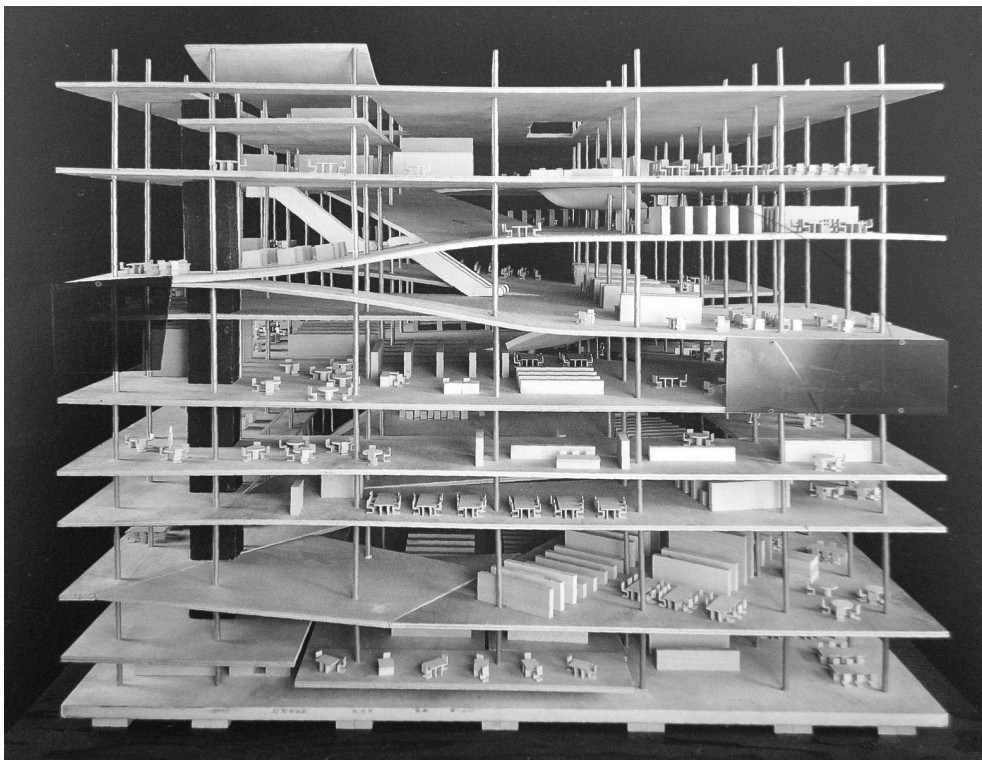


fig. 20. *Deux Bibliothèques Jussieu*, Paris: Office for Metropolitan Architecture, 1992:
competition project model

With their continuous and folded surfaces these projects suggest an affinity with the smooth spaces of continuous transformation produced within architectural Deleuzism, as appears particularly apparent in Koolhaas/OMA's competition project for the Yokohama Center (1992) [fig. 21], for example, which, with its undulating ground condition, suggests itself as a precursor to FOA's Yokohama Port Terminal of 2002. Rather than derived from a translation of Deleuze and Guattari's conceptual vocabulary into a prescription for architectural form, however, the source of Koolhaas's manipulation of the ground plane can, as has been identified by Roberto Gargiani, be located in the work of the Brazilian artist Lygia Clark.¹¹⁴

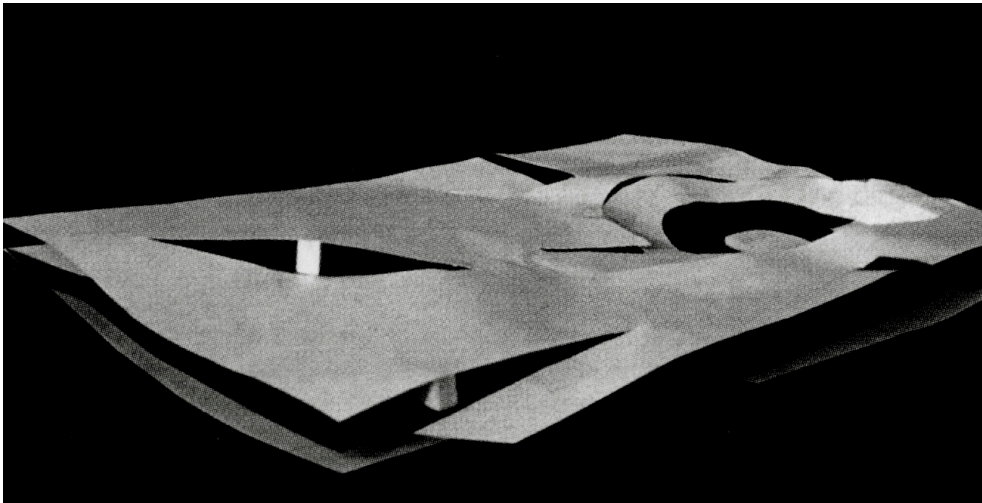


fig. 21. *Project for Yokohama Center*, Japan: Rem Koolhaas/Office for Metropolitan Architecture, 1992



fig. 22. *O dentro é o fora* [*The inside is the outside*], Lygia Clark, 1963

The *Caminhando* (walking) series of works, with which the artist was engaged in the mid-1960s, explored the production of spatial form through cuts made within a single pliable surface. The metal sculptures produced by Clark—such as *O dentro é o fora* (*The inside is the outside*) [fig. 22]—in which incisions made within sheet metal enable the articulation of a complex topology, clearly bear a close resemblance to OMA's Yokohama Centre model. The influence of Clark upon Koolhaas can be identified in relation to the paper-cutting exercises within the *Caminhando* series. In these works by Clark, strips of paper were formed into a Moebius loops by the creation of a 180-degree twist in the joining its two ends to form a single continuous surface. As Suely Rolnik elaborates in her account of this project:

The work consists simply in offering to the spectator this object and a pair of scissors, with instructions to choose a point at random to begin the cut and avoid hitting the same spot upon each completion of the circuit. The strip simultaneously narrows and lengthens with each successive cycle, until the scissors can no longer avoid the starting point. At this moment, the strip regains its front and back, and the work is concluded.¹¹⁵

That Clark's work, and the *Caminhando* project specifically, formed a decisive influence upon Koolhaas is made clear both in a passage from an interview with the architect that appeared in *L'architecture d'aujourd'hui*, where he stated 'Pour moi, le travail d'un Hélio Oiticica ou d'une Lygia Clark est essentiel,'¹¹⁶ and in the visual quotation of images of the process of making the paper *Caminhando*, of hands, scissors and paper, in the photographs used by OMA in explanation of the design of the Deux Bibliothèques Jussieu project [figs.23,24].

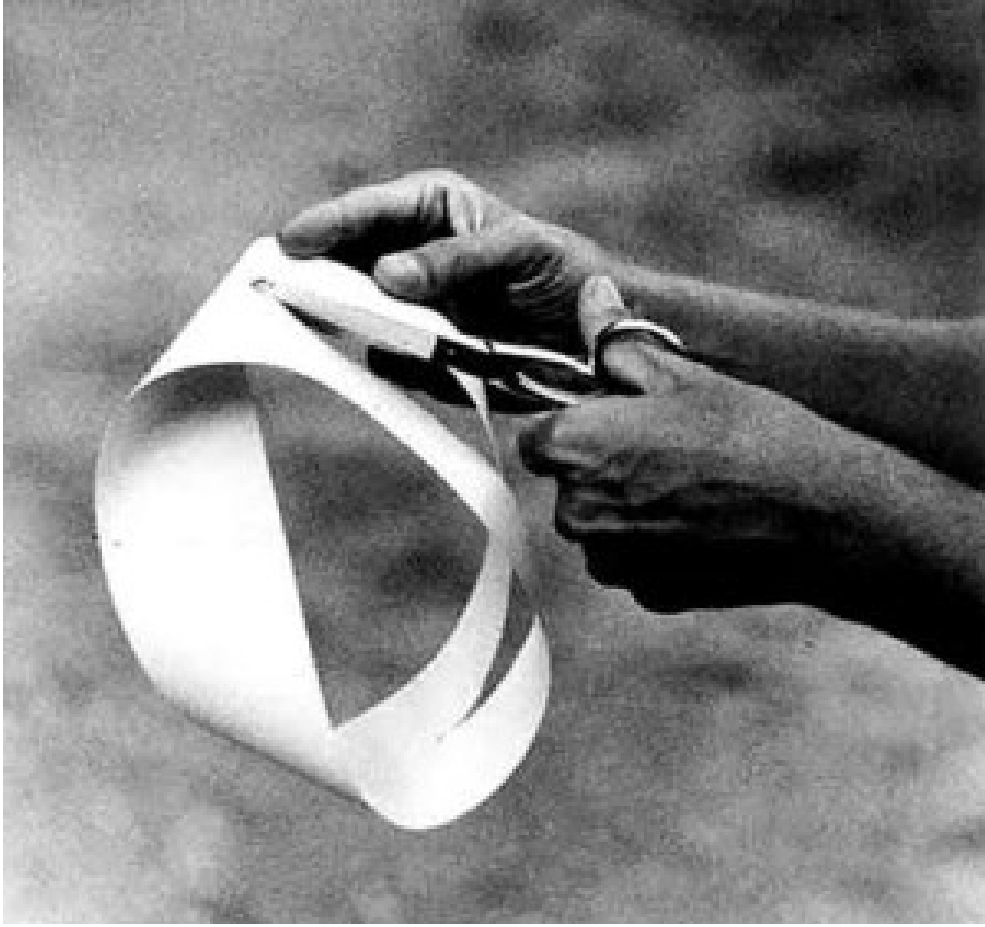


fig. 23. *Caminhando Sculpture*, Lygia Clark, ca. 1966



fig. 24. *Deux Bibliothèques Jussieu*, Paris: Rem Koolhaas/OMA, 1992: modelling technique

The *Caminhando* series undertaken by Clark was but one manifestation of an oeuvre committed to breaking down the distinctions between art and everyday life, and between object and spectator, that had been produced by the official institutions of the art world. In inviting participants to execute the cuts in the *Caminhando* she was seeking to involve them directly in the unfolding of spatial form and to experience this as the result of their own activity. Clark was, as Suely Rolnik argues, interested in experiments such as this especially because of their capacity to intervene in the production of ‘modes of subjectivation’.¹¹⁷ It is not unreasonable to suggest, therefore, that in borrowing the formal modelling techniques of Clark, Koolhaas was drawing, in some way, on their potential to realise an active experience of the production of subjectivity. The execution of the cut along the continuous surface of the *Caminhando* can be read, for instance, as analogous to the experience of the visitor’s production of a trajectory, slicing through and between the floor plates, within the intersecting, ramped, and spiralling surfaces of his architecture. Rather than invested, as is architectural Deleuzism, in the production of an exclusively smooth space, and, through this operation, in managing the movements of a swarm-like aggregate, Koolhaas’s Bigness is concerned with the dialectic of the cut and the flow—the schiz-flow—and the self-production of a flaneur-like subjectivity by the visitor moving through its complex topologies.

‘REMAKING THE PUBLIC’: CCTV AND THE IMAGE OF LABOUR

OMA/Koolhaas’s largest built project to date, the CCTV headquarters in Beijing [figs. 25,26], however, marks an about turn from Bigness, and, I would argue here, towards a kind of common cause with architectural Deleuzism. Designed as a new headquarters for CCTV within Beijing’s Central Business District, the building is located on a 180,000 square metre site accommodating the entire complex, which comprises a cultural centre

—‘TVCC’—a service building, and a media park. The CCTV Headquarters building itself is 234 metres in height, with a total floor area of 465,000 square metres. It will be in continuous occupation by 10,000 workers, plus a stream of visitors who will be channeled through its internal ‘loop’. Combining production, administration and management facilities within its structure, it will also serve as the centre from which 250 television and radio channels will be broadcast.



fig. 25. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012: in construction, 2008



fig. 26. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012

Ole Scheeren, Koolhaas's chief partner in the project, has described it as '[s]ome kind of new utopia, partly social, partly constructive, [that] reclaims the ground from the seemingly rational territories of the global market economy ... it is a scale beyond the simple addition of its individual components: Bigness.'¹¹⁸ However 'big' it may be, though, an exemplar of Bigness it is not. Bigness's perplexity and mystery are replaced here by coherence and transparency so that what you see is, after all, what you get. Rather than offering a delirious juxtaposition of programmes, CCTV is designed to serve as an instrument of programmatic integration. Instead of providing a spatial envelope in counterpoint to its context, its interior operations are intended to serve the composition and organisation of that context, whilst its form—refusing the conventionally vertical articulation of the architectural icon—is designed to integrate itself within the contextual frame of the intensive development of Beijing's Central Business District. In place of the intensification of difference, pursued through the Paranoid Critical Method, CCTV is designed to produce identity and erase paranoia.

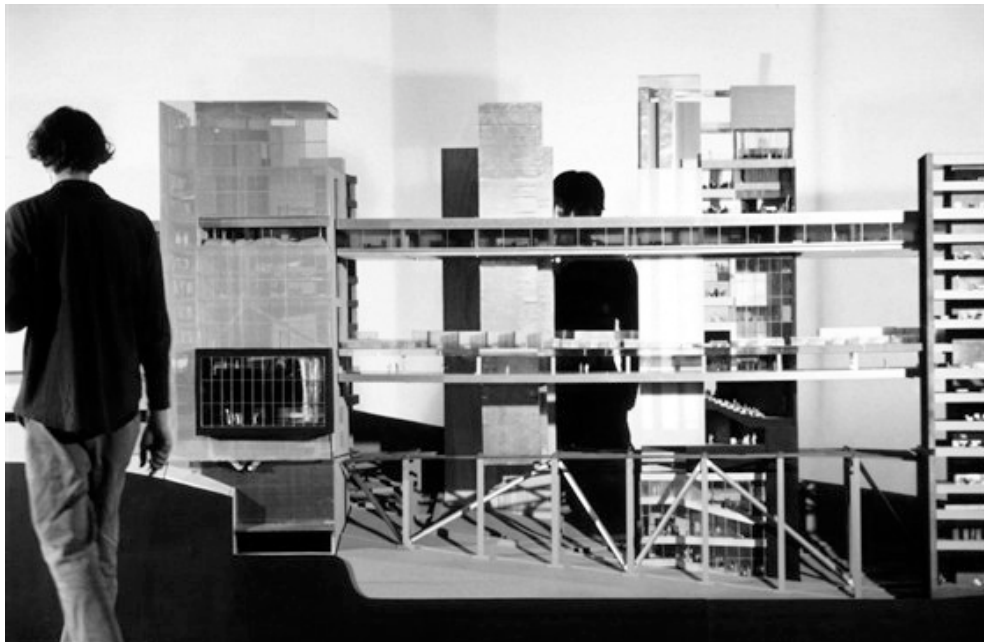


fig. 27. *New Headquarters for Universal Studios in Universal City, Hollywood*: Rem Koolhaas/
OMA, 1996

THE HYPERBUILDING

Whereas projects such as the Kunsthal, the Deux Bibliothèques Jussieu, the IIT Campus Center, and the Casa da Música can be conceived as originating in the discoveries of *Delirious New York*—their shocks, schisms, and juxtapositions derived, in part at least, from the ‘automatic’ architecture of the Manhattan skyscraper—the architecture of the CCTV building emerges from the very different paradigm of the ‘hyperbuilding’, whose ideal locus is proposed as the rapidly urbanising cities of Asia. It is not simply the reversal of the tenets of Bigness which are significant to this shift, but, especially, the implications of this turn in regard to the production of subjectivity within the spaces of Koolhaas’s new spatial paradigm.

The hyperbuilding makes its first distinctive appearance, as a new object of research and possibility for OMA/Koolhaas, in their project for the headquarters of Universal Studios in Los Angeles in 1996 [fig 27]. In place of the deep volumetric massing of projects such as the libraries at Jussieu, or the Casa da Música, the architecture of the Universal Studios headquarters is a composite form of four vertical towers from which are suspended connective horizontal slabs of office floors. Each tower is designed to serve a specific component of the corporation:

There is a Virtual Tower of double height, containing loft-like workshops, a Circulation Tower, which is a travertine-clad atrium with its elevator bank open to the outside air, a Collective Tower of shared conference centres and screening rooms, and an Executive Tower of suites for senior management.¹¹⁹

Connecting these towers, the ‘Corporate Beam’ is described as a ‘a glass volume that consolidates corporate activity with special needs and shared support departments.’¹²⁰ This composite structure is presented as form of urbanism:

At this scale of organization, architecture approaches urbanism. Universal is not so much an office plan as an urban plan, a map: the

building as an organizer of different elements. The organizational diagram resonates more with a subway map than with a building plan.¹²¹

The urbanism of the hyperbuilding is coded here in a discourse at significant variance with the relationship between architecture and the urban posited in the earlier concepts of Bigness. There, as has been argued above, and notwithstanding Koolhaas's apparent hostility to context, where 'Bigness is no longer part of any urban tissue', large-scale architecture offers itself as a kind of refuge for the 'collective theater' that is no longer possible within an instrumental urbanism that has subsumed the street as a mere 'organizational device' of its 'continuous metropolitan plane'. Operating as kind of 'City within a City', the architecture of Bigness potentiates a space not reducible to its instrumental organisation in pursuit of a larger enterprise; rather, it proposes 'the assembly of maximum difference', 'a promiscuous proliferation of events', and the 'exacerbation' of specificity. Conversely, the hyperbuilding offers the 'virtue' of 'an enormous controllable critical mass' with the capacity to 'forge a new entity from disparate parts'.¹²² The entity whose coherence is to be forged from the hyperbuilding is that of the large multi-departmental corporation. In an interview conducted in 2008, Koolhaas remarks:

When we were planning the Universal Studios headquarters in Hollywood, a problem we had was that the company's individual components are spread across a large area – so we designed the building to bring the components together again. It includes a common space where people who work in distant offices could pass and run into each other.¹²³

This 'common space'—the 'beam' that integrates the company's various departmental components—has now become not a '*collective*', but a '*corporate theatre*'.¹²⁴ With this shift from the collective to the corporate comes as well a discourse that closely approximates that of architectural Deleuzism: the 'calculated integration of Universal City's current fragments ... improves its flaws and corrects its flows';¹²⁵ 'No matter how turbulent the composition of

the company becomes, the office floors provide the necessary flexibility'.¹²⁶

Furthermore, whereas, in Bigness, infrastructure serves to enable a volumetric scale that, in turn, supports the complexity of its programmatic relations, infrastructure becomes, in the hyperbuilding, the very model of urbanism, the 'diagram', to which, in its organisational efficiency, architecture should now apparently aspire. This movement towards architecture *as* urbanism, with the latter itself defined as, in essence, an infrastructural operation, is evident too in the turn from the skyscraper to the composite form of bundled, interconnected and leaning towers in projects such as Universal Studios, the Hyperbuilding, Bangkok, Thailand [fig. 28], and the Togok Towers, Seoul, Korea [fig. 29]. In contrast to his earlier enthusiasms for the possibilities of the skyscraper, as developed in *Delirious New York*, in *Content* Koolhaas makes explicit his frustration at its current limitations:

The skyscraper is a bizarre typology. Almost perfect at its invention, the skyscraper has become less interesting in inverse proportion to its success. It has not been refined, but corrupted; the promise it once held—an organization of excessive difference, the installation of surprise as a guiding principle—has been negated by repetitive banality. The intensification of density it initially delivered has been replaced by carefully-spaced isolation.¹²⁷

Yet in *Delirious New York* 'isolation' and generic banality appear not as problematic impediments to the creation of 'excessive difference', but as the very conditions upon which its production is premised. Identity and equivalence are there valorised as the 'unstated philosophy of the grid' through which 'each block can now turn into a self-contained enclave'. This potential, argued Koolhaas:

implies an essential isolation: no longer does the city consist of a more or less homogenous texture – a mosaic of complementary urban fragments – but each is now alone like an island, fundamentally on its own.¹²⁸



fig. 28. *Hyperbuilding*, Bangkok Thailand: Rem Koolhaas/OMA, 1996

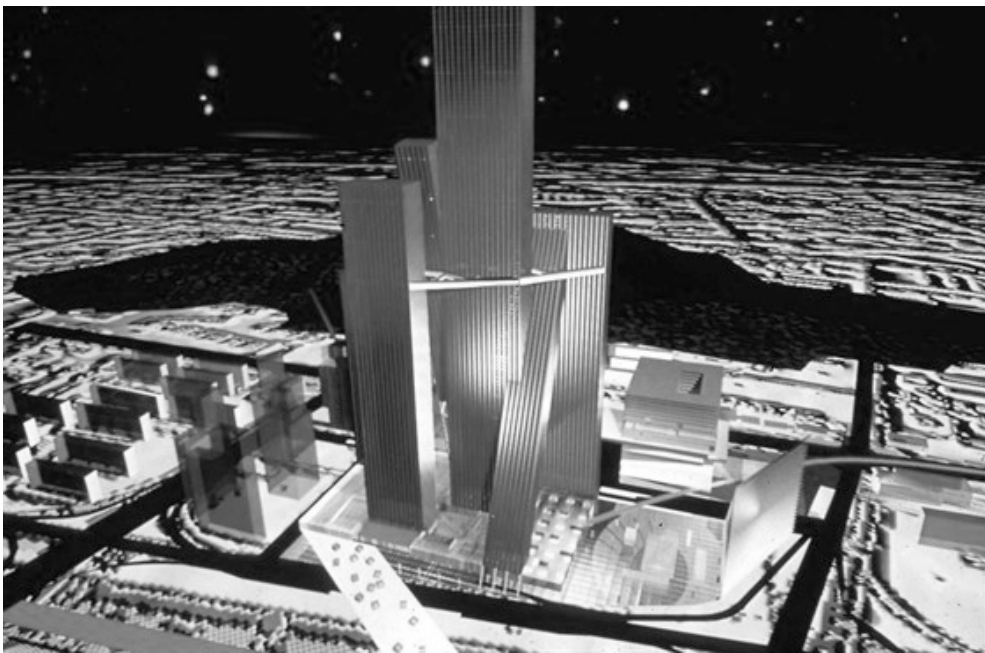


fig. 29. *Togok Towers*, Seoul, South Korea: Rem Koolhaas/OMA, 1996

The hyperbuilding, in contrast, appears designed to achieve precisely this ‘mosaic of complementary urban fragments’; to integrate them within a cohesive entity and to rescue business from the ‘dry archipelago’ of departmental isolation. Business, according to the Koolhaas of *Delirious New York* is only an ‘alibi’ for the development of the Manhattan skyscraper, in which it is but one world amidst many others. The promise of the skyscraper is to serve as a ‘laboratory’; ‘the ultimate vehicle of emotional and intellectual adventure.’ The hyperbuilding, however, posits an architecture in which business *is* the world.

In the proposition of architecture *as* urbanism, in the specific sense that it serves as the infrastructural support of the ‘corporate theatre’, the hyperbuilding subsumes architecture to a process of urbanisation that Pier Vittorio Aureli has argued, in stark but persuasive terms, has been essentially concerned, since the time of its modern inception by Ildefonso Cerdá, with the creation of ‘the best conditions for the reproduction of the labor force.’¹²⁹

In its concerns with interdepartmental integration, its ambitions to manage flows of workers and visitors, and its composite form of inclined towers and horizontal bridging structures, the CCTV headquarters project can be understood as a development of the hyperbuilding typology. In order to effect an adequate critique of the discourse in which it has been framed by Koolhaas and Scheeren, and of CCTV’s precise urban/infrastructural operations within post-reform China, however, a more precise analysis of this context is required.

DEFINING A NEW CONSENSUS

Koolhaas has repeatedly represented OMA’s decision to compete, in 2002, for the CCTV project over that of the Manhattan World Trade Center competition (following the attacks on its Twin Towers of ‘9/11’), as being driven by a principled choice to pursue ‘integrity’, and an architecture of

‘the people’, over that of business and monumentality. Interviewed in 2005, on the reasons for his choice of CCTV over the WTC competition, he responded:

I just felt the conditions for the WTC were not right. Because, it was clear that in the American context you would have to make a monument, which would be dedicated to the WTC ... On the other hand, we felt that, ultimately, it was no different from the usual American way of business ... on the one hand, there's Libeskind, and on the other hand there were typical groups of Foster, Skidmore, etc. ready for it. We were not going to do that. We were simply not convinced by the integrity of that whole operation.

On the other hand we noticed that in China, there was a sincerity and ambition to run operations like this with more integrity, and with a more straightforward relationship between the intentions—with respect to the people—and the result. It also coincided with the change in leadership in the political party. That was a part of the effort of China itself to become more legitimate, more straightforward. And we wanted to support that.¹³⁰

Koolhaas's arguments for working in China ought also to be understood in the context of the potential for controversy surrounding his decision. Ian Buruma, for example, wrote in 2002:

In one respect, at least, the rulers of the People's Republic of China have been astonishingly successful. After gunning down thousands of unarmed civilians in 1989, the Chinese government has managed to become utterly respectable again. None of the murderers was ever called to account. It is still the same repressive government. Its record on human rights is still appalling. All potential challenges to its monopoly on power have been crushed. And what foreign pressure there ever was has been lifted. It's as though Tiananmen never happened.¹³¹

He continued, referring directly to the CCTV project:

Unless one takes the view that all business with China is evil, there is nothing reprehensible about building an opera house in Beijing, or indeed a hotel, a hospital, a university or even a corporate headquarters. But state television is something else. CCTV is the voice

of the party, the centre of state propaganda, the organ which tells a billion people what to think.¹³²

In their counteroffensive against this kind of criticism, Koolhaas and Scheeren have sought to justify CCTV as representative of their commitment to the public over the private, communism over the capitalist free market, and of positive affirmation over negative cynicism. Koolhaas has argued that the effect of capitalism upon architecture has, in recent decades, been largely negative, producing a situation in which ‘there’s no more public’.¹³³ CCTV, should thus be understood, he continues, as an ‘attempt by us to see whether the more traditional work of the architect—somebody working for the public good—would still be possible in a communist context.’¹³⁴ Koolhaas then turns, in this same interview, to situating the project in relation to his early interest in the ‘communist architecture’ of Russian Constructivism: ‘It’s a kind of re-visiting the communist history, and moving beyond a classical position of “capitalism good, communism bad”.’¹³⁵ In the introduction to the issue of *Architecture and Urbanism* in which this interview was published, Scheeren similarly glosses the ‘public’ and ‘democratic’ qualities of the CCTV headquarters:

The declared aim is to become the BBC of China, and the many publicly accessible functions of the new building program point towards a democratization of the institution...becoming the icon for a new contemporary China.¹³⁶

Despite the unashamedly promotional tenor of such claims, Koolhaas and Scheeren do not leave the kind of concerns raised by Buruma unacknowledged. Rather, these concerns are incorporated into an argument which recognises their existence whilst arguing that they provide no substance, other than that of pure cynicism, against building in China. Whilst Scheeren concedes the role of CCTV in editing and censoring the ‘voice of China’, he goes on to argue, as its positive counterweight, that it is ‘also driving forward the transformation process and opening up of this

country. On its path, it is carefully manoeuvring between (radical) change and (apparent) retention of existing principles.¹³⁷ 'Risks are inherent—central control paired with untamed financial dynamics', he continues, 'yet the emerging hybrid also creates new dimensions of visionary scope and quality.'¹³⁸ Koolhaas, again framing his arguments through an opposition between capitalist America and a supposedly communist China, remarks:

Particularly the Americans are just simply waiting for the moment when China finally becomes capitalist. I have a different assessment of the situation. I believe that the government is trying to, in a very intelligent way, introduce some of the advantages of liberalization without entirely giving up a kind of 'safeguard' for the entire nation. That is something you can either be serious or cynical about.¹³⁹

Similarly, Koolhaas writes in an essay appearing in *Content*, 'Triumph of Realization':

Ongoing tectonic shifts reveal the outlines of a possible new political configuration where China's leadership sets Asian standards and defines a new consensus. It is easy to imagine it going wrong, but essential to imagine it going right.¹⁴⁰

Any critical analysis of CCTV as a project, particularly one focused upon the production of subjectivity, demands a better informed perspective upon post-reform China than is offered either by its ethical condemnation in terms of its abuses of human rights (whatever the truth of this might be), or its characterisation as a 'communist' society on the path to some degree of 'liberal reform'. Through this analysis will emerge, in outline at least, an account of contemporary China's political economy and, as well, the modes of neoliberal governmentality employed in its production, more adequate to the objectives of the analysis pursued here. As will be argued, on the basis of this account, China, whilst sharing certain features of its political economy with those common to Western neoliberalism, is also defined by specific conditions of governmentality. This analysis, in turn, will set the context for the critique of the spatial production of subjectivity within the CCTV headquarters, which, similarly, ought to be understood as inextricably

related to its specific context whilst, at the same time, being characterised by certain elements broadly generic to the *modus operandi* of architectural Deleuzism.

NEOLIBERALISM ‘WITH CHINESE CHARACTERISTICS’

There is, according to the analysis of a number of commentators, at least an element of credibility to Koolhaas’s argument that China should not be understood as pursuing a path straightforwardly headed towards becoming capitalist, particularly in its current, and globally hegemonic, neoliberal forms.

Giovanni Arrighi, in his *Adam Smith in Beijing: Lineages of the Twenty-First Century*, for example, challenges the notion that the recent global ascent of the People’s Republic can be understood simply on the basis of its ‘alleged adherence to the neo-liberal creed.’¹⁴¹ Drawing upon the analyses of J.K. Gailbrath,¹⁴² and J. Stiglitz,¹⁴³ Arrighi concludes that:

the success of Chinese reforms can be traced to *not* having given up gradualism in favor of the shock therapies advocated by the Washington Consensus; to recognizing that social stability can only be maintained if job creation goes in tandem with restructuring; and to having sought to ensure the fruitful redeployment of resources displaced by intensifying competition. Although China welcomed the World Bank’s advice and assistance from the start of the reforms, it always did so on terms and at conditions that served the Chinese “national interest,” rather than the interests of the US Treasury and Western capital.¹⁴⁴

Broadly concurring with this analysis, Yuezhi Zhao, in his *Communication in China: Political Economy, Power, and Conflict*, argues that: ‘To be sure, China is not an openly committed neoliberal capitalist social formation. Nor did the post-Mao leadership launch the economic reforms with an ideological commitment to neoliberalism.’¹⁴⁵ Similarly, Lisa Rofel, in her *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture*, remarks that ‘China did not simply follow a well-established neoliberal plan, fully laid out, based on normative principles.’¹⁴⁶

What ultimately emerges from accounts such as these, does not, however, confirm Koolhaas and Scheeren's narrative of China as a still communist state on the path to the kind of liberal reform that would offer, for architects, an opportunity to work free from the demands of the market and for the 'public good'. Rather than operating beyond the logic of the market, China's reforms have been understood by many as directed towards a very particular form of neoliberalism, only qualified, as David Harvey has put it, by its specifically 'Chinese characteristics'. Post-reform China, writes Harvey, 'increasingly incorporates neoliberal elements interdigitated with authoritarian centralized control.'¹⁴⁷ Rofel, following a similar line of argument, remarks:

Economic reform eventually entailed a rejection of collective enterprise, the gradual promotion of a market economy, and the steady move toward privatization. While the state gradually retreated from a centrally planned economy, it continued to have an intimate involvement in the means and modes of economic reform ... the specificity of neoliberalism in post-Mao China rests in part on the premise of a continuity in the political system of governance, coupled with a discontinuity in the state's promotion of radical marketization and privatization.¹⁴⁸

Wang Hui, in his *The End of the Revolution: China and the Limits of Modernity*, writes that:

China has promoted radical marketization; in addition, under the guidance of state policy, China has become one of the most enthusiastic participants in the global economy. This continuity and discontinuity has lent a special character to Chinese neoliberalism.¹⁴⁹

The 'special character' of neoliberalism in China lies, then, in its structurally unique combination of a market-oriented political economy under the strict management of a centralised state authority. That the state should have a role within neoliberalism—principally that of legislating for and legitimating the conditions of the 'free market'—is, of course, not a situation unique to

China. Rather it is the *state form*—that of the single party—and the powers of governance it has inherited from the era of Mao, that define its ‘special character’. The apparatus of the party, and its extensive powers, have been retained while its objectives have been transposed from the political to those of economic management. As Hui observes of this depoliticisation of the party: ‘In contemporary China the space for political debate has largely been eliminated. The party is no longer an organization with specific political values but a mechanism of power.’¹⁵⁰ This ‘depoliticization process’, he continues, ‘has had two key characteristics: firstly, the "de-theorization" of the ideological sphere; secondly, making economic reform the sole focus of party work.’¹⁵¹

China’s movement towards a market economy, whatever the supposed gradualism of its transition, has involved the country in an upheaval of epochal significance. As China moves from a largely agrarian to a majority urban demographic, plans to create 400 new cities in the next twenty years have been put in place. 153 million migrant workers, displaced from rural farmlands, travel the country in search of work.¹⁵² Whilst there is massive investment in urbanization and infrastructural development, arable land is becoming scarce, leading to concerns over food security, and environmental problems, such as soil degradation and water pollution, are rife. The *danwei* (labour units), which once functioned as the essential organ of social and political cohesion, have been progressively dismantled, setting the individual adrift from their immediate point of access not only to party ideology, but from the basic mechanisms of social welfare.

These radically changed conditions have not been received by the populous with passive acceptance. A report by Reuters on a violent conflict between villagers and police over a land dispute in May 2010, notes that ‘the Chinese government has become increasingly worried about rising public anger at environmental problems, especially pollution, illegal land seizures and other issues.’ ‘In 2007’, it continues ‘China had over 80,000 "mass incidents"—or

riots and protests—up from over 60,000 in 2006, according to the Chinese Academy of Social Sciences. The government has not given updated figures.¹⁵³ Stabilising these volatile conditions has thus become central to the work of the party. As Zhao argues:

The Hu Jintao leadership, recognizing that social instability had reached the ‘red line’ after it came to power in late 2002 and assumed full control of the Chinese state in late 2004 (when Hu assumed control of the Chinese military), has intensified its attempts to stabilize such a fluid, and indeed potentially explosive, social field for more sustainable development of the Chinese political economy.¹⁵⁴

The introduction of the mechanisms of neoliberal governmentality has been central to this work of stabilisation. Under this mode of governmentality, as has been already examined, control is invested in lateral relations within ‘open sites’, and with an emphasis upon the modulation of environments in which self-interested ‘enterprising’ subjects are to pursue objectives whose economic and social aspects are made to coincide absolutely and inextricably. Whereas in the West the theories and practices of neoliberal governmentality have emerged over a relatively long time-frame, in China, however, their introduction has been so rapid, and in such marked contrast to the previously existing mode of governmentality, as to constitute a full blown rupture, rather than a gradual transition, within the mechanisms of governmentality.

The discontinuities and dislocations wrought by these shifts have been registered in and through an emergent body of critical literature,¹⁵⁵ concerned with neoliberalism and the production of subjectivity in China, that includes Rofel’s *Desiring China*, and Aihwa Ong’s *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*.¹⁵⁶ Rofel, for instance, specifying the particular character of neoliberalism as a mode of governmentality in China, writes that it can be identified as ‘project ... to remake national public culture.’¹⁵⁷ Ong, theorising neoliberalism as ‘a new relationship between

government and knowledge through which governing activities are recast as nonpolitical and nonideological problems that need technical solutions',¹⁵⁸ notes the emergence of the concept of 'reengineering the Chinese soul' within organisational discourse in China and argues that:

Reengineering has become a metaphor for converting Chinese employees from particularistic cultural beings into self-disciplining professionals who can remanage themselves according to corporate rules and practice.¹⁵⁹

It is through the optics of social 'stabilisation', the 'reengineering' of the worker, and the 'remaking' of the public, that the CCTV headquarters can be effectively analysed; its architecture can be addressed as the production of an environment for the management of subjectivity, whose concepts and techniques suggest common cause with architectural Deleuzism—in directing this management towards the demands of a form of neoliberal governmentality—whilst also acquiring their purchase upon the subject within very particular circumstances. The nature of these particularities is not limited to those of post-reform China in general, but concerns, as well, the central place of CCTV, physically, culturally and ideologically, within this regime's work of stabilisation, reengineering and remaking. For, as Zhao writes of the role of the media in post-reform China and its relation to the party:

As the party decentralizes control to maximize its effectiveness, it has also tried to minimize its political costs. In an era of media explosion, 'passive censorship,' which aims at limiting the impact of oppositional ideas by neglect within a small elite circle, has been adopted as a more practical form of control. In the past, due in part to its self-righteous impulse as a holder of truth and its mission of politically educating the masses and transforming their consciousness, the party would typically organize a public critique of ideas deemed 'incorrect.' As part of Deng's 'no debate' decree and perhaps the party leadership's own increasing cynicism over its 'truth,' the party has more or less given up its mission of political indoctrination to simply concentrate on *the management of its own publicity* [emphasis mine].¹⁶⁰

A BODY *WITH* ORGANS

The form of the CCTV headquarters is premised, like those other examples of OMA's hyperbuilding prototypology with which it shares a family resemblance, on its capacity to achieve the integration of interdepartmental relations within a large organisation. Its looped structure, however, and the seamless continuity between its towers and bridges, suggests a further refinement of this model of large-scale architecture so that its serviceability extends to iconic, as well as organisational, purposes [fig. 30.a,b,c]. Whilst the building's distinctive form is readily translatable into a 2-dimensional image, so that it serves, as is conventional of contemporary iconic architecture, a broad range of promotional uses, its particular signified is surely that of circulation: the loop as the formal expression of the idea of continuous intercommunication. Yet, rather than the continuity with other, earlier, projects that this foregrounding of circulation might imply, the CCTV headquarters treats these concerns in a fashion fundamentally distinct from those of their earlier manifestations. Here, circulation is not conceived as a device with which to achieve, after the manner of an avant-garde practice, the surreal, dissonant or paranoiac qualities of a montage aesthetic, but, instead, to produce the normative cohesion of an 'organic whole': a body *with* organs, tending towards the reproduction of an identity whose ideal is given in advance.

Each of the departmental components of the CCTV headquarters—administration, broadcasting, news, production, new media, and service—is assigned a particular location within the building's loop so that together they are interlinked in a productive chain [fig. 31]. As Ole Scheeren has said of the relationship between form and programme in the architecture of CCTV:

CCTV is a loop folded in space, it creates a circuit of interconnected activities and joins all aspects of television making in one single organism. The loop acts as a non-hierarchical principle, with no beginning and end, no top and bottom, in which all elements form part of a single whole.¹⁶¹



fig. 30. a,b,c. CCTV headquarters as icon and logo

In addition to serving to integrate television production, the building's looped form is also designed to service the production of the relations between its users. In a manner recalling the strategies of control analysed at Hadid's BMW Central Building, workers at CCTV are supposed to be formed into an integrated 'community', and the presence of hierarchies within the organisational structure to be minimised, through the relations of

form to programme:

The coexistence of all functions involved in the process of television-making in one single building allows administration and management, production studios and news departments, research and training divisions, technical areas and broadcasting centres to enter into a continuous dialogue—not only reminding all parts of each other's existence, but clearly illustrating their mutual dependence: a system, in which the 'heads know what the hands are doing'—and vice versa. There are hierarchies—of managers and workers—but the building is not simply broken down into different sections, but a loop of communal circulation with associated social areas, canteens and meeting rooms exploits the shape of the building and promotes direct exchange and contact between the departments. The organisation is more continual than vertical; the top floors of the skyscraper—normally reserved for the board and leadership—are accessible to all employees in the 'Staff Forum'.¹⁶²

Despite the fact that such strategies are to be found, as has been elaborated above, within the West, Koolhaas has sought, in his 'Beijing Manifesto', to claim them as possibilities that only emerge in the space beyond the money economy that he argues exist now in China. 'In the free market', he writes, 'architecture = real estate.' The brutal economics of this fact, he continues, require that the 'complex corporation is dismantled, each unit sequestered in place',¹⁶³ so that all media organisations, for example, are marked by a mutual distrust between their departments: an endemic condition of 'paranoia'. 'But in China', suggest Koolhaas:

money does not yet have the last word. CCTV is envisioned as shared conceptual space in which all parts are housed permanently, aware of one another's presence—a collective. Communication increases; paranoia decreases.¹⁶⁴

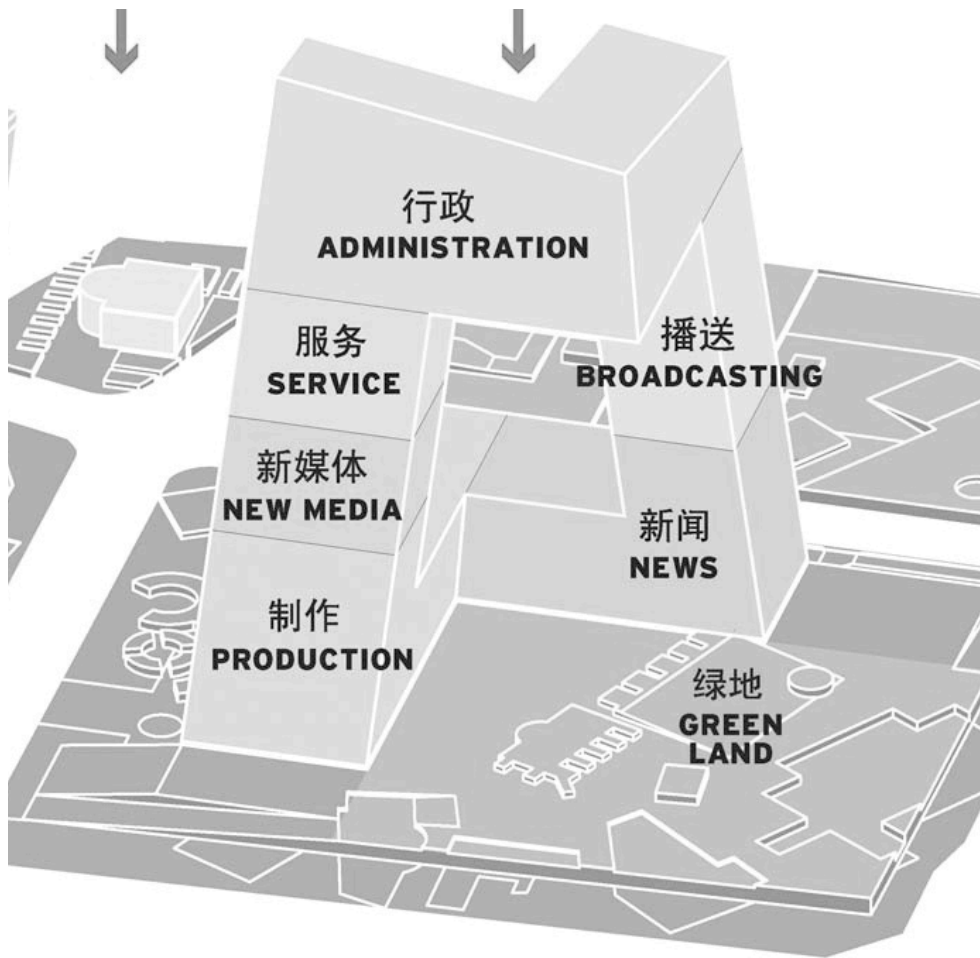


fig. 31. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012 (scheduled): diagram of programmatic distribution

Koolhaas's turn here, from the use of the Paranoid Critical Method as a means toward the delirious production of difference within the limits of the whole, to the pursuit of communication through which the whole is, through the elimination of paranoia, efficiently normalised, marks a significant reversal in his architectural agenda. This turn cannot be accounted for, however, solely with reference to the will of the architect. The elimination of paranoia emerges as a governmental concern in post-reform China, in general terms, and in the specific case of *CCTV*, as a consequence of those factors contributing to its current condition of 'instability'. Chinese society, writes Zhao, is 'one of the most inequitable in the world ... characterized by a fractured structure, acute divisions along class, rural/urban, ethnic, and regional cleavages, and heightened conflicts.'¹⁶⁵ Rather than lead by

concerns to produce a ‘collective’ which emanate, as Koolhaas implies, from an essentially communist *political* programme, the elimination of paranoia is not a political, but, in fact, a *managerial* strategy targeted at stabilising the deterritorialising forces set in motion by China’s turn, however qualified by its ‘special circumstances’, to neoliberal marketisation. CCTV’s particular concern to stabilise a fragmented workforce, for these reasons, can well be understood given Zhao’s descriptions of its conditions of employment around the time at which OMA were awarded the project for its redevelopment:

CCTV, with its five classes of permanent employees and flexible casual workers with staggeringly different job security and welfare entitlements well into the early 2000s, epitomized the hierarchical, highly exploitative, and almost feudal labor structure in the Chinese media industry.¹⁶⁶

Confirming this assessment of its iniquitous employment practices, is a report by Shu Taifeng on CCTV’s system of ‘renumeration by invoices’, through which it sought, beginning in the early 1990s, to bypass China’s labour regulations. These methods, writes Taifeng, have ‘lead to a series of negative consequences ... caused the existing wage system to collapse, brought about huge income gaps and sowed the seeds for corruption.’¹⁶⁷ It is the ‘paranoia’ induced by these conditions, then, that Koolhaas and Scheeren’s architecture ought to be understood as offering—through the stabilisation of the whole—to remediate for their clients.

That their methods in doing so suggest an instrumentalisation of architecture remarkably close to that practiced, for similar ends, by Hadid, Schumacher and Zaera-Polo, is not their only point of coincidence with architectural Deleuzism. In their conception of the subjects who are to be ‘reengineered’ by the architecture of the CCTV headquarters, Koolhaas and Scheeren also turn to a discourse which echoes that of the ‘flat ontologies’, ‘material organisations’ and ‘swarm modelling’ common to this

architectural current. Scheeren, for example, has described the building as a 'living organism',¹⁶⁸ one that 'absorbs a lot of granular particles inside and indeed creates a type of urban complexity inside its own envelope.'¹⁶⁹

Positing the occupant as a mere particle, the possibility of delirium is cancelled, and with it the equation through which the architecture of Bigness might engage the subject in a critically reflexive encounter with spatial production. In the vast internal spaces of the CCTV headquarters urbanism is not mimetically reconfigured, intensified or reimagined, but *replicated* as an ideal of organisational and productive efficiency:

During its 24-hour operation CCTV accommodates a broad range of different activities and a huge population ... Under the pressure of such large numbers, spaces have to be conceived as infrastructural systems, able to guide, disperse and direct all different groups to their various destinations.¹⁷⁰

As the means through which 'granular' subjects are be 'channeled',¹⁷¹ the building becomes more of an infrastructural, rather than an architectural project [fig.32]. Its functions are principally organisational, concerned, that is, with the efficient management and distribution of its particulate flows and their productive capacities. That CCTV is an infrastructural project of organisational management, as opposed to an architecturally achieved 'culture of congestion', can be understood in its extensive deployment of stacked floor plates, the conceptual origins of which may be located in Koolhaas's essay 'Typical Plan'.¹⁷²

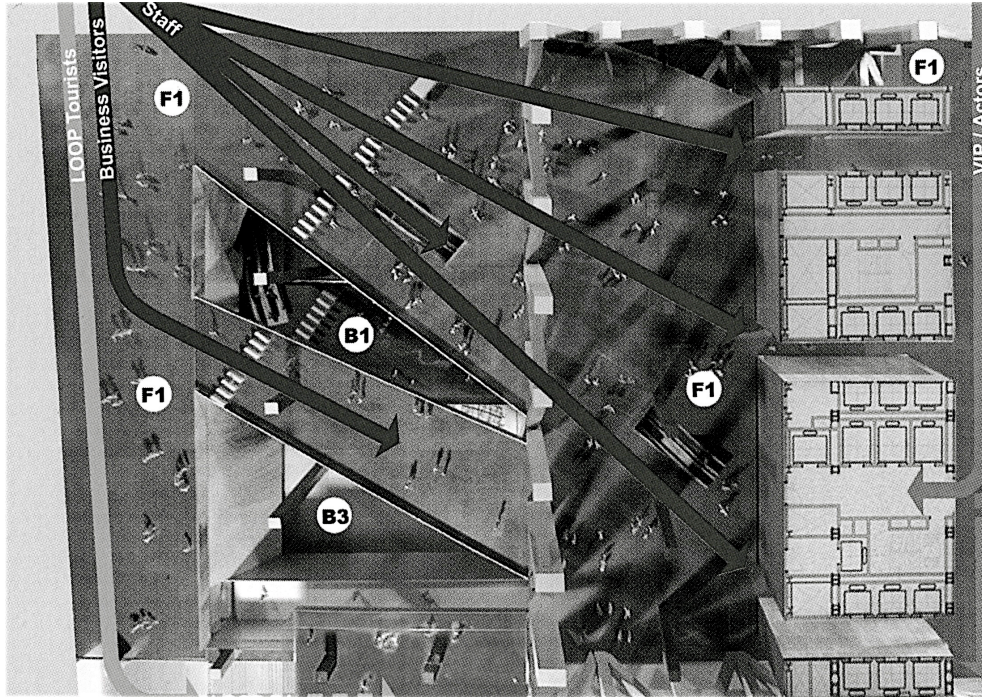


fig. 32. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 2012 (scheduled): diagram of 'channeling' for 'LOOP Tourists', 'Business Visitors', 'Staff' and 'VIP/Actors' in Tower 1 Lobby

Written in 1993 and published in *S,M,L,XL*, 'Typical Plan' has been described by Gargiani as 'another chapter of *Delirious New York*'¹⁷³, since its subject matter, the floor plan of the American office, coincides culturally and historically with that of the earlier publication. Yet whereas, in *Delirious New York*, the Manhattan skyscraper was for Koolhaas an 'exquisite corpse' composed of stacked and heterogeneously programmed floor spaces, for which business was only an 'alibi', in 'Typical Plan', it is not juxtaposition or differentiation that is affirmed, but rather the undifferentiated neutrality of the typical plan (described in Deleuzoguattarian terms as a 'smooth space'), for which business serves as its fundamental premise:

From the late 19th century to the early 1970s, there is an 'American century' in which Typical Plan is developed from the primitive loft type (ruthless creation of floor space through the sheer multiplication of a given site) via early masterpieces of *smooth space* like the RCA Building (1933) - its escalators, its elevators, the Zen-like serenity of its office suites-to provisional culminations such as the Exxon Building (1971) and the World Trade Center (1972-73). Together they represent

evidence of the discovery and subsequent mastery of a *new architecture*.¹⁷⁴

‘The ambition of Typical Plan’ write Koolhaas, ‘is to create new territories for the smooth unfolding of new processes, in this case, ideal accommodation for business.’ The typical plan is a neutral ground, a ‘degree-zero’ of architecture, whose spaces, unimpeded by formal intervention, give free reign to the essentially ‘formless’ existence of business.¹⁷⁵

Typical Plan is to the office population what graph paper is to a mathematical curve. Its neutrality records performance, event, flow, change, accumulation, deduction, disappearance, mutation, fluctuation, failure, oscillation, deformation. Typical Plan is relentlessly enabling, ennobling *background*.¹⁷⁶

The passage of the subject between what must, by definition, constitute the generically self-similar floors in which the Typical Plan is stacked cannot, then, be expected to achieve the delirium or paranoia induced by a Downtown Athletic Club, for example, but only the ‘smooth’ accumulation of more of the same: ‘Typical Plan $\times n$ = a building...floors strung together by elevators of incomprehensible smoothness, each discreet "ting" of arrival part of a neverending addition.’

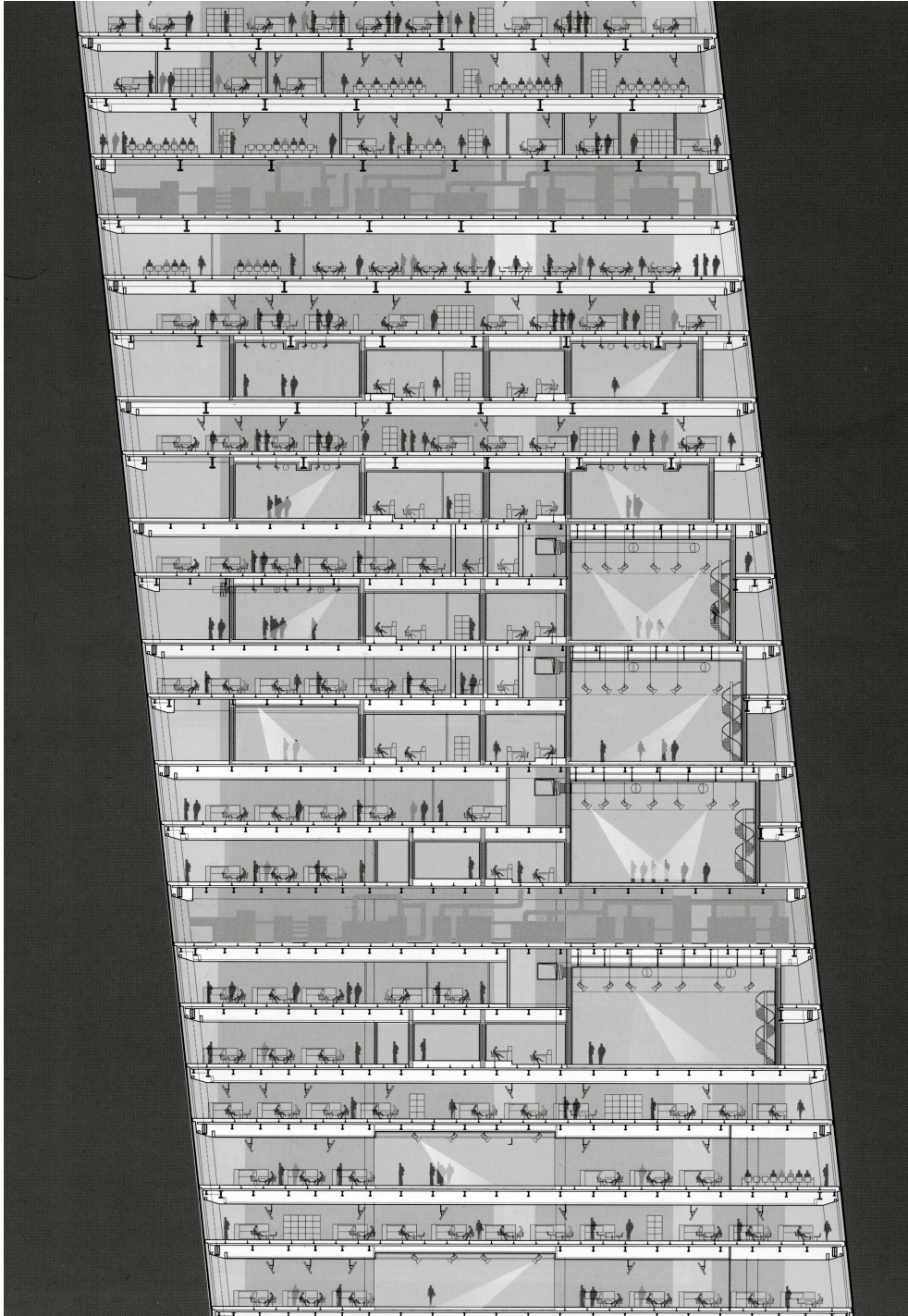


fig. 33. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012 (scheduled): stacked generic floor plates of news production facilities in Tower 2

Gargiani has traced the appearance of the ‘generic floor plate’ in the hyperbuilding architecture of Koolhaas/OMA, and the ‘Universal Floor’ of the Universal Headquarters building, specifically, to the ideas expressed in the ‘Typical Plan’ essay. The generic floor plate appears too in the *CCTV*

headquarters—itself a particular iteration of the hyperbuilding—as the principal device through which its various programmes are provided with the neutral ground for their laterally articulated performance [fig. 33]. With each departmental component assigned its specific location in the building, given its own stack of generic floor plates, CCTV's programmes are not brought into any kind of friction with one another, nor experienced as an intensive juxtaposition. Rather, CCTV is zoned for organisational efficiency according to a sequence of relations determined by the logistics of the production process. Where the spiralling ramps of projects such as the Kunsthal appear as architectural interventions that might further intensify, for the subject, the critical paranoia already implicit in the heterogeneously programmed skyscraper, the hyperbuilding, with its vertically stacked generic floor plates, aims towards an infrastructural paradigm of efficiency, coherence and stability. Rather than the architectural bracket from the relentless rationalisation of urbanisation that is offered by Bigness, the hyperbuilding, such as is CCTV, is premised on the realisation, within its envelope, and in concentrated form, of the managerial ideal of urbanism. 'Typical Plan', claims Koolhaas, 'is a segment of an unacknowledged utopia, the promise of a *post-architectural* future [emphasis mine].'¹⁷⁷

INDUCTION LOOP

Where stacked generic floor plates serve the lateral articulation of work at CCTV, the 'Visitors Loop' [figs.34,35] establishes a supplementary pattern of circulation traversing its various departmental components. It is described by Koolhaas and Scheeren as 'a dedicated path circulating through the building and connecting to all program elements while offering spectacular views across the CBD and the city.'¹⁷⁸ Unlike the ramped structures used in other OMA projects, whose juxtapositional effects serve to fragment and complicate the experience of the whole, the Visitors Loop articulates that whole as an image of interactive coherence:

Multiple event spaces allow for diverse programming and direct views into some of the technical areas of the building give the visitors insight in the functioning of a television station. The visitors enter the main lobby in Tower 1 and descend to the first basement level. After passing security control, wardrobe and a café, the path moves along a media wall around the central production area while providing views into television studios and actors lounges.¹⁷⁹

If the generic floor plate and the infrastructural zoning of departments serve to stabilise the organisation of CCTV, the function of the loop is to stabilise its image and fashion its perception. Through the loop, write Koolhaas and Scheeren, 'CCTV can present itself as a media organization to the public.'¹⁸⁰ The incorporation of visitors within contemporary organisational architectures is, on the evidence of examples such as the BMW Central Building and Ravensbourne (as addressed in previous chapters), not unique to the CCTV headquarters. Specific to the case of CCTV, however, is the political charge that runs through the very concept of the 'public' in contemporary China, and the current transformation of its relationship to CCTV as the state's central organ for mass media communication.

The 'public', and the 'public sphere', are currently subject to processes of refashioning and remaking in accord with the radical marketisation of China's economy and the depoliticisation of the party, as elaborated above. The central role of state media in these processes has been to maintain the image of the PRC as a still communist society, whilst, at the same time, constructing and managing its subjects as an 'audience' according to Western and marketised models of media production and reception. As Zhao argues in *Communication in China*:

To stay in power, the party must continue to articulate and rearticulate its communistic pretensions, otherwise...communism threatens to once again become a powerful subversive ideology against party-led capitalistic developments in China.¹⁸¹

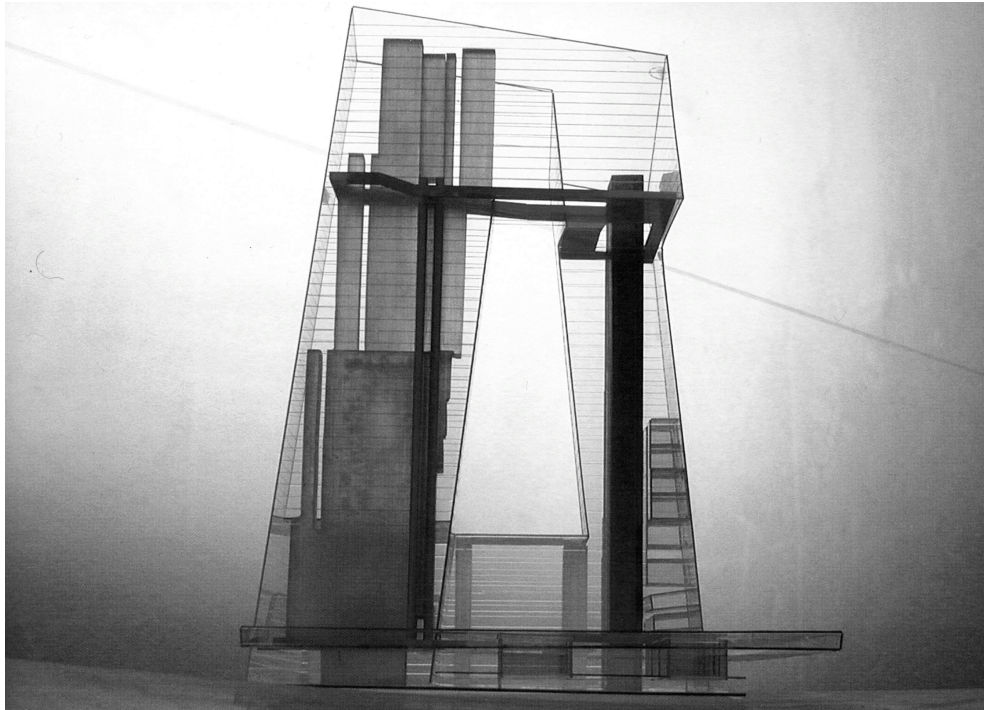


fig. 34. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012 (scheduled): Visitors Loop

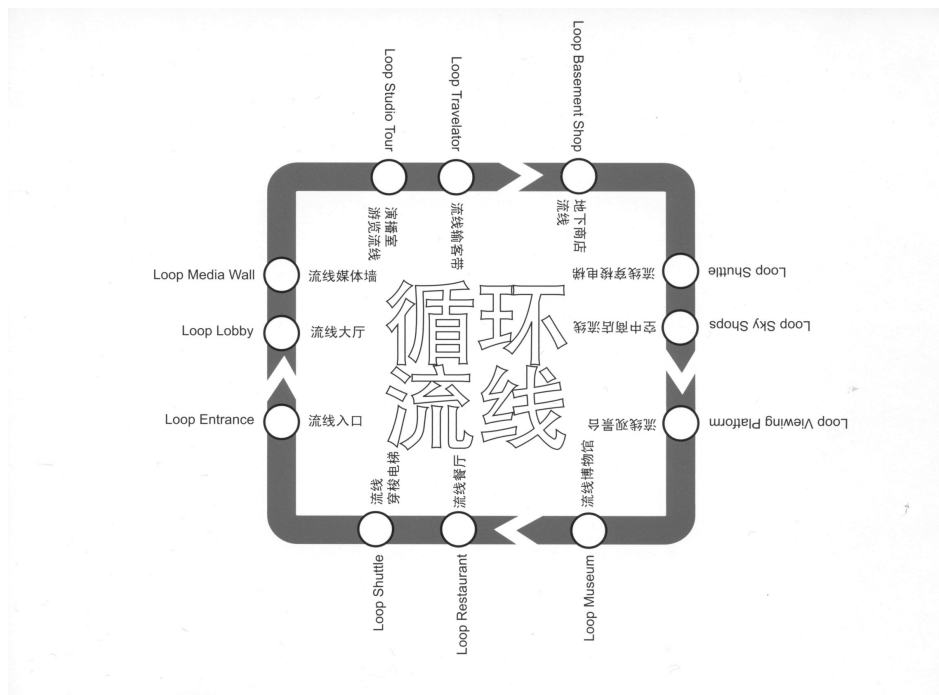


fig. 35. *CCTV*, Beijing: Rem Koolhaas/OMA, 2004 - 20012 (scheduled): Visitors Loop diagram

Without absolutely abandoning its established Leninist and Maoist strategies of propaganda, the party has also turned to the public relations and image-

making techniques of the West. 'Leadership image design', notes Zhao, 'has become a new topic for applied communication research and everyday media management practices.'¹⁸² Included amongst the techniques of 'Leadership image design' are methods previously castigated by the party as 'bourgeois', such as opinion polls and audience surveys, and the broadcasting of images of the party's leadership interacting with, and coming to the aid of its citizens that are 'designed to project a "pro-people" popular leadership.'¹⁸³ Additionally, '[p]ro-active news reporting of negative events aims to turn the party state into the primary definer in a media world where simple suppression no longer works.'¹⁸⁴

As well as managing the image of the party, CCTV has had also to manage its own image—in relation to its standing within the wider transformation of media industries in China—so as not to be regarded by its audience as having changed its values from those of communism to those of the market. Indicative of the precarity of its own image, in these terms, is an incident in CCTV's recent broadcasting history, as recounted by Zhao:

CCTV carried [the] objective of capital accumulation to the extreme during the school hostage crisis in Russia in September 2004. While reporting on the tragedy, CCTV4 concurrently flashed a multiple-choice question at the bottom of the television screen, asking its viewers to guess the correct death toll and to send in their answers as text messages on their mobile phones. Three leading state companies, CCTV, China Mobile, and China Unicorn, shared in the profit collected from mobile phone customers in this business scheme.¹⁸⁵

There is thus more at stake in the Visitors Loop than the simple 'presentation' of CCTV, as a media organization, to the public. In the 'opening' of a previously closed organ of the state to public view, the Visitors Loop appears as an instrument through which the image of CCTV, and through it, that of the party itself, may be carefully managed precisely at a time when such image management is so critical to both parties. Additionally, the specifically spatial articulation of this image management suggests its performative dimension, and, by implication, its pedagogical role

in the production of subjectivity. From the viewpoint of the visitor travelling the building's internal loop, the perspectives offered onto workers in the studios, suites and production facilities, combine to present a picture of organised collaboration; they perform an image of labour as communicative cooperation. In the terms employed by Paolo Virno, in his *A Grammar of the Multitude*, the Visitors Loop offers to the visitor the 'spectacle' of labour as a 'virtuoso' performance.¹⁸⁶ This spectacle serves to induct the visitor into the organisational paradigms central to marketisation through a process of exemplification, and articulates it—through the views offered out on to Beijing's rising Central Business District from within CCTV—with that of the business imperative that now defines the urban condition both within and beyond its envelope.

CONCLUSION

The trajectories of Koolhaas's metropolitan architectures of Bigness, with their topological complexity, their programmatic juxtapositions and their montage-like shock effects, potentiate a reinvention of the experience of the city's connective and collective qualities. Whilst this capacity is situated within the architectural envelope, Bigness does not propose, through this condition, the more efficient management of the subject, but rather its potential to 'reinvent the collective,' to 'reclaim maximum possibility.'¹⁸⁷ Echoing the approach of certain tendencies within Surrealism, and Benjamin's conception in which technological reproduction and montage aesthetics might offer back to the subject that which is otherwise lost to it in modernity, Bigness appears far closer to a *mimetics* of the urban, as distinct from its instrumental *replication*. Further, and returning at last to the question of the 'thought of the whole' raised by Deleuze, Bigness is premised neither on the deconstructive fragmentation of the whole nor on the seamless monism by which it is represented in architectural Deleuzism. The architecture of Bigness, whilst invested in connectivity, does not propose that this connectivity be one of absolute smoothness and fluidity (though these

qualities, amongst others, may be present within its architecture), nor that the technological, social, cultural and environmental implications of architecture be collapsed under a single paradigm of a 'materialist' and asignifying complexity (Koolhaas has, in fact, explicitly rejected the subsumption of architecture to 'chaos theory').¹⁸⁸ The 'whole' conceived by Bigness is, according to Koolhaas, 'the whole after the crisis of the whole, a whole based no longer on exclusion or homogeneity but on cultivating the uncontrollable.'¹⁸⁹ The events contained within Bigness are organised according to a logic through which both their *independence* and their *interdependence* are sustained. If this position appears merely contradictory, it can though be made sense of within the context of a dialectical approach to form in which, as Deleuze says of Eisenstein's intellectual montage, the thought of the whole is produced by the shock effect of the collision of percepts and concepts within it. At the same time it can also be understood in terms of Koolhaas's adoption of Dali's Paranoid Critical Method through which the limited contents of the whole are to be constantly reshuffled in order to sustain and affirm the uncontrollable complexity and productivity of their relationships.

This conception, and mimetic reproduction, of the whole suggests that Koolhaas's Bigness has the potential to produce an architectural condition for the production of subjectivity which differs significantly from that sought within architectural Deleuzism. In drawing upon certain methods and aesthetic strategies of the early twentieth-century avant-garde, the architecture of Bigness foregrounds the means and components of its own construction, and thus, in effect, presents the whole which it composes as an artifice, and one therefore open to the possibility of a different configuration. The subject is able, at least, to conceive of the constructed nature of socio-spatial production and to experience the fissures and voids that attest to its composition. In the examples of Koolhaas/OMA projects such as the Kunsthal or IIT Campus, the whole that these architecture produces is not represented as ideal, through, for example, surfaces and façades whose

treatment advertises its organisational principles. The programmatic superpositions, shock encounters and contrasts in surface facture deployed in Bigness, read, instead, as an intensification of urban contingency and difference. Rather than subjected to an *anaesthetics* of affect, in which the intellectual consciousness of concepts is banished so as to condition an unreflective affinity with managerial objectives, the subjects of architectural Bigness are exposed to an aesthetics in which pathic and perceptual experience may provoke thought and conception leading to further perceptual awareness and so on; a movement that may travel back and forth between sensuous experience and intellection. In short, where architectural Deleuzism attempts to control the uncontrollable, where it proposes to organise complexity as an instrument of managerialism and enterprise, Bigness seeks to sustain the uncontrollable as an enrichment of intellectual and sensuous experience compensating the subject for the death of such possibilities in the space without its envelope.

I am not the first to observe a later turn from Koolhaas's metropolitan architectures, and the projects inspired by the theorems of Bigness, towards the emergence of other tendencies within his writing and practice that seem more happily complicit with the advancement of commercial and neoliberal objectives. Noting the turn in Koolhaas/OMA's work towards servicing the 'empty-value consumption' of brands such as Prada, and the 'authoritarianism' of CCTV, Murray Fraser, for example, has written that:

The resulting feeling, therefore is of a critical discourse started by figures like Koolhaas and Tschumi that has needed to go undercover for so long that it has become dissipated and lost its bearings ... by reacting against the banal complacency of Welfare State modernism—and the backdrop of an essentially positivist discourse—they played a vital role. But now their tactics come across as a resigned reaction to the impossibility of ever challenging the dominant economic forces of capitalism ... the tactic of blending into the corporate world has clipped both of their wings, eroding the ability now to be critical.¹⁹⁰

Similarly, in his essay 'Architecture and Empire', Hal Foster has noticed an

increasing ambiguity in Koolhaas's latter output, one that:

has led him to to critique the contemporary apotheosis of shopping, yet also to serve as house architect of Prada...It has led him to open an innovative complement to OMA called AMO dedicated to intervene critically in the expanded field of design, yet also to sign on as consultant to Condé Nast in its bid to refashion its magazine empire.¹⁹¹

Rather than levelling my own critique of Koolhaas and OMA at their entanglements with commercial interests or authoritarian powers *per se*—however pertinent these arguments may be—my purpose in analysing the CCTV project is more specifically focused on the central concerns of this thesis: architecture's engagement with philosophy and theory, architecture's instrumentalisation within and servicing of the mechanisms of societies of control and neoliberal governmentality, and the production of subjectivity. Hence, where a 'metropolitan architecture' of Bigness suggests a coincidental affinity with the thought of Deleuze and Guattari, specifically in terms of the possibility of pushing the delirium inherent to the real abstractions of capital beyond its own axiomatic, the CCTV headquarters represents the closing of this possibility through a reversal of its theorems and methods. The 'whole' is presented, mimetically, in Bigness, as a construction rather than a given, opening up to thought and the senses the possibility of its ongoing reconfiguration. There is a real sense here in which architecture, and the architect, are endowed with an agency through which might be challenged, through specifically architectural means, the givenness of existing arrangements in governmentality, the socius and the production of subjectivity. The whole is *destabilised*, not so as to dismantle it, but in a fashion that opens a space, at least, in which to conceive of the possibility of its alternative composition.

CCTV, and the other projects with which it may be likened in the latter work of OMA, represents the reversal of this possibility precisely because it is concerned with *stabilising* the whole through the production of a space of

managerialism and governmentality. Architecture, and its inventions, are here subsumed to the infrastructural requirements of a process of urbanisation itself driven by the imperatives of the market and its concomitant requirement for new spatial apparatuses of control. Circulation is no longer joined to the movement of thought beyond the given, but to the affirmation, through spectacle and performance, of what exists as what is ideal—the Visitors Loop—and to the mobilisation of communication between ‘granular’ subjects in the service of self-regulating efficiency—the generic floor plate.

¹ Koolhaas, ‘Typical Plan’ in Rem Koolhaas and Bruce Mau, *S,M,L,XL*, Jennifer Sigler (ed), New York: The Monacelli Press, 1995, p. 336.

² Rem Koolhaas, ‘Elegy for the Vacant Lot’, Koolhaas and Mau (1995), op. cit., p. 937: ‘The genius of Manhattan is the simplicity of this divorce between appearance and performance: it keeps the illusion of architecture intact, while surrendering wholeheartedly to the needs of the metropolis. This architecture relates to the forces of the Grozstadt like a surfer to the waves.’ See also Koolhaas’s remark in a Seminar of 1991 at Rice School of Architecture: ‘Marshall Berman’s book *All That Is Solid Melts Into Air* describes modernization and modernism as a kind of maelstrom, which implies that you have no choice in terms of your fundamental alignment that the surfer has to make with the wave.’ in Rem Koolhaas, *Conversations with Students*, Sanford Kwinter, editor, New York: Princeton Architectural Press, 1996, p. 64.

³ Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan*, New York: Monacelli Press, 1978.

⁴ Gilles Deleuze and Félix Guattari, ‘Capitalism: A Very Special Delirium’, in *Chaosophy*, Sylvère Lotringer (ed), Los Angeles and New York: Semiotext(e), 1995.

⁵ Rem Koolhaas, ‘Bigness: The Problem of Large’, in Koolhaas and Mau, op. cit., pp. 495-516.

⁶ Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem and Helen R. Lane, London: Continuum, 2004, p. 35.

⁷ Ibid., p. 153.

⁸ Ibid.

⁹ Ibid., p. 36.

¹⁰ Ibid., p. 408.

¹¹ Karl Marx, *Capital: A Critique of Political Economy, Volume I*, trans. Ben Fowkes, London: Penguin, 1976, p.178.

¹² Ibid., p. 182.

¹³ Ibid., p. 160.

¹⁴ Ibid., p. 189.

¹⁵ Alfred Sohn-Rethel, *Intellectual and Manual Labour: A Critique of Epistemology*, London: MacMillan, 1978, p. 20.

¹⁶ For a detailed and critical analysis of the concept of abstraction within philosophy and critical theory see Peter Osbourne, 'The Reproach of Abstraction', in *Radical Philosophy* 127, Sep/Oct 2004, pp. 21-28.

¹⁷ See, for example, David Cunningham, 'The Architecture of Money: Jameson, Abstraction and Form' in Nadir Lahiji, *The Political Unconscious of Architecture: Essays in Honour of Fredric Jameson*, Aldershot: Ashgate, 2011.

¹⁸ Georg Simmel, 'The Metropolis and Mental Life', translated by Edward Shils, in *The Blackwell City Reader*, Oxford: Wiley-Blackwell, 2010.

¹⁹ Ibid., p. 106.

²⁰ Ibid., p. 104.

²¹ Simmel, 'The Metropolis and Mental Life', cited in Cunningham (2011), op. cit., p. 43.

²² Fredric Jameson, 'The Brick and the Balloon', in *The Cultural Turn: Selected Writings on the Postmodern*, 1983-1998, London and New York: Verso, 1998, pp. 162-189.

²³ Cunningham (2011), op. cit., p. 41.

²⁴ Jameson (1998), op. cit., p. 186.

²⁵ Ibid.

²⁶ David Cunningham, 'The Concept of Metropolis: Philosophy and Urban Form', in *Radical Philosophy* 127, Sep/Oct 2005, pp. 13-25.

²⁷ Georg Simmel, 'A Chapter in the Philosophy of Value', in *American Journal of Sociology*, No. 5. 1900, accessed July 10, 2001, at <<http://www.generation-online.org/c/fcvalue2.htm>>.

²⁸ Sohn-Rethel (1978), op. cit., p. 27.

²⁹ Cunningham (2005), op. cit., p. 23.

³⁰ Cunningham (2011), op. cit., p. 39.

³¹ Ibid., p. 53.

³² Whilst Simmel is most noted, in this respect, for his discussions of the coldly calculating metropolitan subject, and the 'blasé attitude', with his 'indifference toward the distinction between things', it should also be acknowledged that there is some consideration given in his writing to the production of *difference*, as an attempt to counter the effects of the abstractions of the money economy of the city. As he writes in 'The Metropolis and Mental Life', for instance: 'Where quantitative increase of value and energy has reached its limits, one seizes on qualitative distinctions, so that, through taking advantage of the existing sensitivity to differences, the attention of the social world can, in some way, be won for oneself. This leads ultimately to the strangest eccentricities, to specifically metropolitan extravagances of self-distantiation, of caprice, of fastidiousness, the meaning of which is no longer to be found in the content of such activity itself but rather in its being a form of 'being different' - of making oneself noticeable. For many types of persons these are still the only means of saving for oneself, through the attention gained from others, some sort of self-esteem and the sense of filling a position.' op. cit., p. 109

³³ Deleuze and Guattari (2004), op. cit., p. 247.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid., p. 230.

³⁷ Marx (1976), op. cit., p. 247.

³⁸ Ibid., p. 256.

³⁹ Ibid., p. 255.

⁴⁰ Deleuze and Guattari (2004), op. cit., p. 247.

⁴¹ Koolhaas (1978), op. cit., p. 18.

- ⁴² Ibid., pp. 18-19.
- ⁴³ Ibid., p. 20.
- ⁴⁴ Ibid.
- ⁴⁵ Ibid., p. 87.
- ⁴⁶ Ibid., p. 32.
- ⁴⁷ Ibid., p. 33.
- ⁴⁸ Ibid., p. 75.
- ⁴⁹ Ibid., p. 87.
- ⁵⁰ Ibid., p. 89.
- ⁵¹ Ibid., p. 91.
- ⁵² Ibid., p. 125.
- ⁵³ Ibid., p. 97.
- ⁵⁴ Ibid., p. 174.
- ⁵⁵ Ibid., p. 173.
- ⁵⁶ Ibid., p. 139.
- ⁵⁷ Deleuze and Guattari (2004), op. cit., p. 61.
- ⁵⁸ Ibid., p. 54.
- ⁵⁹ Ibid., p. 83.
- ⁶⁰ Koolhaas (1978), op. cit., p. 271.
- ⁶¹ Ibid., p. 255.
- ⁶² Deleuze and Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi, London and New York: Continuum, 1992, p. 153.
- ⁶³ Koolhaas (1978), op. cit., p. 237.
- ⁶⁴ Ibid.
- ⁶⁵ Ibid., p. 241.
- ⁶⁶ Ibid., p. 243.
- ⁶⁷ Alejandro Zaera-Polo, editor, *Rem Koolhaas/OMA 1987-92, El Croquis 53*, Madrid: El Croquis, 1994.
- ⁶⁸ Ibid., p. 19. It is not inconceivable, it should be acknowledged, that there is an element of stage management in what appears, at first sight, to be the foisting of a Deleuzoguattarian framework upon an unwilling Koolhaas by Zaera-Polo. According to the latter, in his 'A Scientific Autobiography: 1982-2004', after being introduced by Sanford Kwinter, at the Harvard Design School, to 'Henri Bergson, Ilya Prigogine, Gilles Deleuze, Manuel De Landa, and the like', he was then invited by Koolhaas to work for OMA in Rotterdam. Zaera-Polo describes one of his primary roles in the office there, between 1991 and 1993, as being to 'update' their outmoded frames of theoretical reference with the 'theory cocktail' he had imported from Harvard (op. cit, pp. 7-8). It is possible, then, that in wanting, to some extent at least, to have the practice of OMA reconceptualised in Deleuzoguattarian terms, Koolhaas chose to frame this move, publicly, as being one outside of his control rather than as coming from his own change of position. Nevertheless, I would still argue that it is largely untenable to characterise the projects of OMA at this period, or indeed in much of their subsequent output, as purely 'machinic' and post-representational.
- ⁶⁹ Ibid., p. 35.

⁷⁰ Richard D. Levene and Fernando Marquez Cecilia, editors, *Rem Koolhaas/OMA 1992-96, El Croquis* 79, Madrid: El Croquis, 1996.

⁷¹ Ibid., p. 29.

⁷² Lara Schrijver, 'OMA as tribute to OMU: exploring resonances in the work of Koolhaas and Ungers', *The Journal of Architecture*, 13:3, 2008, p. 256.

⁷³ Ibid.

⁷⁴ Koolhaas and Mau, op. cit., p. 699.

⁷⁵ Ibid.

⁷⁶ Ibid., p. 696.

⁷⁷ Sarah Whiting, 'Spot check: a conversation between Rem Koolhaas and Sarah Whiting' in *Assemblage* no.40, December 1999, p. 46.

⁷⁸ Alejandro Zaera-Polo, 'Patterns, Fabrics, Prototypes, Tessellations' in *Architectural Design, Special Issue: Patterns of Architecture*, Volume 79, Issue 6, pp. 18–27, November/December 2009, p. 25.

⁷⁹ Koolhaas (1978), op. cit., p. 11.

⁸⁰ Rem Koolhaas and Brendan McGetrick (eds), *Content*, Köln: Taschen, 2004.

⁸¹ John Berger, *Ways of Seeing*, London: BBC/Penguin, 1972, p. 152.

⁸² Koolhaas and McGetrick, op. cit., pp. 58-63.

⁸³ David Cunningham and Jon Goodbun, 'Propaganda Architecture: Rem Koolhaas and Reinier de Graaf' in *Radical Philosophy* 154, March/April, 2009, p. 40.

⁸⁴ Koolhaas (1978), op. cit., p. 238.

⁸⁵ Koolhaas, 'Bigness', op. cit., pp. 506-507.

⁸⁶ Sergei Eisenstein, 'A Dialectic Approach to Film Form' in Sergei Eisenstein, *Film Form: Essays in Film Theory*, translated by Jay Leyda, New York: Harcourt Brace and Company, 1949, p. 49.

⁸⁷ Ibid., p. 29.

⁸⁸ Ibid., p. 61.

⁸⁹ Gilles Deleuze, *Cinema 2: The Time-Image*, translated by Hugh Tomlinson and Robert Galeta, Minneapolis: University of Minnesota Press, 1989, p. 156.

⁹⁰ Ibid., p. 158.

⁹¹ Koolhaas and McGetrick, op. cit., p. 182.

⁹² Simmel, op. cit., p. 106.

⁹³ These pathways were originally established by students and lecturers finding shortcuts between the buildings of the campus and made apparent by the wear upon the grass caused as a consequence.

⁹⁴ Koolhaas, 'Bigness', op. cit., p. 501.

⁹⁵ Walter Benjamin, 'On Some Motifs in Baudelaire,' in *Illuminations*, edited by Hannah Arendt, translated by Harry Zorn, London: Pimlico, 1999, p. 171.

⁹⁶ Ibid., p. 159.

⁹⁷ Esther Leslie, *Walter Benjamin: Overpowering Conformism*, London and Sterling, Virginia: Pluto Press, 2000, p. 183.

⁹⁸ Walter Benjamin (1999), op. cit., p. 171.

⁹⁹ Walter Benjamin, 'The Work of Art in the Age of Mechanical Reproduction,' in *Illuminations*, op. cit., pp. 228-9.

- ¹⁰⁰ Ibid., p. 229.
- ¹⁰¹ Ibid., pp. 229-30.
- ¹⁰² Ibid., p. 230.
- ¹⁰³ Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*, Cambridge, MA and London: MIT Press, 1991, p. 268.
- ¹⁰⁴ Benjamin's theory of mimesis is developed throughout a number of his essays, including his 'On the Mimetic Faculty', in *Walter Benjamin: 1931-1934 v. 2, Pt. 2: Selected Writings*, Michael William Jennings, Howard Eilings and Gary Smith (eds), Cambridge, MA: Harvard University Press, 1999, pp. 720-722, and 'The Work of Art in the Age of Mechanical Reproduction,' op. cit. For a particularly clear and succinct account of mimesis in the work of Benjamin see Esther Leslie's *Walter Benjamin: Overpowering Conformism*, op. cit., pp. 154-155, and for extended analysis of its specific relation to film see Miriam Hansen's 'Benjamin, Cinema and Experience: "The Blue Flower in the Land of Technology"' in *New German Critique*, No. 40, Special Issue on Weimar Film Theory. Winter, 1987, pp. 179-224.
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¹²⁹ Pier Vittorio Aureli, 'Toward the Archipelago: Defining the Political and the Formal in Architecture', in *Log II*, Winter 2008, p. 98.

¹³⁰ Rem Koolhaas, 'Interview with Rem Koolhaas', by Ma Weidong, *CCTV by OMA*, op. cit, pp. 11-12.

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¹³³ Koolhaas (2005), op. cit., p. 12.

¹³⁴ Ibid.

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¹³⁶ Scheeren, (2005), op. cit., p. 4.

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¹³⁸ Ibid., p. 5.

¹³⁹ Koolhaas (2005), op. cit., p. 16.

¹⁴⁰ Koolhaas, 'Triumph of Realization', in Koolhaas and McGetrick, op. cit., p. 451.

¹⁴¹ Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century*, London and New York: Verso, 2007, p. 353.

¹⁴² J. K. Galbraith, "Debunking *The Economist* Again," available at <<http://www.salon.com/opinion/feature/2004/03/22/economist/print.html>>.

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¹⁴⁵ Yuezhi Zhao, *Communication in China: Political Economy, Power, and Conflict*, Lanham, Maryland, and Plymouth, UK: Rowman & Littlefield, 2008, p. 6.

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¹⁴⁸ Rofel (2007), op. cit., pp. 7-8.

¹⁴⁹ Wang Hui, *The End of the Revolution: China and the Limits of Modernity*, London and New York: Verso, 2000, p. 19.

¹⁵⁰ Ibid.

¹⁵¹ Ibid., p. 7.

¹⁵² James Pomfret and Chris Buckley 'Special Report: China migrant unrest exposes generation faultline', Reuters, 29 June, 2011, accessed 30 August, 2011, at <<http://uk.reuters.com/article/2011/06/29/us-china-migrants-idUKTRE75S0PU20110629>>.

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¹⁵⁴ Zhao (2008), op. cit, p. 7.

¹⁵⁵ They have also registered a significant effect in other fields too; culturally, for example, in the films of Jia Zhangke, such as *Still Life* (2006), and *24 City* (2008).

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- ¹⁵⁸ Ong (2006), op. cit., p. 3.
- ¹⁵⁹ Ibid., p. 223.
- ¹⁶⁰ Zhao (2008), op. cit, p. 34.
- ¹⁶¹ Ole Scheeren interviewed by A Lian for FeedMeCoolShit, not dated, accessed 11 December 2011, at <<http://www.feedmecoolshit.com/interviews-archive/ole-scheeren/>>.
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- ¹⁶⁴ Ibid.
- ¹⁶⁵ Zhao (2008), op. cit, p. 7.
- ¹⁶⁶ Ibid., p. 84.
- ¹⁶⁷ Shu Taifeng, 'CCTV Halts Decades-long Practice of "Remuneration though Invoices"', *Caijing*, 26 September, 2011, accessed 11 December, 2011, at <<http://english.caijing.com.cn/2011-09-26/110874570.html>>.
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- ¹⁶⁹ Ole Scheeren, interviewed on 'Nightwaves', BBC Radio 3, 26th March 2008.
- ¹⁷⁰ Koolhaas and Scheeren (2005), 'CCTV Headquarters', op. cit., p. 77.
- ¹⁷¹ Ibid., p. 80: 'The main lobby organizes the access to the rich infrastructural and programmatic demands of the building. Staff, business guests, actors, VIPs and visitors are channeled to their specific destinations.'
- ¹⁷² Rem Koolhaas, 'Typical Plan' in Koolhaas and Mau, op. cit., pp. 334-350.
- ¹⁷³ Gargiani, *Rem Koolhaas*, op. cit., p. 223.
- ¹⁷⁴ Koolhaas, 'Typical Plan' in Koolhaas, and Mau, op. cit., p. 336.
- ¹⁷⁵ Ibid., p. 337.
- ¹⁷⁶ Ibid., p. 341.
- ¹⁷⁷ Ibid., p. 336.
- ¹⁷⁸ Koolhaas and Scheeren (2005), op. cit., p. 80.
- ¹⁷⁹ Ibid.
- ¹⁸⁰ Ibid.
- ¹⁸¹ Zhao (2008), op. cit, p. 39.
- ¹⁸² Ibid.
- ¹⁸³ Ibid.
- ¹⁸⁴ Ibid.
- ¹⁸⁵ Ibid., p. 79
- ¹⁸⁶ Paolo Virno, *A Grammar of the Multitude*, Semiotext(e), Los Angeles and New York, 2004. Virno here reworks the originally Debordian concept of 'spectacle' so as to suggest that as communication, in post-Fordism, moves to the centre of all production, then spectacle takes on a 'double nature' in that under these conditions of production work tends toward a 'production of communication by communication', and the worker's performance is likened by Virno to that of the musical 'virtuoso', but where the 'general intellect' now becomes the 'score' played by all.
- ¹⁸⁷ Rem Koolhaas, 'Bigness: The Problem of Large' op. cit, p. 510.

¹⁸⁸ See Koolhaas's rebuttal to Zaera-Polo's suggestion that 'chaos theory' might constitute a useful epistemology for architecture: "I am becoming skeptical about the contributions of this chaotic analysis to the profession of architecture. The more direct and literal [sic] the influence of this science upon architecture, the more devastating its effects." Alejandro Zaera-Polo, 'Finding Freedoms: Conversations with Rem Koolhaas' in OMA/Rem Koolhaas 1987-1992 / *El Croquis* 53, Madrid: El Croquis, 1994, p. 27.

¹⁸⁹ Rem Koolhaas in Rajchman, John, 'Thinking big - Dutch architect Rem Koolhaas - Interview', in *Art Forum*, December, 1994, accessed November 8, 2008, at <http://findarticles.com/p/articles/mi_m0268/is_n4_v33/ai_16547724/pg_1?tag=artBody;coll>.

¹⁹⁰ Murray Fraser, 'Beyond Koolhaas' in *Critical Architecture*, Jane Rendell, Jonathan Hill, Murray Fraser and Mark Dorrian (eds), London and New York: Routledge, 2007, p. 334.

¹⁹¹ Hal Foster, 'Architecture and Empire' in Hal Foster, *Design and Crime and Other Diatribes*, London and New York: Verso, 2002, pp. 60-61.

EPILOGUE

ENDGAMES

Architectural Deleuzism names the practice by which architecture has turned itself to the production of the spatial apparatus of a society of control, and the production of a discourse that, in its translations of Deleuze and Guattari and their conceptual personae—folding, smoothing, molecularity, complexity, affect and faciality—has presented this practice as essentially progressive. Engaged in the analysis of certain of the key projects through which a spatiality of control has been produced, and, as well, in a critical reading of certain key texts through which this production has been framed as Deleuzoguattarian in inspiration, I have been especially concerned with a critique that focuses on the production of subjectivity. In respect of this concern, and of attending to the specific circumstances and conditions through which new modes of subjectivation have been posited (if not always realised) between architects and their clients, I have addressed such features of a society of control as its demands for swarm-modelled subjects of labour, ‘citizen-consumers’, ‘nomadic’ student-entrepreneurs and re-engineered publics. Furthermore, the production of continuously self-modulating subjectivities, mobilised across the ‘inseparable variations’ of ‘open sites’, have been located within specific geopolitical and historical moments of territorial transformation—the implementation of new managerial strategies within post-communist Eastern Germany, the positioning of consumerism as central to notions of urban life in Istanbul, the marketisation of education as a ‘learning landscape’ in the UK, and the remaking of the relations between state, media and public in post-reform China.

What has been argued, then, through the analysis of certain key projects, is that architecture has, in these examples, found a significant place for itself within the most advanced moments of capitalism’s current mechanisms of control and valorisation. Whereas much critical attention—typically framed through the notions of iconic architecture, branding and ‘starchitecture’—

has been addressed to a critique of the ideology of the *image* of architecture, I have been primarily concerned here with its *spatial* and *processual* modes of subjectivation. Without discounting the continuing significance of architecture as a producer of the image of capital, of its powers to shape through representation the perception of capital's urban investments and corporate operations, the critique of this thesis has been positioned as immanent to the turn in architecture away from the semiotic and the linguistic, and towards its materialist, organisational, formal and processual concerns, that the discipline itself identified as its new orientation sometime around the mid-1990s. Rather than *reading* the architecture of Deleuzism, that is, I have sought to understand its *operative* dimensions—not what it *means* but what it *does*, to repeat once more its foundational mantra—so as to reflect upon how its immersion of the subjects of labour, commerce, education and publicity within its architectural environments has served mechanisms of control and governmentality.

Whilst the analysis of such operations has been focused principally upon specific projects through which these mechanisms are manifested, these projects have also been situated in relation to larger patterns of transition within the operations of power, and, specifically, to the processes of subjectivation which Deleuze theorised as constitutive of an emergent society of control. At the same time, and without suggesting that the projects and texts analysed here should be understood merely as vehicles of exemplification, there has been an attempt to understand their relationship to a wider phenomenon referred to as architectural Deleuzism. Hence this thesis has broached larger questions concerning contemporary modes of power and the relationship of these to certain currents within architectural discourse and practice. Approaching the possibility of offering some concluding remarks upon this relationship, two concerns are immediately apparent.

The first of these is the question of whether the projects analysed here

should be taken as evidence for the consolidation of a society of control, i.e. of whether or not they should be understood to mark the arrival of a new order which decisively departs from that of the older, disciplinary, society. One might also understand this question as related to one of whether immaterial labour has now replaced material labour, or of whether everyone is now equally, and globally, exposed to the same experience of space as a field of continuous transformations, variations and affective inducements towards communicative behaviour. Framing the question in this fashion, of course, serves to make it more readily apparent that a decisive break between an older order of power and a new society of control has not transpired, and nor does it seem likely that such an absolute transition is imminent, or perhaps even possible within contemporary capitalism. Globally, millions still labour under conditions of work barely, if at all, distinguishable from those of Fordism. The networks of communication and interactivity through which immaterial labour, and its associated service industries operate are themselves supported by an apparatus involving the regimented conditions of labour of, for example, the call centre, and the factories in which the components of personal computers and smartphones are mass-produced. It is probably better, then, to understand the society of control, and the spatial formations through which it operates, such as have been analysed here, as something like an emergent strata of power, or as a recently acquired tool in a larger kit whose older instruments have not been entirely abandoned. Such was the manner, after all, in which Foucault understood the development of new techniques of power in relation to older ones. As he expressed this in relation to the mechanisms of 'security' said by him to emerge after those of disciplinary power:

So, there is not a series of successive elements, the appearance of the new causing the earlier ones to disappear. There is not the legal age, the disciplinary age, and then the age of security. Mechanisms of security do not replace disciplinary mechanisms, which would have replaced juridico-legal mechanisms. In reality you have a series of complex edifices in which, of course, the techniques themselves

change and are perfected, or anyway become more complicated, but in which what above all changes is the dominant characteristic.¹

Rather than a lineage of succession in the mechanisms of power, therefore, there is an accumulation of new techniques at its disposal. These techniques may be understood to develop in response to the particular demands and possibilities of new conditions without the implication that other, and older conditions, and the techniques developed in relation to these, are simply cast aside in some kind of broad and all-encompassing historical movement. What can be gleaned from the analyses of the projects addressed here is not, then, evidence for a an absolute shift in the mechanisms of power, but rather of the development and operation of certain new techniques in spatial production at certain strategic points: within certain types and conditions of labour and production, within new patterns of urban development, within new models of education and within territories newly opened to the logic of the so-called 'free market'. Rather than a definitive *society* of control we have, then, certain *societies* of control.

The second question concerning the relationship between architecture and contemporary modalities of power that I wish to attend to is of whether architectural Deleuzism should be understood to define a particular moment in architectural theory and practice, one that might now be considered as finished and thus approached historically, or whether it may understood as in some way ongoing. The short answer is that whilst the techniques of power associated with the production of a society of control continue to be developed, produced and deployed, the architecture which serves it will continue, though not without some degree of transformation, to produce its theory, its discourse and its practice along a trajectory which originates in its Deleuzism. Furthermore, that trajectory appears to point to a particular endgame whose emerging outlines I will attempt to trace, as a more elaborated response to this question, in what follows.

FROM DELEUZE AND GUATTARI TO LUHMANN AND LATOUR

Deleuze and Guattari are now less frequently referenced, directly, at least, within architectural discourse. Other figures appear now more prominently amidst the writings of the architects and theorists addressed here. For Schumacher, Niklas Luhmann has eclipsed the place once held by Deleuze and Guattari at the centre of his theorising. For others, such as Zaera-Polo, as we have seen, it is been Bruno Latour, especially, who has come to occupy such a position. Yet there has been no outright rejection of Deleuze and Guattari to accompany this shift, no direct critique of their thought or recanting of earlier allegiances, and nothing like the explicit paradigm shift in which Deleuze and Guattari themselves were substituted for Derrida as the 'New Architecture' replaced Deconstructivism in the mid-90s. Rather than indicative of some absolute rupture within the lines of architectural theory I have been following, then, such transitions suggest their refashioning; a refinement in which they are relieved of the overt radicalism which the names of Deleuze and Guattari continue to invoke, whilst the discourses of complexity, material organisations, flat ontologies and molecularity originally derived from them, however dubiously, can still be pursued. In this ongoing refashioning of a once more explicitly Deleuzoguattarian theoretical model any attempt, or even pretence, to present the pursuit of processual, networked or self-organising principles as radical or in any way progressive is entirely relinquished. Rather than being framed, as was once the case, within a discourse of their tactical utility for some liberatory purpose, the same concepts are now mobilised as straightforwardly affirmative reflections of the given nature of things. Furthermore, these things, such as work, corporations, education, urban life, etc, are all effectively naturalised through the supposed materialism and ontological veracity of the concepts through which they are articulated. Architecture, according to the logic of the arguments to be found in much of its contemporary discourse, must play its informed but unquestioning part in framing, channeling and ordering the actions of the subjects of this reality from within the strict bounds of its disciplinary expertise. In this sense the

last vestiges of architecture as a kind of critical knowledge that might be found within earlier moments of architectural Deleuzism—notwithstanding its consistent denouncement of the ‘negativity’ of critique itself—are now being replaced by the affirmation of an ontology to which architecture must accommodate itself absolutely.

Exemplary of this post-progressive line of theorising is Patrik Schumacher’s two-volume treatise *The Autopoiesis of Architecture*.² ‘The task of architectural design’, Schumacher declaims here,

is the elaboration of an architectural order that catalyzes, facilitates and maintains the specific social order to be accommodated. The first component of this task pertains to organization, ie, the translation of social organization into spatial organization.³

Architecture’s accommodation of the existing social order must now be absolute, insists Schumacher, since ‘it is *not* architecture’s societal function to actively promote or initiate political agendas that are not already thriving in the political arena.’ Following the arguments of Luhmann, the political is understood strictly, and exclusively, as that which is exercised by elected political parties. This is the ‘specific medium’ of the political to which all are entitled to participate ‘via voting in political elections’ as the approved limit of their engagement and contribution to the social order which architecture is henceforth to serve unquestioningly.⁴ Hence:

those who want to debate architecture should keep their political convictions to themselves.

... All political agendas must be pursued in the political system. This also applies to any politics concerning the built environment. Those who want to argue politics should enter politics proper.⁵

Because ‘real politics’ is legitimated only for political leaders ‘effectively representing real political forces’,⁶ architecture can understand its ‘task’ as being to ‘order, prompt, cajole and inspire desired patterns of social communication’ without concerning itself with questions of for whom, or to

what ends, these patterns are ‘desired’.⁷ The subjects of these patterns of communication are no longer conceived as agents who might find some liberatory pathways of their own through its networks—as was claimed through the arguments for ‘progressive realities’ articulated within the DRL’s Corporate Fields programme—but are now to be modelled within design scenarios as ‘rule-governed automatons’.⁸ Discharging its responsibility for the spatial ordering of a social order whose objectives are placed beyond question, architecture is tasked with ‘channelling bodies’ and ‘guiding subjects’⁹ and with the production of environments of ‘atmospheric priming’ designed to instill in its subjects the hegemonic order’s requisite ‘mental and emotional disposition[s]’.¹⁰

THE TROUBLE WITH THEORY

Anthony Vidler, in the opening remarks of a recent lecture titled ‘Troubles in Theory’, commented that after reading Schumacher’s *The Autopoiesis of Architecture, Volume I*:

I realised that theory was in real trouble precisely because someone had realised that in order to deal with the troubling nature of theory a unified and comprehensive theory, which, in the end, I’m afraid to say, is nothing of the sort, had to be written.¹¹

This symptomatic reading of Schumacher’s theoretical endeavours is highly suggestive—particularly in its reference to the ‘troubling nature of theory’—and worthy of further exploration in respect of clarifying the kind of endgame now being played out within architectural theory.

François Cusset, in his essay ‘Theory (Madness of)’, argues that:

theory used to make sense ... sometime in the third quarter of the twentieth century, in France but not only there, theory joyfully *stopped* making sense, and began cracking all existing frames. In other words, theory used to be reasonable, more than strictly *rational*, and for some reason which remains to be fully explained theory turned *crazy* ...¹²

Theory, unleashed from what was formerly considered its proper place

within the traditional framework of Hegelian dialectics, and from the confines of once strictly separated and clearly demarcated disciplinary fields, by figures such as Althusser, Foucault and Derrida—and specifically the unconstrained *movement* of theory between disciplines—begins to produce ‘a transdisciplinary open field, loose yet closely related to literature, politics and psychoanalysis’.¹³ The ‘madness’ of this theory is that its task of ‘self-criticism’ is endlessly multiplied and turned against itself with every encounter staged between once discrete fields of knowledge, and through the multiple displacements, doubts and suspicions that result from these. As well as suggesting the madness of this undertaking, Cusset describes it as a ‘theoretical *demon* which began to possess the Western intellectual body around forty or fifty years ago.’¹⁴

Something of theory’s demonic quality may also be observed within the account of its work in architecture presented by K. Michael Hays in his introduction to his *Architecture Theory since 1968*:

From Marxism and semiotics to psychoanalysis and rhizomatics, architecture theory has freely and contentiously set about opening up architecture to what is thinkable and sayable in other codes, and, in turn, rewriting systems of thought assumed to be properly extrinsic or irrelevant into architecture’s own idiolect.¹⁵

If architecture theory is to be understood, as Hays suggests, ‘[f]irst and foremost’ as a ‘practice of mediation’, or, as he also suggests (following Fredric Jameson), as a ‘transcoding’, then these practices may also be understood as those through which architecture becomes possessed by the demon of theory. Theory becomes a troubling presence—at the same time as an exhilarating one—since it forges all manner of unforeseen connections between architecture and language, the unconscious, capital, class and gender, and, locating these in the forms and structures of architecture, shows them residing in the very places where the discipline might have thought itself most autonomous. So, it is not just the broadly leftist, and even ultra-leftist, politics of theory in this period, but more precisely its *modus operandi*, its promiscuous and infectious unsettling of all certainties, which constitutes

the ‘troubling nature’ of theory within architectural culture.

The shift in architectural theory from Derrida to Deleuze, and Deleuze and Guattari, that occurred in the mid-90s, precisely at the cut-off point of Hays’s anthology, ought then to be understood as an initial move through which architecture sought to recover the ground of its own practice and begin the exorcism of its demons.

In this light, the turn to Deleuze’s *The Fold: Leibniz and the Baroque*, and to Deleuze and Guattari’s *A Thousand Plateaus*—particularly to the morphological, organisational, spatial and materialist themes that were derived from these works—can be understood as an endeavour to shift theory toward more familiar and more specifically architectural territory. Not only is the significance of this shift to be understood, as already suggested, as an explicit rejection of the linguistic and semiotic paradigms then dominant in architectural theory, but also in the sense that this afforded a reorientation of architecture toward the *productive* and the *affirmative*. In contradistinction to the perceived negativity of critique and the incapacities of deconstructivism in the creation of the ‘new’, Deleuze and Guattari appeared to promise architectural theory its renewal as a discourse through which architecture could be conceived, and thus practiced, according to models of matter’s self-organised, rhizomatic, complex and vital becoming.

Whilst the thought of Deleuze and Guattari was, as I have already argued, significantly rescripted by the architectural Deleuzians for their own purposes, it is also the case that affirmation, and the affirmation of production, were already central to their philosophy. As Benjamin Noys observes in his *The Persistence of the Negative*, ‘Gilles Deleuze is the affirmative philosopher *par excellence*’.¹⁶ As Deleuze himself wrote in his *Nietzsche and Philosophy*, in a passage quoted in this context by Noys, ‘Affirmation itself is being, being is solely affirmation in all its power.’¹⁷ In his own critique of ‘affirmationism’, as constitutive of ‘a dominant and largely unremarked

doxa’,¹⁸ Noys returns to the earlier critique made of the theories of Lyotard, Foucault and Deleuze by Jean Baudrillard in *Forget Foucault*.¹⁹ The arguments against ‘affirmationism’ that Noys draws from Baudrillard’s text here are also significant in regard to the development of architectural Deleuzism. Baudrillard’s critique of the affirmation of a certain *form* of production—one of unbounded circulation—as one common both to capital and those arguing for the productivity of desire, is especially pertinent in this context:

This compulsion toward liquidity, flow, and an accelerated circulation of what is psychic, sexual, or pertaining to the body is the exact replica of the force which rules market value: capital must circulate; gravity and any fixed point must disappear; the chain of investments and reinvestments must never stop; value must radiate endlessly and in every direction. This is the form itself which the current realization of value takes.²⁰

It is precisely this affirmation of a *form* of production centred on circulation—whether articulated through the powers of a ‘new materialism’, molecularity, affect, self-organising networks, or ‘smooth space’—that constitutes the fundamental rhetorical basis of architectural Deleuzism. But whilst the form of production affirmed in architectural Deleuzism was thus carried over from Deleuze and Guattari, its content, so to speak, i.e. desire, or ‘desiring production’, never was. Rather than the affirmation of the circulation of *desire*—as that which might liberate the subject, catalyse its becomings, produce for it a body without organs—architectural Deleuzism has always, even its supposedly progressive articulations, affirmed circulation and connectivity as somehow in themselves to be positively valued. The great deception of architectural Deleuzism is that there is, of course, a content valorised by the unconstrained circulation it affirms, which is not desire but accumulation. Under conditions where communication, creativity and the production of affect are themselves economically valorised forms of productive labour, as well as being mechanisms of control, circulation and connectivity are not produced for the subject, but the subject circulated for capital. It is, as I have argued at length in the preceding chapters, toward the production of this subjectivity, productively mobilised, circulated and

channeled, through its spatial production and ordering, that architectural Deleuzism has absolutely accommodated its practice.

Because, however, this undertaking cannot be affirmed in its own right by an architectural tendency describing itself as avant-garde, or ascribing to itself autonomous powers of invention, it has transposed the source of the form of production it affirms from capital to the very nature of things themselves. It is matter, now construed as complex, self-organising, creative, inventive and self-organising, whose powers are affirmed. Thus it is made to appear axiomatic, according to this account, that architecture operate according to these same principles. Architectural Deleuzism has not been alone in this undertaking. The productivity of models of complexity, emergence and self-organisation imputed to the workings of nature has been adopted across a range of social economic, political, institutional and commercial fields to the extent that they now converge—as has been shown in the analysis of architecture's relationships with managerialism, education, statecraft and consumerism in the preceding chapters—in a process of mutual confirmation. Under the movement of this convergence capitalism and its powers are rendered increasingly indistinguishable from those of life itself: capitalism is effectively ontologised as the real, or, at least, as its faithful reflection.

A further way of understanding the significance of this convergence upon a mutually reinforced paradigm of production, underwritten by an ontology of 'vibrant matter', may be to recognise that it now operates as something like a master figure of transcoding. Whereas transcoding had been a theoretical undertaking in which the ground of any discipline was likely to be unsettled, its existing frames 'cracked', as Cussett puts it, through the process of its mediation by other fields of knowledge, a single paradigm now works to identify a number of fields and disciplines as partaking in a shared form of production. Thus theory is dispossessed of its demons, relieved of the troubling foreign agents undermining its certainties, whilst its

new figures of ‘the real’ are themselves put into circulation productively and affirmatively.

This reworking of theory can be found at work in Schumacher’s *The Autopoiesis of Architecture, Volume I*, where, through a chiasmus reversing the relations of mastery, the *design of theory* comes to replace *theories of design*. Schumacher writes here of the ‘the “designed” nature of all theory’,²¹ and asserts that theory ‘is a designed apparatus to give order to the phenomena we experience’.²² Further underlining this instrumentalisation of theory for an end itself unquestioned and already given in advance—in this case the ontological model of autopoiesis derived by Schumacher from Luhmann—he writes that the ‘theoretician’s theory succeeds when its guiding premises, conclusions and turns of argument diffuse into the ongoing autopoiesis of architecture.’²³

Similarly, Alejandro Zaera-Polo, in the introduction to a collection of previously published essays titled *The Sniper’s Log*, has recently written that ‘we must be capable of dropping theories once they cease being useful’, and clarified the given path for which theory is to be instrumentalised as ‘the secret exit from nihilism, and the advance of the radical project of architecture as a self-evident, fully naturalized endeavor toward and for the always deferred real.’²⁴ The general trajectory of his essays is presented, in accord with the now broadly valorised and naturalised forms of production addressed here, as ‘approaching the now of material agency’.²⁵

If theory can thus be understood as now disciplined by an architectural culture itself now taking its cues from capital’s currently valorised forms of production, a similar reconception and repurposing of the avant-garde also becomes apparent. Rem Koolhaas and Hans Ulrich Obrist’s *Project Japan*, for instance, identifies an heroic quality in the Japanese Metabolist movement as an avant-garde whose mission was inextricably bound to national economic and bureaucratic agendas, as well as in the prescience of its ecologically-

derived models.²⁶ Whereas Manfredo Tafuri argued, in his *Architecture and Utopia*, that the work of the early-twentieth-century avant-garde, *despite* its ‘anticapitalism’, had effectively, and largely *against* its own visions, served the process of restructuring everyday life *for* late capitalism, this critique is now rendered redundant by a new conception of the avant-garde as, *by definition*, something like a Research and Development department for capital. ‘It is the task of the avant-garde segment of architecture,’ writes Schumacher, ‘supported by architectural theory, to continuously innovate the disciplinary resources in line with the demands of society.’²⁷ These demands themselves, it should be recalled, are not to be set or even reflected upon by architects or theorists, but taken as given within ‘parliamentary democracy’.²⁸

GUNS FOR HIRE

It is in respect of this latest turn toward what Noys has termed ‘affirmationism’, and specifically the affirmation of certain models of production and control, that the adoption of the figures of Latour and Luhmann at the heart of the latter refashioning of architectural Deleuzism addressed here can be understood. Certainly the thought of Deleuze and Guattari is not itself unmarked by its own forms of ‘affirmationism’, such as a certain investment in vitalism (especially prevalent within the Spinozism and Bergsonism expounded by Deleuze), and a tendency toward the valorisation of forms of emergence, complexity and the like. Yet is also indelibly marked, to the evident discomfort of some, by an attachment to Marxism, and, as I have tried to show, by a deep commitment to critique, however hamstrung this might ultimately have been by their, at best, ambivalent relationship to negation. Latour, in contrast, as was discussed in Chapter Two, is virulently opposed to critique, and presents architecture with a more or less flat ontology of networks in which neither the subject nor capitalism are afforded any special status. Equipped with this kind of worldview, it is a simple matter for architecture to position itself uncritically as a managerial service in spatial organisation, in which the subject is little more than a component particle of some swarm or hive mind, for all

manner of corporate and governmental clients. As Zaera Polo, figuring himself as a kind of ‘gun for hire’, writes in *The Sniper’s Log*:

the sniper’s maverick profile appears as a better protagonist for a contemporary epistemology of the now. Shooting from changing locations at constantly moving targets, following a ruthless path of tactical movements without a necessary alignment with other agents, directly engaged with a permanently changing ground ... The sniper hides and hits by stealth, avoiding direct confrontation with the enemy, bypassing the battlefield’s rules of engagement. When correctness—be it political or moral—becomes the quickest path to conformism, the sniper’s moral ambiguity constitutes a promising model for a new form of theory that never falls into complacency.²⁹

Here theory is conceived as weapon in the arsenal of architecture figured as a mercenary-like operator, unattached to any ethical or political position, relieved of all commitments, and thus on the market for the ‘ruthless’ execution of any task that the client may assign it.

Luhmann, in his subsumption of the political to a universal ontology of autopoiesis, provides a similar form of rationale for architecture’s abstention from critique. It is especially in the remaking of a stable framework for architecture, of providing it with a secure and unconflicted position and a set of clearly defined tasks, that his theories have served, for Schumacher’s *rappel à l’ordre* at least, to rationalise the absolute accommodation of architecture to all current and future forms of dominant political and economic power.

RESULTS

This, then, appears to be the endgame of architectural Deleuzism as an ongoing, though certainly not uncontested, trajectory of architectural discourse and practice. The avant-garde is repurposed as a department of Research and Development, and architecture, relieved of all other duties, assigned to the production of a spatiality in which the capacities of the subject can be rendered immanent to the operations of an order which is itself now pronounced incontestable.

It may bear repeating once more, and in conclusion, that the purpose of this thesis is not to criticise the fact that the thought of Deleuze and Guattari has been instrumentalised or misappropriated by individual architects, nor to argue for a better or more truthful response to their philosophy, nor to point up the failings of the architecture considered here. Architectural Deleuzism should be understood as profoundly *truthful* to a society of control, as appropriate to and necessary for the realisation of a condition in which, as Frédéric Vandenberghe has noted, ‘capitalism itself has become Deleuzian in form, in style and in content.’³⁰ If neoliberal and post-Fordist modes of capital have incorporated the demands for spontaneity, self-management, rhizomatic relations and continuous becoming for which May ‘68 came to stand, as is argued by Boltanski and Chiapello, within its own operative procedures, then architecture’s turn to these same demands—channeled through the thought of Deleuze and Guattari—has succeeded in making it vital to the progress of capitalism in these same terms. The interests of architecture and capitalism have perhaps never before been so closely intertwined.

My concern, then, has been not with questions of error or failure, but with the implications of the *success* of architectural Deleuzism. Hence this thesis has attended at length to the analysis of the production of subjectivity, to the making of architectural spaces designed to service the demand for tractable, precarious and opportunistic subjects. But what of the implications of the success of architectural Deleuzism for theory? As it becomes more readily apparent that the endgame of architectural Deleuzism is the affirmation of capital as the untranscendable horizon of the real, it becomes axiomatic that critique, in the face of its disavowal and denigration, must be rediscovered, especially in its powers of negation. Any proposed return to some form of *critical theory* is, of course, not without its own problems, not least that the critical tools mobilised against the realities of early and mid-twentieth-century capitalism are not unproblematically transposed to the present day.

Yet I hope to have demonstrated that the thought of earlier figures, such as those associated with the Frankfurt School, might acquire a renewed pertinence to our contemporary condition, especially in its relentless concern with the aestheticisation of everyday experience. For theory as it exists outside of the immediate concerns of architectural practice, the rediscovery of critique is no small undertaking, especially as it must set itself against the increasingly hegemonic return to ‘philosophies of life’ and their innate hostilities to the force of the negative. For any architects concerned to theorise a practice outside of, or even against, the organisational *doxa* and prevalent spatiality of post-Fordist capital, the task must be even more daunting. It must, of necessity, involve breaking with an entrenched habit of chasing the latest paradigm shift within a body of theory already as much troubled as it is troubling in the hope of locating its relevance to the contemporary world. This is a game that has now been played out. The results are in.

¹ Michel Foucault, ‘Security, Territory and Population’, 1978 lecture, accessed May 18, 2012, at <http://www.generation-online.org/p/fp_foucault14.htm>.

² Patrik Schumacher, *The Autopoiesis of Architecture; Volume I: A New Framework for Architecture*, Chichester: Wiley, 2011, and *The Autopoiesis of Architecture; Volume II: A New Agenda for Architecture*, Chichester: Wiley, 2012.

³ Schumacher (2012), op. cit., p. 71.

⁴ Ibid., p. 451.

⁵ Ibid., p. 472.

⁶ Ibid., p. 444.

⁷ Ibid., p. 34.

⁸ Ibid., p. 37.

⁹ Ibid., p. 135.

¹⁰ Ibid., p. 136.

¹¹ Anthony Vidler, ‘Troubles in Theory: The state of the art from townscape to datascape’, public lecture at the Architectural Association, February 12, 2012.

¹² François Cusset, ‘Theory (Madness of)’, in *Radical Philosophy* 167, May/June, 2011, p. 25.

¹³ Ibid.

¹⁴ Ibid., p. 24.

- ¹⁵ K. Michael Hays (ed), *Architecture Theory since 1968*, Cambridge, MA and London, England: MIT Press, 2000, p. xi.
- ¹⁶ Benjamin Noys, *The Persistence of the Negative: A Critique of Contemporary Continental Theory*, Edinburgh: Edinburgh University Press, 2010, p. 51.
- ¹⁷ Gilles Deleuze, *Nietzsche and Philosophy*, trans. Hugh Tomlinson, London: Athlone, 1983. p. 186, cited in Noys, op. cit. p. 51.
- ¹⁸ Ibid., p. ix.
- ¹⁹ Jean Baudrillard, *Forget Foucault*, trans. Phil Beitchman, Lee Hildreth, and Mark Polizzotti, Los Angeles: Semiotext(e), 2007.
- ²⁰ Ibid., p. 40.
- ²¹ Schumacher (2011), op. cit., p. 6.
- ²² Ibid., p. 5.
- ²³ Ibid., p. 29.
- ²⁴ Alejandro Zaera-Polo, *The Sniper's Log: An Architectural Perspective of Generation-X*, Barcelona: Actar, 2012, p. 3.
- ²⁵ Ibid., pp. 3-4.
- ²⁶ Rem Koolhaas and Hans Ulrich Obrist, *Project Japan*, Köln: Taschen, 2012.
- ²⁷ Schumacher, (2012), op. cit., p. 458.
- ²⁸ Ibid.
- ²⁹ Zaera-Polo, (2012), op. cit., p. 4.
- ³⁰ Frédéric Vandenberghe, 'Deleuzian Capitalism', in *Philosophy and Social Criticism*, October 2008 vol. 34 no. 8, p. 879. A similar point is made by Slavoj Žižek, in the concluding chapter of his *Organs Without Bodies: On Deleuze and Consequences*, where he argues that there are 'effectively, features that justify calling Deleuze the ideologist of late capitalism.' London and New York: Routledge, 2004, p. 184.

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