AGENCY IN ARCHITECTURE:
REFRAMING CRITICALITY IN THEORY AND PRACTICE
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Agency in Architecture: Rethinking Criticality in Theory and Practice

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Why agency and criticality?

Architecture is, by its very nature, 'in the world', in both spatial and temporal terms: buildings are concrete and tangible elements of our everyday life-world. Yet, also architectural designs, urban plans, utopian schemes or paper architecture are 'in the world': they might not define the way things work, but they do change the way we think about how they work, or should work. It is this peculiar, myriad being-in-the-world-ness of architecture that raises fundamental questions about how architecture enacts, how it performs, and consequently, how it might 'act otherwise' or lead to other possible futures. This possibility underlies all questions regarding architecture's ability to be critical. Agency can be understood as the very vehicle of such *drive* or intention to create alternative worlds.

In the wake of the problematisation of modernism, the discipline of architecture has witnessed a marked turn in its understanding of this ability. The potential for architecture to be engaged with and thus critical of the existing, was no longer to be located in the affirmative realm of the architectural project, but shifted, with Tafuri - under the influence of various schools of Marxism and critical theory - to the realm of history and theory. Whether asserting architecture's socio-economic determination, or promoting its autonomy, the arguments were founded upon one central inclination: the preference for theory as the ultimate guide for criticality in architecture.

Over the past decade, this paradigm has been called into question. With the demise of 'big schools' of thought, the idea of a Theory that would directly guide architectural practice has lost its appeal. What has become known as the 'crisis of theory' can be brought back to the awareness that critical theory does *not* automatically lead to a form of critical practice. While in US architectural culture the rejection of theory as the preferred locus of criticality has been expressed most vocally by advocates of a so-called 'post-critical' or 'projective' approach,[1] there has actually been a more general emergence of proposals for an alternative to the reign of critical theory.[2] These range from neo-Marxist derivatives of the old critical theory now turning towards critical *practice*, to those re-claiming the agency of the architectural object, against the decades-long influence of the social sciences in architectural production.[3]

But more is going on. Concerns with criticality have hardly been limited to architecture alone. The now landmark conference on the future of theory and criticism, organised by the editors of *Critical Inquiry* in 2003,[4] mirrors architects' preoccupations in the wider arena of the humanities and social sciences. In domains from geography to cultural studies, renewed critiques of late capitalism have often been inspired by a search for new ways of thinking about criticality and political engagement - whether through theoretical 'third ways', or, more concretely, by imagining alternatives to 'global neoliberalism' as it manifests itself in the contemporary city.[5] Most importantly, as these disciplines outside of architecture have shown, the world outside has radically

challenged some of the foundations of architectural production. New conditions - from global economic restructuring to an emerging information society based on networks, simultaneity, multiplicity and nonlinearity - provoke us to question not only architecture's critical potential but also, the *univocality* of its agency in the world. Consequently, rather than casting architecture in terms of either societal relevance or aesthetic quality, current approaches tend to be guided less by what architecture *means* or *intends*, than by how it *works*, and what it *does*. Whether addressed as 'an object in flight',[6] or an 'imbroglio',[7] such approaches aim to unravel architecture in its spatial and temporal engagements, which have undoubtedly leaked out of the hermetic space of critical theory.

Hence the main question of this issue: if we think differently about architecture's being in the world today, what to do with theory and criticality? If, despite its current inability to deal with the complexity of architecture's 'earthly' entanglements, theory cannot be given up, then how to use it? A particularly fruitful concept for understanding architecture's multiple ways of engaging with the world is that of agency - a notion that in current debates is as fundamental as it remains implicit. The goal of this *Footprint* issue is thus to rethink criticality in architecture by harnessing the multifarious notion of agency. Theorising agency, and making it more explicit as a category of contemporary thinking in architecture, this issue aims to transcend the engrained dichotomies of the current debate - such as that of critical, progressive social change versus the allegedly uncritical performance of the architectural object - and to trace novel connections between such seemingly disparate concerns.

Explicating / Implicating agency

The question of agency in architecture seems to be a common one. So common, in fact, that it is hard to pin down exactly what is meant by it. Are we talking about the agency of the architect, and if so,

the agency to do what: to act in service of the client, or to guide society towards a better end? Or do we mean instead the power of the architectural project or the building itself, to convince its users about the virtuous lifestyle it hopes to instil, or its spectators about the beauty of its form? Or is it rather the role of the user, or of the built environment at large, in the make-up and transformation of society? Are we perhaps even referring to the world of concepts, of architectural theory, to have some concrete effects in the world beyond? Facing such a wide and seemingly disparate range of questions, how is it possible even to propose agency in architecture as a single topic of analysis?

Rather than constructing a 'big theory' of agency that would replace a 'big theory' of structure gone out of fashion, this issue proposes to work with the concept of agency by - as Margaret Crawford describes it in her contribution to this issue - cutting it up into workable bits that can then be reconfigured and stitched together. As such, we break up the question of agency into smaller sub-questions.

An obvious first question that would allow explicating the notion of agency is to ask: 'the agency of *what*?' Posited in the realm of architecture, this question brings up not only the by now familiar human / non-human division, but perhaps more fundamentally, the issues of multiplicity and relationality. In something as mundane as the process of constructing a building, how many agents do we take into account, and how do we conceive of the relation between them?

A second set of questions, which follows directly from the first, circles around the question of '*how?*' How do agents operate? How does an object exert agency? How do they, together, shape or affect a certain situation or condition? This is, more broadly, a question about means, modes and vehicles. In architecture, a key divide in this respect has been that between empiricism and idealism: what is the

relative importance of ideas versus action, thinking versus doing, theory versus practice?

The third question - undoubtedly the most crucial for this issue - is that of '*why*?' or 'to what effect?' This encompasses, more broadly, the notion of intentionality. If we acknowledge that the concept of agency is indebted not only to the figure of the goal-oriented actor, but more fundamentally, to 'subject-verb-object thinking',[8] then this question pertains literally to the goal or the object. The prevailing way of answering this question in the discipline of architecture has for a long time been to focus on meaning: architecture tended to be interpreted according to models and principles developed in the realm of theory and focused primarily on the intentions of the architect. The recent infatuation with performance in architecture can be understood as an attempt to move away resolutely from meaning as it was espoused in architecture theory, and to think instead through the Deleuzian concepts of *immanence* and *affect*. What is most striking is how these recent attempts are accompanied by the triumph of 'star architecture', and thus entail, despite their lofty ambitions, a return - in the most confining of guises - to authorship and intentionality. A more productive endeavour would thus be to expand the notion of intentionality in architecture, without reverting to the conventions of architectural hermeneutics, but also, without trying to do away with the notion of meaning altogether.

How to go about this? Network theories have suggested one possible answer, which is to trace the *real* in the ongoing construction of networks of agents in the making of architecture. Yet, such a strategy fails to take into account the imaginary and the symbolic in shaping a particular constellation of agents. Without falling into the trap of the idealism of a zeitgeist that would determine historical reality, we need to complement our analysis of the multiplicity of the real - of emergence and invention - with a depth: a dimension that would provide agency with

a sense of direction. Perhaps one possible way is to conceive of agency in terms of *activity*, and of structure in terms of *situation*. This could also lead to a better understanding of 'un-intentionality', a crucial idea when thinking about the multiplicity of actions that makes up the city. Many of these suggestions have emerged out of our conversation with Scott Lash, Antoine Picon and Margaret Crawford, which has served as the theoretical exploration of our overall editorial concerns, and in this respect adopts a particular position in this issue.

The contributions to this issue have been assembled with the idea that focusing expressly on agency allows one to transcend, in diverse ways, the constraining dichotomies of current debates about criticality mentioned above. We believe that each article in this issue throws new light on one or more of our questions outlined above.

By focusing on material contingency, Pep Avilés has carefully disentangled the multiplicity of historical agents shaping postwar Italian neorealist architecture. Charting the historical coalescence of economic autarky with aesthetic austerity in 1930s Italy, his article transcends the teleological idealism that tends to protrude some analyses of architectural style, while at the same time avoiding the trap of material determinism. Avilés has conceived of autarky not just as an agent in itself, but as a complex including political-ideological, as well as economic and material agents.

With his analysis of Venturi and Scott Brown's project for South Street in Philadelphia, Sebastian Haumann places architectural aesthetics on a par with the political agency pursued by so many architects and planners of that period. By emphasising this project over *Learning from Las Vegas*, Haumann confronts architecture theory with its own limitations. With the new perspective of urban history he brings to it, Haumann is able to question the unitary nature of agency: he demonstrates how

architecture is shaped by the duality of the architect as a societal agent - in between architectural culture, discourse, and theory on the one side, and political engagement on the other.

Rolf Hughes argues that, because transdisciplinarity is pertinent to contemporary practice, the agency of architecture needs to be seen as located not in its disciplinary identity, but rather in novel approaches to design research, theory and practice that are shaped by what he calls 'transverse epistemologies'. Such approaches - based on a concern with relationality - have yet to be taken on seriously by architecture theory. Taking 'experience design' as the primary example, the paper sketches the outlines of such a novel form of practice, which allows combining conceptual creativity and innovation with critical thinking and societal responsibility.

Robert Cowherd brings in the sociological notion of reflexive modernisation - developed by Ulrich Beck, Anthony Giddens and Scott Lash - as a way out of what he sees as the false dichotomy between theory and engagement in the so-called post-criticality debate. He argues that a 'reflexive turn' in architecture would not necessarily entail the vilification of theory, nor would it prolong the current infatuation with innovation; it could instead lead to a renewed capability to be critical. Rather than locating criticality in either theory or practice, Cowherd thus makes a case for the indispensable *both/and* of theory and practice.

Gevork Hartoonian argues that the theme of agency in architecture is tectonic in nature. Departing from New Brutalism's critique of International Style modernism, his paper proposes tectonics as the legitimate base for criticality in contemporary architectural practice - being inevitably faced with what he calls the image-laden culture of late capitalism. Reading two projects, Zaha Hadid's Phaeno Center and OMA's Casa da Musica, in this light, Hartoonian recognises in the tectonic an attempt to 'reach that

which is architectural' while facilitating 'architecture's entanglement with the constructive structures of capitalism'.

For Tatjana Schneider and Jeremy Till, the notion of agency in architecture is directly linked to social and political power. Against the internalisation of architectural discourse, they posit the notion of *spatial agency* in order to question the architect as neutral expert, and instead to emphasise the architect's responsibility in the politics and process of building. By showcasing a number of alternative empowering practices, they understand criticality primarily as a matter of practice, yet inevitably guided by theory. Ultimately, they propose a more careful use of theory, based directly on the concrete (political) conditions of architectural practice.

Two of the three review articles included in this issue demonstrate the ideological rifts of the current debate, despite their communality in defending practice as the preferred locus for criticality. The first, a report by 'The Agency' group of the 2008 AHRA conference entitled 'AGENCY', proposes to include in the notion of agency not only architecture theory or practice, but also teaching, pedagogy, social activism, and the organisation of conferences like this particular one itself. With the second report, starting from the 2006 conference 'The Projective Landscape', Lara Schrijver invites us to consider 'projective' architecture not as an argument against theory, but rather as a potential for criticality through practice. She argues for a return to the disciplinary core of architecture, by valorising the craft and expertise of the architect. In a third review article, Tahl Kaminer explores, through a meticulous reading of Beatriz Colomina's *Privacy and Publicity*, a recent trend in architectural history, namely the shift away from understanding architecture as part of the concrete base of society, towards casting it as a cultural product in the realm of representation. While he understands this shift as part of a larger 'retreat from social concern', Kaminer questions its

outright denial of architecture's agency in society.

Agenda, by way of conclusion

The contributions to this issue allow us to rethink some of the basic assumptions and polarities of the debate around criticality in architecture. By explicating the notion of agency in architecture, they provide new insight in how criticality both informs and is shaped by the relation between theory and practice, between architecture's disciplinarity and its societal embedding, and between the individual, the social, and the architectural object. Yet, does this fundamentally challenge the way we understand criticality? If one conclusion is to be drawn from the diversity of threads in this issue, it is that agency, and thus criticality, in their very essence, still entail the question of 'what can we hope for?', or the creation or imagination of alternative worlds. In other words, that agency and criticality still imply some form of *transcendence*, above the here and now of the real. And, that agency, no matter how multifarious or intricately entangled, is what continues to give architecture its critical potential.

A better understanding of agency, so we believe, will help us steer away not only from the outright denunciation of (critical) theory, but also from dismissing the proposals that have recently emerged - the 'projective', calls for new political engagement, or the importation of Actor-Network-Theory - no matter how contradictory or premature they may seem.

Rather than doing away with it, the focus on agency in architecture allows us to transcend the notion of criticality as an *a priori* - as if architecture is either critical or not; or as if *these* practices are *entirely* critical, and *those* are not *at all* - or as something that can be evaluated, tested or realised only by following the principles developed from an external viewpoint. Instead, we can now approach criticality as a *question*, and an agenda for further research. Such an agenda would continue to be

challenged by both theory *and* practice, by both earthly accounts speaking through the real *and* by hopeful accounts for things yet to come.

Notes

1. See: Robert Somol and Sarah Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism', in *Perspecta*, 33 (theme: Mining Autonomy), ed. by Michael Osman, et al. (New Haven: Journal of the Yale School of Architecture, 2002), pp. 72-77; Michael Speaks, 'After Theory', *Architectural Record* (June 2005), pp. 72-75; George Baird, '"Criticality" and Its Discontents', *Harvard Design Magazine*, 21 (Fall 2004/ Winter 2005), pp. 16-21; Reinhold Martin, 'Critical of What? Toward a Utopian Realism', *Harvard Design Magazine*, 22 (Spring/Summer 2005), pp. 1-5. This debate found reception in Europe with the 2006 conference 'The Projective Landscape' organised by Stylos at TU Delft.

2. See: Jane Rendell, Jonathan Hill, Murray Fraser, and Mark Dorrian (eds.), *Critical Architecture* (London: Routledge, 2007); Véronique Patteeuw, Joachim Declerk and Filip Geers (eds.), *Oase*, 75 (theme: 25 Years of Critical Reflection on Architecture, 2008); http://www.criticat.fr [accessed on 15 March 2009]; http://www.field-journal.org [accessed on 15 March 2009].

3. For instance: the AHRA (Architectural Humanities Research Association) initiative established in 2003 and its first conference entitled 'Critical Architecture' (2004), and its most recent one entitled 'Agency' (2008); the Architecture Biennale Rotterdam on Power; Conference 'Architecture of the New World Order' (Bauhaus, Weimar 2009). Recent initiatives to revive the architectural project of autonomy resonate with: Pier Vittorio Aureli, *The Project of Autonomy* (New York: Princeton Architectural Press, 2008).

4. See: *Critical Inquiry*, 30, 2 (2003); Emily Eakin, 'The Latest Theory Is That Theory Doesn't Matter', *New York Times* (19 April 2003).

5. For instance: Homi Bhabha, *The Location of Culture* (London: Routledge, 1994); Arjun Appadurai, *Modernity*

at large: Cultural Dimensions of Globalization (Minneapolis, Minn.: University of Minnesota Press, 1996); Edward Soja, *Thirdspace: Journeys to Los Angeles and Other Real and Imagined Spaces* (Cambridge, Mass.: Blackwell, 1996); David Harvey, *Spaces of Hope* (Los Angeles, Cal.: California University Press, 2000); Neil Brenner and Nik Theodore, *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe* (London: Blackwell Publishing, 2002). Frank Moelaert, Arantxa Rodriguez, and Erik Swyngedouw (eds.), *The globalized City: Economic Restructuring and Social Polarization in European Cities* (Oxford: Oxford University Press, 2003).

6. Bruno Latour and Albena Yaneva, 'Give me a Gun and I will Make All Buildings Move: An ANT's View of Architecture', in *Explorations in Architecture: Teaching, Design, Research*, ed. by Reto Geiser (Basel: Birkhäuser, 2008), pp. 80-89.

7. Imbroglio was used as the name for the website (www. imbroglio.be) related to the 'The loyalties of knowledge' research project, funded by the Belgian Science Policy, and involving amongst others Serge Gutwirth, Isabelle Stengers, and Bruno Latour. It is dedicated to the study of imbroglios of knowledge, institutions, actants and things.

8. Suggested by Scott Lash in this issue, see the article 'Agency and Architecture: How to Be Critical?'

Agency and Architecture: How to Be Critical?

Scott Lash and Antoine Picon, in conversation with Kenny Cupers and Isabelle Doucet.
Comments by Margaret Crawford.

Agency is a notion that brings together, in undoubtedly ambiguous ways, a variety of concerns that currently echo in diverse segments of the architectural debate. Amongst such concerns is that of the role of the architect to effect social or political change, a preoccupation with the performative power of the architectural object, and perhaps essentially, the hope and despair about the efficacy of theory in the world at large. We set out to elicit a conversation addressing the multifarious notion of agency in the broadest possible way, while at the same time locating novel points of intersection between concerns too often perceived as disconnected.

Interrogating agency theoretically leads first of all to the question of its binary coupling with structure, perhaps one of the most central concepts in the understanding of modern society. Secondly, because agency is intimately linked to the idea of a possible 'acting otherwise', it assumes intentionality and criticality, both of which have resonated strongly in the architectural debate. A third fundamental issue, which will allow a better understanding of agency within the specific context of architecture, is that of the architectural object and its complex relation to the individual and the social.

The following text has been assembled from separate interviews with three prominent scholars who have, from different fields, made particular contributions to these issues. Antoine Picon, historian of architecture and technology at Harvard University, interviewed in Paris on 3 December 2008, is widely

recognised for his contributions to the historical formation of the architectural discipline, the role of utopia in architecture, and the impact of digital culture. Scott Lash, professor of sociology and cultural studies at Goldsmiths College, has challenged dominant understandings of agency and structure through his influential writings on the notion of reflexivity, and the question of critique and cultural production in contemporary information society. The interview with Scott Lash took place in London on 23 January 2009. Margaret Crawford, professor in architecture and urban studies at Harvard University, is widely known for her work on 'the everyday' in the built environment, and its political implications within and beyond architectural and urban practice. She has responded to our questions via email in December 2008.

Agency versus structure: how to position architecture?

[London, 23 January 2009] Kenny Cupers and Isabelle Doucet: Cast in opposition to the notion of structure, agency has been one of the central questions in the humanities and social sciences. Influenced by various strands of Marxism, agency also tended to be associated with the intention to effect social change against existing societal structures. The structure/agency binary has in certain ways organised large parts of the theoretical landscape, assembling proponents on either side - Gabriel Tarde and Emile Durkheim, for instance - or proposals for a middle ground - like those of Bourdieu or Giddens. Nevertheless, more recent work on the

'non-linear' or horizontal workings of power, reflexivity, the powers of invention, or flows and networks calls this dichotomy fundamentally into question. Is the notion of agency then still meaningful, once we disengage it from its coupling with structure, and shed it of its 'progressive' aura?

Scott Lash: I have a very strong position about this at the moment, and it comes from my research in China of the past three years. In terms of agency, I think there are a lot of problems with Western notions of agency, and Western notions of the individual. I am quite influenced by François Jullien in this matter. Agency presumes a notion of the goal-directed actor. At least for a sociologist like Giddens or myself, agency comes from the classic notions developed by Weber and Parsons, and presumes two kinds of actions: ends-oriented and means-oriented ones. Or, in other words, instrumental and substantively rational ones. Compare it to Kant's first and second critiques. Both presume that the agent sets up a model that he or she will follow. Goal-oriented stuff basically. It presumes a disembodied, rational kind of model.

Against this, I would like to suggest the notion of activity. Activity is much less goal-directed, it is much more situational. It's like situationism in a way: you put yourself down anywhere, and see where it takes you. In China, it's like that: you analyse the situation, and see what arises from it. This also involves abstract thinking, but of a different kind than agency-type thinking. Agency-type thinking presumes a subject-verb-object kind of thinking: this is the object, and this is my plan. It's almost a kind of scientific model you follow.

Isabelle Doucet: When you say abstract but in a different form, do you mean more from the inside rather than the outside?

Scott Lash: I used to think that Chinese thought wasn't abstract. That it was completely embed-ded in the material, immanent. It's not dualist in the sense that Western thought is. Even if we want to talk about immanence in the West, it's an immanence *after* the dualism. Whether it's Latour, Deleuze or anybody. But the Chinese never had the dualism. Chinese thought has immanence but it also involves abstraction. It's just a different kind of abstraction, a more pictorial one perhaps rather than our phonetic, alphabetic one. We thought, with the Greeks, in terms of elements, fire, water, air, earth. The Chinese had a different kind of thinking - the *jin* and the *jang* - hence another kind of abstraction.

But the big thing for me, in terms of action, is that for us it involves a subject-verb-object type of thing - you set your goal, and it's very direct. In China, everything is very *in*direct, and comes out of the situation. A lot of sentences don't have a verb nor a subject. There is not an 'I'. People place themselves, situate themselves. So things are very spatial. Spatial, temporal, relational. But not subject-verb-object. So there is abstract thought, but it's not dualist and not subject-verb-object. It's not classical agency at all. Is it classical structure? I don't know.

Kenny Cupers: So if structure has lost its explanatory power, what do we do then with the notion of agency? If we no longer have this fundamental binary, everything that we used to be able to get at through the notion of agency - social or political relevance, the concept of action or social change, and even intentionality itself - no longer coheres, does it?

Scott Lash: I think also phenomenological intentionality presumes agency, not just instrumental classical theory. Giddens is following classical Parsons/Weber, rather than the kind of Husserlian intentionality. But I think even *that* is a problem in a sense. I'm so much on the border of all this, I'm going to be so influenced by China, but on the other hand I'm always a Westerner. But structure... I don't know.

Kenny Cupers: But does structure become situation then?

Scott Lash: Well, you've said it.... Yes, maybe structure needs to be rethought in certain ways. I do think that we have agency in the West. Okay, not exactly, but pretty close. And I do think we have structure in certain ways. Structure is an interesting question, you know; what is structure exactly? I don't want to go back to Levi-Strauss or Althusser, but... I think maybe you're right, if we're going to try to think about it from a Chinese point of view, the notion of structure would have to change. The Western contract - rights and obligations - is very well-defined. In China, it's not very well-defined, and it's much more long-term. And it's continually negotiated. So in a funny way this kind of relation takes on a structure itself. And I think you're right, it might be a bit more like a situation, but it's also something that almost has its own temporality, rather than the classical, timeless kind of structure *à la* Levi-Strauss.

Kenny Cupers: If you look back from China to the West, how do you think we can think differently about agency here?

Scott Lash: Something more situational first of all. There is something like transaction cost theory in the West, which means transactions finish and then what are the costs. But what if you never stop transacting? Think of a business or economic relation as a continuing transaction. The other person I've been using a lot is the anthropologist Marilyn Strathern: in *The Gender and the Gift* she collapses the gift and the market, the commodity and the gifts you give - something that is going on in China. I think the very anonymity of our monetary system, and the chopping up of loans into bits is part of the problem of Western capitalism. And if we had something that was more relational, more long-term, more transactional, then we would not be in the mess that we're in now. And an oppositional politics can work like

that as well I think, like the economy. I'm really into this in major ways, as you can hear.

[Paris, 3 December 2009] Kenny Cupers and Isabelle Doucet: While we understand the notion of agency first of all in opposition to that of structure - in humanities and social science debates - we are interested in understanding its particular importance in architecture. How have architects understood agency? The recent enthusiasm about the notion of agency in architecture debates seems to us to be shaped by a fundamental conflation: agency is used simultaneously as a concept to interrogate the social concernedness of the profession - the idea that architects can or should effect social change - and the performative role of the architectural object - its efficacy with regards to clients' or users' expectations. What is for you the specificity of the notion of agency for architecture?

Antoine Picon: First of all, by agency, do you mean effectiveness, the fact that theoretical reflection has some impact on practice?

Kenny Cupers: Yes, as well as the more oppositional definition of agency as the individual's capacity for intentional action against what is perceived as hegemonic, or the structural constraints of society.

Antoine Picon: That for me is a very Anglo-American definition. The French are not that obsessed with this definition, because we don't believe that much in individuals. Even in Lefebvre, as far as I remember, it's about the *structure* of everyday life, so it remains very structural. In any case, I don't think the neo-Marxist position, of architecture as a critical agency, is a very general feature in the architectural debate at the moment. Performativity, or architecture doing what it does, seems to be a more general interest. The real question for me, however, is how to construct a political and social relevance for architecture today - relevance more than perhaps 'meaning' in the traditional sense. We

know the traps to avoid. One of them is the belief that architecture is going to change the world, in a kind of mechanistic way. We now know it is not a question of multiplying social housing, although it cannot hurt, but it's not enough and it's not going to happen everywhere in the world. We know that architecture is always a partial project, an unfinished project, by definition incomplete. So how exactly does it have political and social relevance? That is the question. You could even say that architecture is always a failure; it never accomplishes what it intends. So how can it still be socially and politically relevant today? Although there are optimistic dreams of a return to a kind of neo-cybernetic modernity, criticality most of the time implies that we know we cannot go back to the ideal city, or the ideal regional plan. Diametrically opposed then, is to fully accept globalisation, to do only what the client asks, and to be a puppet of market forces. These are the two symmetric pitfalls. You can position yourself as a bit more Marxist, or a bit more 'performalist' - more inspired by neoliberalism. I think this is how the debate is framed today.

Isabelle Doucet: What is interesting here is that those are also precisely the two camps where the notion of agency is harnessed today. What does this mean for our understanding of agency in architecture?

Antoine Picon: This is the argument of Luc Boltanski and Eve Chiapello in *Le nouvel esprit du capitalisme*, namely that the new spirit of capitalism is heavily inspired by alternative movements and ideologies. Capitalism today is all about emergence, creativity, indetermination, and so on, which is exactly the vocabulary of neo-alternative movements. This is the fundamental ambiguity of today. It reminds me of an interesting comment I heard recently, namely that the left in the twentieth century was generally in agreement about both the main goals, and the fundamentals of the situation. Class for instance: social democrats and communists alike, all agreed that the working class was the true engine of history, and that the big goal was the social state. The strategy to get there, then, was what people disagreed about. I think today we are in the opposite situation: we have the same strategies - and this is why capitalism resembles alternative movements, they both use networks and so on - but the objectives are very discrepant. I think this is different for architecture, because it has uncertainties at every level. While there seems to be a relative consensus amongst architects about what reality is - through notions like emergence and so on - both strategy and objective remain totally unclear. That's the difference with political movements, where the reality and goals are unclear but the strategies are known. This is probably where the specificity of architecture lies *vis-à-vis* politics at large.

[Email correspondence December 2009] Margaret Crawford: The dualism of agency versus structure certainly needs to be questioned but I don't believe that either the 'non-linear' flows and networks approach or the 'third way' deals with this issue in a satisfactory way. The important thing is to find an opening for politics. It is clear that the period of extreme critiques (we might call these Xcritiques) in which criticality developed its own rules and momentum, is over. Xcritique virtually eliminated all political possibilities. Theoreticians attacked every imaginable topic with such critical ferocity that, after they were done, only a pile of ashes remained. Instead, we need to acknowledge that dualisms, whatever their weaknesses, will not disappear. Epistemologically we can't do without them. So we need to deal with them more effectively. Instead of opposing big chunks of theory (like structure and agency), we need to take some scissors, cut them into smaller pieces and then reconfigure the pieces. Examining specific issues, precisely locating them in their contexts, then investigating the ways these dualities interact, overlap and intermingle as well as contradict each other. This should produce a more nuanced and refined use of theory.

Criticality: what to do with theory and practice?

[Paris, 3 December 2009] Kenny Cupers and Isabelle Doucet: The notion of agency implies not only intentionality and free will, but also the possibility of criticality. In architecture, this possibility - fostered by critical theory and continuing to haunt contemporary practice, whether in the guise of 'critical practice' or 'the projective' - assumes an often ambiguous relation between theory and practice. How and where can we see criticality at work, as part of theoretical reflection, or in the domain of practice? In other words, what is the location of criticality?

Antoine Picon: Criticality has perhaps been over-rated in architecture. It is a notion that comes from very specific contexts - primarily Italy with Tafuri - and has been imported in the United States in very peculiar ways. Architecture is primarily a practice, not necessarily a discipline. It corresponds to a series of disciplines, and a practice is not all the time critical. It's actually most of the time acritical. Likewise theory in architecture has no real critical approach. Most of the time critics do not have a real autonomy *vis-à-vis* designers - how would a critic survive if he would constantly oppose them? The traditional role of theories in art, except in very specific moments, is actually to confirm that they are indeed guidelines or principles in the practice of an art. This is exactly the opposite of criticality. It is a very peculiar turn of mind in fact, to consider that the primary concern of theory is to be critical. I see history as having a more critical role, because it is a deconstruction of the conditions of the past and an exploration of how things change, how the present is constantly jeopardised by historical change. I would say the 'normal' state would be for theory to be acritical and for history to be critical.

Of course there are specific moments in which art, as a practice, is concerned about its foundation - for example when it is undergoing important changes. It is in such moments that a need for criticality emerges. Critical moments occur when history and theory interconnect. This is how I understand Tafuri's notion of criticality. The critical project, and critical theory, basically took off with the end of modernism. When modernism got criticised and gradually abandoned, it was a problem for both theory and history, and led to a rewriting of some of its basic presuppositions.

Isabelle Doucet: Do you think we might be facing a similar situation today?

Antoine Picon: I think we might very well be heading towards a similar movement today, a similar meeting of theory and history. Digital culture for example, clearly challenges several critical assumptions of architecture. Tectonics, but also scale, is seriously challenged by digital culture. Theorists and critics used to take the relation between architecture and scale for granted. Today, however, architecture's natural relation to scale is accepted as socially constructed. In a similar way, the so-called return of ornaments calls for a re-examination of what is traditionally understood as ornament. In short, digital culture challenges some of the foundations of practice, and we are confronted with a new critical stance. In this situation we need history to make sense again of architecture's own tradition. So, yes, I think we might very well be at a new convergence between history and theory.

Isabelle Doucet: What you say seems very much in opposition to claims by architects like Somol and Whiting, and others advocating a so-called 'post-critical' approach.

Antoine Picon: I think that the so-called 'post-criticality' as promoted by Whiting and others is actually the normal condition for theory, namely to be acritical. What they theorise as a shift is actually the normal development: as soon as paradigms get accepted, they are simply no longer perceived as critical or innovating, and are in that sense per defi-

nition post-critical.

Kenny Cupers: What you call the 'normal state' prompts for me the question of what the distinction is then between art and architecture in this respect. For example, if we consider the idea of the avant-garde - whether we understand its task as to revolutionise art for itself, or to dissolve its boundaries with everyday life - what is at stake for architecture is different than for artistic practice, say painting for instance.

Antoine Picon: What if we would actually let go of this idea of the avant-garde? One of the major differences between art and architecture is that art, to be political, needs to take a critical stance - or reside in the avant-garde pathos. Architecture, to be political, does not necessarily need to be avant-garde. It needs to do what it does. Architecture is deeply 'performative' in its political stance. So I think architecture becomes political at moments of suspension of its clear political meaning. Tafuri's criticality, for example, came in when all the assumptions regarding the participation of architecture in the modern project were challenged, when architecture no longer had a clear political position. Architecture is always both about the reproduction of society as is, and about proposing an alternative future: architecture is always between ideology and utopia. Today we are faced with a renewed question of criticality, because architecture is in a real need to redefine its political agency and to reposition itself, in terms of sustainability for instance, because we just simply cannot go on designing Prada shops. I think what we're looking for is a new ideology, a new standard regime or belief about architecture's agency in the world at large. This means we also need to rethink architecture's relationship with utopia.

Kenny Cupers: What then would be the repercussions and potentials for doing research in architecture?

Antoine Picon: Two things. First of all, at the beginning of a new ideological construction, the big dilemma for historians is to use the ideology they're embedded in, while at the same time being aware that it will eventually change. More than practitioners, historians therefore need to be self-critical and avoid getting too embedded. Secondly, if we take the understanding of field, radiance, and so on seriously, mapping becomes crucial. Agency is to be first understood through new innovative ways of mapping. We need to ask again what the categories of mapping are. This implies that the question of representation - in the almost artistic sense - becomes crucial.

Isabelle Doucet: What do you mean concretely by mapping in this context? How does it relate to the metaphorical use of maps and diagrams in architecture at the moment?

Antoine Picon: There is a huge question for example about how to map networks. And mapping is also about how you understand theory, for instance in network theory, the degree of connectivity of a network, how you visualise that, and so on. The reason why I am sceptical about diagrams is that they are simplified maps, and how can we simplify maps that we don't have yet at our disposal? I propose mapping primarily as a project for history and theory. Part of the function of architecture is to displace things, and metaphor is one way to do so. That's why practitioners use maps by displacing it in the metaphoric sense. And that's why most of the diagrams architects produce are too normative and simplifying.

Isabelle Doucet: What are then the potentials for a critical practice based on shortening the distance between theory and practice?

Antoine Picon: Compared to architectural critics and theorists who attempt to follow as close as possible in the footsteps of practitioners, I have,

probably because I am a historian, different obsessions. I rather ask myself: what is the picture, what is the general configuration of the ballet, what are the dancers doing?

Kenny Cupers: That seems to imply a fundamental belief in a form of distance to practice.

Antoine Picon: I think, ultimately, historians are fascinated by two things: what people have in the head, and how they behave. And then the possible relations between the two. An architectural historian is not indifferent to practical questions: he is fascinated by practice yet he is not a practitioner.

Kenny Cupers: What do you think about the argument that, because of the speed of contemporary culture, it is necessary to follow the object closely, and thus to collapse the distance of the researcher with the object of research?

Antoine Picon: That to me is a little bit to reinvent the wheel. In the humanities and social sciences there is always a conflict between a deep, emphatic understanding of the object, and the need to take a distance from it. This is the old dilemma of the ethnologist and of all the modern social sciences more generally: you're supposed to be both inside and outside of the thing you are investigating. For example, if you want to research the way new modelling software is changing architecture, you need an understanding of that software. In other words, I would argue for participation to a certain extent.

Isabelle Doucet: If criticality is to be located mainly in the realm of history, is the idea of a self-reflexive or critical architecture practice then a contradiction in terms?

Antoine Picon: No, I think, as a practitioner, you have to be critical. Yet, only up to a certain point. Architects have always been tempted to erase

academics, and to be both the practitioners and the academics. But it has never really worked. It's true that with the digital, the producer can be the consumer - the internet was the first product designed solely by its users - so there are short circuits. But one should not exaggerate. Architects ultimately want to build. This does not mean architects cannot be true academics at some point in their lives or make significant contributions to the debate (take Koolhaas for example). Conversely, critics like Sanford Kwinter make significant contributions to the intellectual debate by being very close to the world of design. But I don't think you can forever maintain the distinction.

[Email correspondence December 2009] Margaret Crawford: The problem with the narrative of 'criticality' followed by 'post-criticality' is that, in architecture, criticality was never actually critical. Its concerns were so distant from the real economic, political and social issues that the profession and architectural production faced, that it ended up serving as an excuse to disengage and pursue a purely formalist practice. Thus, 'post-criticality', by simply inverting an already fictional 'criticality', produced an equally questionable acceptance of the status quo. Instead, I would propose a more flexible criticality which addresses specific questions and can be selectively critical about things that really matter. This could provide an opening for a more politically engaged approach to architecture, grounded in the complex realities of contemporary life.

[London, 23 January 2009] Kenny Cupers and Isabelle Doucet: Dissociated yet engaged, architectural theory seems to take on the nature of contemporary cultural critique: it is neither launched from a transcendental, privileged position, nor fully immersed in the velocity of contemporary production. If we agree to 'follow the object' as you suggest, and accept the ambiguous nature of this relation, can criticality without transcendence still be critical? Can we conceive of forms for critique that do not

resort to the notion of distance, and that thus entail a different relation between theory and practice?

Scott Lash: Doing research in China makes you return to who we are, in the West. We are Greek, maybe Christian Greek, maybe Jew Greek... the Greekness, it's science, it's logic, it's subject-verb-object thinking, it's the grammar, it's ontology. But what's happening in China is not ontology; it's something else. Basically, critical thinking comes from the Jew-Greek and it is not ontological. It always includes the messianic, the utopian, that is, a 'to come'. When I say critical theory, I mean Benjamin, some of Derrida, Agamben, or Adorno. Heidegger is clearly ontology: being is always already there, as opposed to the 'to come' of Agamben for instance ['*The Coming Community*']. Deleuze is not a 'to come' at all, he's more like Heidegger in that sense. The critical goes back to Kant of course. When he explains enlightenment, it means asking 'what can I know?', 'what should I do?', and 'what can I hope for?'. The 'what can I know?' is the first critique, it is knowledge; 'what should I do?' is the second critique, it's ethics. But that's not yet critique! Critique is in the third one, the 'what can I hope for?', which entails the utopian and the messianic: that's where critique is. And it works *out of* the ontological. Ontological difference is the difference between Being and beings. But this is not at all what Derrida is doing: when he talks about difference, he starts from ontology, but it goes to the border between what's ontological and what is not. And that is why I think Derrida, Levinas, and others talk about infinity. Heidegger's ontology by contrast is finite: finite beings up against death. I think that's where critique is most interesting to me.

In *Global Culture Industry* we focused on the real, the let-it-happen, while the symbolic was only there in fragments. What I would now probably say is that, apart from the real, the symbolic is important, and so is the imaginary. *All three* are important. We can't help but symbolise. I'm think-

ing here about Durkheim and Benjamin. In his piece on 'the languages of man', Benjamin talks about the distinction between thing- or animal-language, and man-language. While the first two work through images and mimesis, man-language is always symbolic. Durkheim, in 'Elementary Forms of Religious Life', also makes the distinction between symbols and images. Even animals can have images, and his critique of empiricism is that it works through an image-logic, a *tabula rasa* and then images. And I am convinced we are irreducibly symbolic creatures. There is the symbolic and it is important. But today, it has become fragmented, as I said in *Another Modernity* and other people have done too, using Benjamin. What I now think we need to work for, is a culture sector in which, in a very imaginative way, the cultural, the symbolic and the real are stitched together. We can no longer think of the symbolic, real, and imaginary as being ordered on different levels: they are on the same level; they can be manipulated, and are malleable. All three are equally important. Whether you're an architect, artist, thinker, new media activist, or political activist, you're always stitching all three together in very different ways.

Isabelle Doucet: So how could we rethink criticality in this respect? And what kind of relation between theory and practice would it imply?

Scott Lash: I'm taking on critical theory much more than I was. *Critique of Information* was in a lot of ways anti-critical theory, or at least, it was defining critical theory in a way nobody would accept it as critical theory. The same counts for *Global Culture Industry*, which was still completely Deleuzian.

Isabelle Doucet: Global Culture Industry was indeed very much focused on the real; it was very descriptive. So if we were to rethink criticality it wouldn't be through either the real, or the symbolic, or the imaginary, but through all three at the same time?

Scott Lash: Actually, it would be an inventive re-stitching together of all three, and also of the fragments of all three, fragments of something that was much more integral in the past. It would suggest not just a celebration of the real against the other two, but also the importance of the symbolic, and the imaginary. To have a politics, we need to work with all these fragments. We need a little more pattern, a little less noise.

Isabelle Doucet: And also... a more critical approach perhaps?

Scott Lash: Yeah, and more critical too. The credit crunch has discredited not only the Anglo-American model and consumer culture, but also the positive fetishisation of invention. The trick is how to lose some of the consumer culture, and keep all the invention. I think what's going on in China, and what also preoccupies the West, is the bringing together of relationality and invention - in some kind of critical mode. Even if I don't particularly like capitalism and commodification, it is just true that markets are and always have been a space, not just of commodity exchange, but of invention. *Global Culture Industry* was about nothing but invention. But then I saw, through China, a much more relational side. Capitalism and invention, when they get out of hand, become destructive, for example of the environment. I don't want to lose the invention bit, but it's not the whole story. We are programmed into invention but also into commodification. The question I am addressing right now is how we can keep all the stuff that we need, while at the same time changing.

The object and the individual: what are the intentions of architecture?
[Paris, 3 December 2009] Kenny Cupers and Isabelle Doucet: Recent work in the social studies of science has taken the analysis of agency to include objects and 'non-human actors'. In architecture however, the idea that agency can be situated beyond human

intentionality, in the interactions of people and (architectural) objects, seems hardly revolutionary at first sight. Does the focus on objects, images, and processes in architecture - instead of actors, classes or causalities as in many social sciences and humanities disciplines - entail a fundamental difference in the way agency is understood?

Antoine Picon: I would like to respond to this question by way of the changing importance of the individual. Part of the difficulty we have today is what to make of a more and more individualised society, as described by many scholars, for instance François Ascher in the French context. Traditionally, political agency was made synonymous with class structure. The question was how to position architecture in the class structure debate. Even if you were a right-wing person wanting to re-institute community, class remained the starting point. We are very ill at ease today with a society where inequality, and thus also class inequality, has all but disappeared, but at the same time the most significant experiences in life are based on the individual. In other words, what the political agency for architecture is in an age of Facebook remains very unclear. What is utopia in an age of individuality? Utopia used to be all about the collective, so what kind of collective can we build in an age for individuals, and of individual destiny? The only progress today is the fulfilment of individual destiny, in some ways, but I think we have to reinvent the engine of a global destiny. Right now we live in an age of suspension or shock, in an eternal present that is threatened by apocalypse, by an abrupt ending - be it global warming or global terrorism, always something inevitably global. But I don't think this will last, I see it as a kind of transitional phase.

Kenny Cupers: If we take this condition of individuality as a basis, then what does this mean for our understanding of intentionality? Not only as it pertains to the production of architecture, but also because it necessarily entails the question of

un-intentionality - the unintended consequences of any action - which brings us to the question of the contemporary city.

Antoine Picon: Well, my own take on this comes from my work on the notion of the cyborg, or what I call disrupted identity. We are no longer trapped within our own bodies, we live in the space of mediation and we fully inhabit our various mediations. This is a model you can see at different levels, from molecules and genes to the universe. In molecular biology for instance, recent research indicates that genes do not follow an assembly line model, but need to be thought of as a society of bits and proteins that function in a complex network. This is also how we can conceive of society: the individual is no longer a dot, but a network. Even the human body can be seen as a society of modules that interact with each other. So the big question for architecture then is: how do we build for a society of networks, a society of networked individuals? I think this is where social meaning can be reconstructed. And this has direct implications for the human /non-human divide. Latour is continually fascinated by the fact that we are constituting hybrids of human and non-human. But for me, the most important thing is to begin from the fact that we are always truly and intimately spatialised. This is why Sloterdijk is really interesting, especially in the first volume of *Spheres*, where he says about two interacting faces, that the spirit or the mind is actually in between, and not in the mind or head of the individuals. This suspends for me the question of whether it is human or non-human. I think we are still very Cartesian in our reluctance to envisage that we fully inhabit space as human beings - and today's space is a very peculiar one, a networked space full of artefacts. One of my hypotheses at the moment is that 'affect' is something that characterises not what happens in the head, but what happens through this kind of spatialised identity - which is why 'affect' is linking object and subject and in some ways transcending the distinction between them.

Kenny Cupers: How would this shift in the way we think about materiality and the individual be able to help us to understand the social in architecture?

Antoine Picon: This is my intellectual obsession at the moment: to understand how we feel things differently, experience differently. This transcends the idea of the cyborg, because I think the entire *sensorium* is redefined as a result of this new conception of the subject. Digital culture for me was always the symptom of something else, rather than a sort of magical trigger. I am not a technological determinist. One of the reasons for the success of Deleuze is that rethinking continuity was the big philosophical issue, which also explains the return of landscape, and also of the city. What happens if we think of the city not only as a field of discrete actors, but as a seamless, radiant field. This is the big question about the city, a very different approach from older ways of looking, for instance through class analysis.

[Email correspondence December 2009] Margaret Crawford: For me, a more important question than the human / non-human is to understand the agency of the unintentional actor - the slum dweller or street vendor, who, through everyday practices, challenges existing ways of thinking, or reveals new economic, social and cultural possibilities. Although the results may be very different from the intentions (and certainly any reduction of these to simple survival needs to be questioned) they can have very powerful implications for architecture and politics. Years ago, Ernest Pascucci told me that 'popular culture does the work of theory'. We are seeing more and more of this 'theory from the bottom up' and we need to pay attention to it.

[London, 23 January 2009] Kenny Cupers and Isabelle Doucet: In contrast to the reflexive process of production, circulation and consumption you describe in Global Culture Industry*, and despite the complexity of actions building entails, architec-*

tural production is still very conservative about the notion of authorship. Is this symptomatic of a more fundamental specificity of architecture compared to other forms of cultural production? How is architecture's being-in-the-world different? Can we consider agency in architecture beyond the attribution of individual intentionality, and if so, what happens to the idea of criticality?

Scott Lash: Architecture is different because... Critique always has some kind of transcendental, is always outside of the empirical with which we are engaging. And I think art surely is: it always opens out into something that is transcendental. But I don't think architecture does in the same way. Architecture and design are largely about taste. In Kant's third critique, he criticises more empiricist thinkers, who talk about taste all the time. And taste is something that is completely empirical, that does not open up into what Kant calls the sphere of freedom. Whereas art does. And judgement does, at least in the sense of the third critique. Judgement always opens out into either a 'to come', in Lyotard's sense, or some sort of sphere of freedom, the prophecy of criticality, and so on.

Kenny Cupers: The same way Bourdieu's critique of taste is one-dimensionally social, leading to a closed realm?

Scott Lash: That's exactly what I was thinking yes. Bourdieu's is a social critique of judgement, in French *critique social du jugement*, and Kant's is a judgement critique of the social, moving it exactly the other way around. But the thing about design and architecture is that they work much more through taste, whereas art moves right on to the sphere of freedom. Architecture remains very much in the register of taste but sometimes it moves up to that other realm. The work of Koolhaas or Hadid has something transcendental about it in some ways. Or the transcendental and the empirical collapse in it, which is also perhaps the symbolic and the imagi-

nary, no longer being separated.

Kenny Cupers: Is this how you understand the intertwining of art and architecture in the global culture industries?

Scott Lash: Design especially, and perhaps also architectural design, really works in this register of taste, as do the culture industries. It's funny to me that Bourdieu ends up being a sociological positivist really, making critique impossible. His social critique of judgement is almost like a critique of critique: critique's critique is that critique is not possible. So I'm coming back to the idea of immanent critique, as in *Critique of Information*, and *Global Culture Industry*.

Isabelle Doucet: Critique no longer from above, but as you say, from within. In the realm of architecture, this brings us to the idea of a 'critique through practice' - against what is perceived as the more conventional domain of critique, namely theory. But how exactly could practice then be critical in a different way? And is it then people like Koolhaas you see as doing this?

Scott Lash: Not really. What you've got is this fantastic invention that's going on. I think what people like Koolhaas do is start from the register of taste and then somehow open it up, into the sphere of freedom, in the Kantian sense. And what we always thought of as just taste, also has this other, namely freedom. Critique through practice is one thing we wanted to do with the Centre for Cultural Studies, whether it's new media or shows or whatever.

Isabelle Doucet: Do you think this is the way new theory can be produced today? Because we also continue to see it being produced high up, and then trickling down. Is this model still applicable? Are there practitioners now who really change the turns of the theoretical discussion? Or do we need to understand this as part of some kind of

move against theory - considering that in architecture culture there seems to be such a paradoxical tendency recently?

Scott Lash: Well, I think it's a very theoretical thing to do, to theorise the end of theory. It mirrors the attention given to Latour today. His is perhaps the most influential paradigm in sociology today. And Latour is brilliant and a very implicit theorist. But he doesn't really write theory. I find it slightly disingenuous, to constantly put theory down, and yet have such a strong stake in theory at the same time: to say 'we can't be asking the big questions' and at the same time really asking them. Then why put other people down who are asking it too?

Kenny Cupers: Might it be because he too is infatuated with the real, as you mentioned before?

Scott Lash: I don't think it's critical theory that he does. For me, it is individualist because it starts with the individual actant, and then the networks kind of come from the individual actant. I don't think it starts from relations.

Kenny Cupers: What would a more relational approach be like?

Scott Lash: It would start from the relation, and wouldn't presume that these actor networks are somehow strategically power-oriented, are engaging and combating each other.

I don't think theory has ever stopped a war. I do think that there are exchanges. The art sector surely has taken on theory and theorists in a huge way. Conceptual art especially. And also what you could almost call conceptual architecture. Not just Rem, but also Multiplicity, with Stefano Boeri. A kind of exploration of urban change on the ground, like in China, a ground that seems laden with concepts and ideas. Either the work or looking at what is going on makes you think as a theorist. I think the

key is to start from the situation, and the legibility of the situation.

Isabelle Doucet: Perhaps one of the more useful ideas in Latour is exactly this proposal to start from the complexity of the situation - in the sense of what Isabelle Stengers and others have called an imbroglio - and then to retrace the threads. How feasible, innovative or fruitful is such an approach to you, considering that it doesn't allow you to predict where it will lead you to?

Scott Lash: Because I'm critical of the notion of action, I come to it from a slightly different direction. There are assumptions of instrumental rationality in terms of what the network does; that I think also sometimes is a network of individuals. That's why I prefer to use Marilyn Strathern, who really starts from the relation. The question is how, in terms of research. It's a really good question. In *Global Culture Industry* we were influenced by Appadurai, Kopytoff, as much as by Latour and also just by the research itself.

What is valid knowledge, in a way, is the question. It is a different kind of method. It's not even a laboratory. I'm not trying to discredit Latour, Koolhaas or Obrist in their use of the notion of laboratory, but it is not a laboratory at all: it is just the opposite, you're out there where it's happening. A laboratory means control, and this, in contrast, is engaging with the fabric. If it's an experiment, it's another kind of experiment, not a laboratory experiment. Almost like social engineering, not in the proper sense, or even the social democratic sense, but social engineering that doesn't really know what's going on. Social and material engineering, *socio-material engineering*. In which you're dealing with a material-social environment and you try to work with it, as much as possible, as a planner or researcher, or both.

Isabelle Doucet: It seems that one should at least acknowledge the engineering through several *labo-*

ratories, and explore not only their different modes of experimentation and knowledge production, but also the interaction between them...

Scott Lash: We need to figure out how to think about experimentation outside of the lab, and even beyond the laboratory model. A different notion of experiment. That's why I'm thinking an engineering experiment, a socio-material engineering, which sounds like a swear word, because it sounds too old-fashioned social-democratic, you know, but maybe it's interesting to use a kind of engineering meta-phor to think about it. It gives you a strong material aspect as well as a strong social aspect. And maybe we're situated, entering a different kind of planning. Where you are, as much as possible, into the fabric, and things are arising from that. It's not objective knowledge, because you only get there through a huge involvement.

And I think this ultimately brings us back to the notion of relationality. It is not just that the relation comes before the individual, but that our rela-tion comes right before you and me, and does not come out of your or my intention. The intentions will come from the relation rather. And the other thing is that it is somewhere between the virtual and the actual. It is not the virtual and not the actual, it is in between the two. The virtual gets actualised and then it's done. This is something that is in between the virtual and the actual, always continuing. Politics are very different when you start from the situation, when you start from something that is much more relational, that is not from the individual at all. And that is something that we need to take on board, urgently, here in the West.

Biographies

Margaret Crawford is currently Professor of Urban Design and Planning Theory at the Harvard Graduate School of Design. Her research focuses on the evolution, uses and meanings of urban space. Her publications include *Build-ing the Workingman's Paradise: The Design of American Company Towns; The Car and the City: The Automobile, the Built Environment and Daily Urban Life and Everyday Urbanism*. From Fall 2009, she will be Professor of Archi-tecture at UC Berkeley.

Scott Lash is Professor of Sociology and Director of the Centre for Cultural Studies at Goldmiths College (University of London). His publications include *The End of Organized Capitalism* (with J. Urry, 1987), *Reflexive Modernization* (with U. Beck and A. Giddens, 1994), *Another Modernity, A Different Rationality* (1999), *Critique of Information* (2002), and *Global Culture Industry* (with C. Lury, 2007).

Antoine Picon is Professor of the History of Architec-ture and Technology at the Harvard Graduate School of Design where he is also serving as director of the doctoral program. He has published extensively on the rela-tions between architecture, urban design, science and technology. Devoted to the perspectives opened by the development of digital architecture, his next book will deal in more detail with some of the issues he addresses in his interview.

Kenny Cupers and Isabelle Doucet, editors of this issue.

Autarky and Material Contingencies in Italian Architectural Debate (1936-1954)

Pep Avilés

Finding the archaeological precedents of what has been labelled 'Italian neorealist architecture' is perhaps too easy an endeavour, as the Italian historian Manfredo Tafuri recalls.[1] According to Tafuri, the precedents for this kind of architecture that blossomed right after World War II, were the rural exhibitions promoted by the fascist regime. These created a common stratum for disenchanted intellectuals, working classes, and the peasantry alike, well before the beginning of the international hostilities. To trace the natural, rural, or popular influences in a country that had only recently accomplished full industrialisation and was still dependent on a strong agricultural sector, seems not too much of a challenge. Nonetheless, some conditions may also be highlighted: a whole array of political, ideological, and economic factors contributed to that redemptive communion in an amalgam of agents that inevitably affected the architectural debates. In 1936, the official adoption by the fascist regime of policies promoting autarky[2] - a national economic doctrine that relies on domestic material disposal and manufacturing in order to guarantee economic independence - did not just provide significant direction for the architectural use of national materials. It also brought forward austerity as a fundamental guiding concept for a sector that was not considered as strategic in terms of warfare. From the 1930s until the end of World War II, the government promoted, by means of indoctrination campaigns, the intensive use and research of domestically produced materials over imported ones. The architectural consequences of the search

for economic autonomy in an increasingly unsteady international environment would play a fundamental role in the development of Italian postwar architecture. Architects with affinities to the fascist regime took advantage of the economic restrictions to defend the use of Italian materials while promoting monumentality to represent the official architecture of the regime. But also the architects less committed to Mussolini's regime defended austerity, as a way to support the ideological basis and possibilities of the modern movement. The tendentious reading of interwar political interests triggered numerous social, industrial and architectural reactions that provided a productive substratum for postwar architecture. After World War II, austerity became the main semantic assistance for the Roman architectural elite to engage with the reconstruction tasks and accommodate the huge immigration movement from the agricultural fields towards urban centres.

The present article will explore some of the material, industrial, and ideological developments that were already present before World War II and cannot be overlooked in the analysis of postwar architecture. The intent is not to propose a cultural revision of that period, but to acknowledge the reception and establishment of material policies in architectural discipline and debate from 1936 until the reconstruction years. Autarchic policies became a recurrent agent in time, interacting with different cultural (the presence of the avant-garde and the re-evaluation of the modern movement), social (peasantry and immigrations towards urban areas),

ideological (the fascist regime and its opposition), and productive forces (the relationship between industry and craftsmanship) before World War II. Without overestimating its relevance, austerity can be identified as a semantic offspring of material policies, articulating a multiplicity of agents in architectural practice. As such, it becomes a valuable tool for reading and interpreting the difficult and intricate interactions between economic contingencies and architectural production. Pre- and postwar Italy serves as a particularly appropriate case for comprehending such entanglements. The interplay between social categories and productive forces, on the one hand, and history and ideology, on the other, within a precise cultural milieu, encourages a contingent historical reading of architectural developments, rather than a teleological one.

1 - Precedents
Any evaluation of the presence and development of the modern movement in different countries before and after World War II must take into account the level of industrialisation of the economy and its material possibilities in a given cultural and social environment. Avant-garde European architecture had been connected to the metaphoric representation of the industrial machine. Notwithstanding its Futurist movement, Italy witnessed a relatively slow industrialisation after its 1870 reunification. The cultural ambitions of the bourgeoisie were belatedly incorporated into the national cultural agenda, and therefore the Liberty Style - also called *Floreale* - would be less agile than its European counterparts.

Even though recent studies of nineteenth-century Italian industry tend to demonstrate that its backwardness was not as extreme as was suggested by the data published by the *Istituto nazionale di statistica* during the 1950s, Italian industrial development was without doubt incomparable to the achievements of its European neighbours. In order to accommodate for the nation's socio-economic reality, Italian industrialists were reluctant to import

technologies that required investments and instead opted for technologies that allowed the exploitation of the available mass of unskilled labourers. The major businesses emerging after reunification - companies that would later play a fundamental role in Italian mass production, such as Pirelli (1872), Fiat (1899), or Olivetti (1908) - were founded on familiar oligarchies, but were also sponsored by (both leftist and conservative) public authorities, and financed by a banking system of German origins, such as *Credito Italiano* and *Banca Commerciale* (1894). Italy would thus enter the twentieth century as a hybrid capitalist state, based on both public and private capital resources.[3]

Italian industrialisation switched gears thanks to hydroelectric power and the surplus of agricultural labour migrating to wealthier areas in the north, such as Milan or Turin. This exodus resulted, after World War II, in the emergence of a huge gamut of small businesses or *laboratori*: companies with a combination of technical and craftsmanship knowledge able to nourish each other materially. The economic historian Vera Zamagni has argued that industrialisation in Italy was faster and more successful precisely in those places where the relationship between the peasantry and the manufacturers was closer.[4] Social aspects, such as familial concentration, and neighbourhood and community values, helped blur the line between manufacturers and workshops, a strategy that had no counterpart in Europe. In fact, the capabilities, flexibility, and independence of Italian manufacturers from the government and public sponsorship, as well as the atomisation of its economy in multiple small-scale companies, would become the cornerstone of Italian production, allowing it to face the challenges of the first half of the twentieth century. Italy was thus a country of small- and medium-sized businesses, partly as a result of its craftsman heritage but also due to the limited size of its market and economy.

The *biennio rosso* (1919-1920) was character-ised by worker upheavals and popular calls for a redistribution of wealth. This led to high inflation and rampant unemployment, which in turn allowed for the political rise of the *Fasci di combattimento*, founded by Mussolini in March 1919. Mussolini's arrival to power in 1922 did not result in substantial economic changes until the official declaration of the dictatorship three years later. The government addressed the pressing problems of monetary policy and inflation through the application of initially liberal strategies that soon became interventionist. With public interventions and the nationalisation of key sectors, such as the banking system, the state began to take over the economy and industry. It also launched new production policies as a way to guarantee the economic independence of the nation. The aftermath of those policies in the devel-opment of Italian industry has been disputed. Some economists and historians have read the period as an obstacle to Italian technological growth. Others instead have argued that the combination of the sponsorship of small- and medium-sized manufacturers, the encouragement of material research, and the defence of domestic production were foundational to the 'Italian economic miracle' of the 1960s.

The final aims of the fascist regime are less disputed than its policies. It is verifiable that the priority was to transform the nation into a war machine, despite the scarcity of products and even though downsized opportunities abroad hindered industrial production. The domestic output was only able to provide one-fifth of the material needs of the country. Few scholars understand the autarchic statements as an advantage for later technological development.[5] The result was that Italian imports between 1936 and 1938 were half the level of 1913.[6] The situation was such that Italy was forced to sell weaponry to those countries already at war with Germany, disavowing the needs of its ally and delaying its participation in the conflict due to its

material weakness. Thus, autarchic measures were considered a double failure, neither able to guarantee the military power that Mussolini needed to engage in the dispute, nor to launch a powerful industrial productive force. Nonetheless, if the fascist regime did not bridge its technological gap with surrounding nations, it did not hamper industrial progress either. The imperial aspirations of Mussolini fuelled new political agreements that influenced postwar devel-opments, notably the initiatives around the chemical industries, which were paramount in the fabrication of explosives, artificial textiles (e.g. rubber), and the development and exploitation of aluminium.

2 - Autarky and industrial policy

In 1933, the *Istituto per la ricostruzione industriale* (IRI) was founded to undertake strategic control of industry. After the crisis in the beginning of the decade, the IRI took control of steel production, favouring, for instance, the use of scraps as a way to counteract the scarcity of raw material. At that time, Italy became the main importing country of scraps in the world, amounting to one-third of the total output between 1920 and 1936. Despite those efforts, the price of steel products in Italy was up to three times the value in other countries because of inefficient coordination of the overall metal production. During the second half of the 1930s, engineering would demand the larger amount of iron, whereas the use of steel in construction diminished.[7]

The military invasion of Ethiopia on 3 October 1935 by Mussolini's fascist regime had considerable consequences for its imperialistic and economic aims. Four days after the conquest, the Society of Nations imposed economic sanctions,[8] denouncing the Italian act as a declaration of war against all members of the Society, according to previously signed agreements. The intensification of Italian economic autonomy was a direct consequence of those events.

Even though the international blockade did not

last long - sanctions ended on 15 July 1936 - the government launched a series of measures to assuage energy and supply shortages while mobilising national production according to military agendas and interests. Among the many obstacles the sanctions brought, the lack of coal and iron was the most worrisome. Italy was short on natural resources to satisfy demand for those materials, which were fundamental to meet the needs of the army. Moreover, Mussolini's military aspirations relied chiefly on steel production. Thus, the Italian government sponsored programs in order to obtain not only those raw materials, but also the required currencies for international commercial trade. The government also promoted small- and medium-sized companies around industrial districts to research and create new materials.

On 23 March 1936 (year XIV according to the new fascist calendar that commemorated the rise of the movement), Mussolini addressed Italians from the *Assemblea delle corporazioni*, warning of the inevitability of war and the need to intensify state presence in the market - not to 'nationalise', or 'bureaucratise', but to 'manage' and 'control' its industrial and economic pace.[9] As such, the policies articulated Italy's three greatest productive sectors: agriculture, small- and medium-sized production, and big-factory manufacturing. Mussolini was very aware of the role small- and medium-sized companies based on craftsmanship played for a healthy Italian economy. As a result, he dedicated great attention to them in his speech, while calling for 'initiative' and 'individual responsibility' in order to solve common problems.[10] The aim was to subordinate and amalgamate private efforts, to defend those common targets previously monopolised by the fascist state, without jeopardising military production.

Propaganda plays a fundamental and obvious role in the existential need for control in totalitarian states: mass indoctrination and tendentiously fabri-

cated reports for outside consumption become a key source for political continuity. It was in that spirit that, in 1938, the *Istituto per gli studi di politica internazionale* in Milan published a document written in English, titled *Autarchy*, meant to justify the actions taken within the turbulent and uncertain atmosphere between nations in the 1930s. Autarky was portrayed as the most compelling but also inevitable solution to safeguard Italian interests. But autarchic policies had more ambitious aims beyond economic self-maintenance. The policy was presented as a manoeuvre of national reaffirmation to guarantee its political autonomy:

The essential character of autarchic policies cannot be explained by merely showing the connection between the tendency to secure greater self-sufficiency shown by all countries and the postwar trend toward a planned economy. The real explanation is to be found in the fact that all efforts at economic self-sufficiency aim not only at satisfying economic needs but at securing national political independence. It is only when the connection between economic and political needs is understood that autarchic policies become comprehensible.[11]

Liberating the government from foreign dependence would jettison unwanted political chains, allowing Mussolini to proceed according to his own agenda. The Italian dictatorship was therefore shielded behind the tendency among industrialised nations to protect their market after the Great Depression, regardless of the agreements of liberalism signed in previous years. The movements made by Germany and followed by Italy in that direction were mandatory, according to the Italian pamphlet, both to guarantee and safeguard their political integrity and to justify the otherwise unacceptable invasions.

This new international situation forced the government to evaluate its domestic material disposal and to reconsider its industrial organisation. In terms of energy, the nation struggled to supply sufficient coal

and oil for its domestic market. The government naively believed that increasing exploitation and availability of coal from mines in Sardinia and Istria would be sufficient to safeguard its industrial and military development. Unfortunately, Italy could not rely solely on its own energy sources. It also had to ensure the supply of iron and steel for commodities, either by importing, by recycling scraps, or through mining exploitation. To follow a policy of imports would seriously threaten the autarchic assignment, and the reuse of scraps had its obvious limits. The problem with the Italian mining industry was that its most promising mines were located at an altitude of 2.800 meters, hampering not only extraction but also manufacture and transportation. Therefore, in order to solve the problem, the use of steel and iron had to be restricted in those industries that were not relevant to military enterprise. However, the great-est battle to be fought was for the re-education of the population and the adaptation of large economic sectors to face the complex and delicate economic situation:

[...] it is becoming apparent that autarchy not only requires the mobilisation of all productive activities and the utilisation of the low grade raw materials available in the country, it is above all a question of ingenuity in discovering new uses for available economic resources, and this calls for a radical modification of consumer's tastes, which will be secured by the active propaganda carried on in favour of economic self-sufficiency. Thus our people are learning to eat more fish and less meat, to use tinned foods which can be prepared in abundance from home grown fruits and vegetables, to reduce to a minimum the use of structural steel and iron in the building trades, to increase the use of synthetic products.[12]

This educational policy was nevertheless rendered partially insufficient. Even though the results of autarchic legislation were a resounding failure in military terms, the overall production shrinkage led

to some success in areas like naval construction as well as industrial and chemical production. The construction industry had to reduce its technological aspirations as a result of the material restrictions, and instead developed different solutions in tune with available resources.

National and autochthonous values came to the forefront, discouraging the use of iron and steel in buildings. The use of new and local materials such as stone and marble was instead encouraged. National wood was used for fibre panels (*Faesita*, *Masonita*), chipboards (*Eraclit*, *Tekton*), or plywood (*Buxus*). Chemical developments contributed to new materials such as composite panels (*Bakelita*), while the use of aluminium became comprehensively promoted in products such as *Duralluminio* or *Anti-corodal*. Undoubtedly, the material that responded better to national directions was glass, with its star product *Securit* appearing in every issue of archi-tectural magazines. Nevertheless, no remarkable glass architecture was developed. Furthermore, to succeed in such an economic environment meant quite often to highlight the national or autarchic character of the material in industrial advertise-ments. Foreign companies such as Saint-Gobain had to emphasise the *italianietà* of their output in an attempt to show acquiescence with governmental recommendations.

3 - Autarky and architecture
The architectural discipline and all the industrial activity around it suffered from the convoluted economic situation, the governmental policies, and the scarcity and control of commodities. However, the debate around the use of materials in Italian architecture had started a few years earlier: magazines such as *Casabella*, *Quadrante*, and, to a lesser extent, *Rassegna* and *Domus*, were concerned about the relationship between the architectural image, the formal language employed, and its syntactic articulation, already during the first half of the 1930s. In doing so, they foresaw the

fundamental critique of rationalism and the artistic avant-garde that was about to take place: its inability to communicate meaning to a larger segment of the population. This critique paralleled the argument that Ortega y Gasset launched in 1925 already, in *The Dehumanization of Art*, where he bitterly complained about what he called the presumptuous and elitist statements of abstract art, insufficiently comprehensible to, and compatible with the cultural success of future democratic societies.[13]

One of the main consequences of autarchic policies was precisely the rise of a semiotic debate centred on the relationship between material and its meaning. After stigmatising modern materials such as iron or steel, labelled as 'antinational', the dispute became ideologically loaded between those who saw in modern techniques a threat to Italian traditional architecture, and those embracing the formal and intellectual basis of the modern movement. The magazine *Casabella*, edited by architect Giuseppe Pagano (and Edoardo Persico until his death in 1936), initially held an ambiguous position. Pagano initially defended the modern use of materials rather than the use of modern materials. But once the controversy arose, *Casabella's* editor became one of the most vociferous defenders of steel as an autarchic material, above the official ones like stone or clay. It was not just a question of the material itself, but rather an attack on those positions that could jeopardise the road taken by avant-garde architects to this point. In order to settle the editorial board's positions, the magazine launched a series of essays in its *Sezione Tecnica* in the late 1930s, aimed to counteract the official recommendations against the use of metals, and presenting technical knowledge and statistical information that evaluated metals in terms of their desired autonomy from foreign markets.[14] Nonetheless, defending steel from the threat of construction ostracism also meant stepping into some paradoxical terrain. It was not about consuming less steel but about consuming less money to produce those commodities. Ignazio

Bartoli, an engineer and regular contributor to the technical section of *Casabella*, argued that the use of steel in buildings was not truly in opposition to official policies and recommendations, because a closer and more accurate analysis of the meaning of autarky would illuminate hidden aspects and reverse the conclusions.[15] Bartoli affirmed that the use of steel in carpentry would be less costly than the use of wood because steel was a fully industrial, mechanised material, with less labour invested in its production. Certainly, one of the most pressing needs in interwar Italy in relation to the economic blockade was to obtain foreign currency. Nevertheless, Bartoli's argument went a step further by pointing out that the equation of autarky and austerity was not inevitably the consequence of autonomous economic wishes. In addition, Bartoli wrote that steel manufactures could enjoy a 'longer life' because it was feasible to recycle them as scraps, while wood could only be used once as an energy source. According to that argument, Bartoli tacitly assumed the obsolescence and expandability of the products as a positive quality, whether or not they would later be recycled. This was opposed to traditional restoration, reconstruction or simply repairing, an issue that Reyner Banham would later insist upon with regards to postwar consumerism.[16] During those years, the coupling of autarky and austerity was the most frequent argument to defend the use of steel.

The resounding responses to *Casabella's* campaign were just around the corner. In 1938, the magazine *Rassegna di Architettura* founded a series of instalments under the heading *Tecnica Edile*, a much more conservative section intended to parallel official positions.[17] In the opening article, entitled *Autarchia nelle Costruzioni Edili*, the engineer and future minister of labour Giuseppe Gorla asserted that the use of metallic materials in construction had to be subordinated to military urgency. The prescription was to overcome national constraints by abolishing the use of metals 'in the rural and urban

modest constructions'.[18] Imported wood was also to be avoided, as well as coal, while the use of local materials was strongly encouraged. Stone stood as the chosen material for 'the works that fascism will leave for posterity as a memory of its heroic time'.[19] The aim of the article was to impose a mentality that was predisposed towards what Gorla called an 'autarchic mystique', one that worshipped domestic and local products above commodities from foreign nations.[20] This mystique became invested with orthodox fascist rhetoric. The exhibition *Torino e l'autarchia*, organised to commemorate the visit of *Il Duce* to the *Piemonte* in 1939, displayed the glossy achievements in economic autonomy of the fascist government in areas such as fishery, siderurgy, and so on. The exhibition featured an entire pavilion devoted to the question of the autarchic mystique, a euphemism disguising the indoctrination of governmental spirit. This mystique paralleled the 'realist mystique' that Salvatore Cardella proposed in the same magazine, shortly after Gorla's indictment.[21]

Architectural polemics between the defenders of the state's economic and industrial policies on the one hand, and the non-conformists on the other, reached one of its highest peaks in Giuseppe Pagano's written responses[22] to three articles previously published by Marcello Piacentini in *Giornale d'Italia* under the unequivocal title *Politica dell'Architettura*.[23] Piacentini had supported fascist ideological policies by advocating the use of marble in monumental architecture of pure volumes, very much in tune with the government's taste and its ideal of self-representation. Even though Piacentini and Pagano would agree on rationalistic values of construction, simplicity, and structural clarity, the latter could not share Piacentini's defence of *l'internazionale classicoide ed academia*, which so much pleased the official apparatus.[24] The ideological criticism ran parallel to the aesthetic one: according to Piacentini, among the values of the modern movement was its 'adherence to reality' and natural laws.[25] He used the term tendentiously to promote and strengthen nationalist and populist attitudes.

Piacentini's positions were supported and reinforced by Salvatore Cardella, who in 1939 published an apologetic article entitled *Punti fermi della nuova architettura* in the magazine *Rassegna di Architettura*.[26] The article appropriated Sant'Elia's architectural statements to establish nationalistic roots for a 'new architecture'. Cardella launched a vindicatory appraisal of stone, specifically marble, as a material belonging to a traditional Italian language, for a new monumental architecture meant to represent the fascist regime. Unfortunately, this new architecture very much resembled the old one. According to Pagano, the only space that Piacentini and his followers defended was the spurious sphere of tradition, a conservative place for fixed values and habits that hampered future development of the national economy while questioning the industrial capabilities of the nation. The problem of a poorly understood autarky was its technical and economic heritage, as the lack of research in that direction would jeopardise new technological developments. And so it was.[27] In 1940, the year that *Casabella* changed its name to *Costruzioni Casabella*, Giuseppe Pagano criticised the confusing position of the state regarding artistic and cultural expressions. On the one hand, the state stubbornly defended a national monumentality based on artificial myths of 'romanity' as misleading academic paraphrases. On the other hand, modern architects were willing to find common grounds between 'art and life, technique and feeling, humanity and civilisation, between social ideals and artistic primary ones'.[28] Meanwhile, the battle for economic autonomy of the fascist government was affecting architecture in two different ways: first, by means of the political role assigned to architecture and the acknowledgement of the paramount relevance it had in fashioning the moral habits of populations; and secondly, by altering construction procedures and solutions that constitute the base of architectural expression.[29] Materials and their technical use have their formal

solution within the physical possibilities in a given cultural framework. Structural technologies as well as final construction details reveal industrial and cultural identities. This semantic capability of detail in architectural expression became the discursive axis for Italian postwar architecture, either in neorealist Roman architecture, or in the tendency to recover past artistic traditions in the northern areas of the country, a movement Paolo Portoghesi labelled Neoliberty Style.[30] Unfortunately, fascist retaliations kept Giuseppe Pagano away from those developments.[31]

4 - Reconstruction

Italy signed peace treaties with the winning countries in 1943, but it was not until 28 April 1945, that the shadow of Benito Mussolini was politically banished.[32] After the war, it was difficult to distinguish between debris and urban settlements in the European landscape: a perfect *tabula rasa* where society had to be reconsidered. Furthermore, Italy faced a double misfortune: on the one hand, it was stultified by warfare; on the other, it had to negotiate the poisoned heritage of 21 years of fascist dictatorship. Italy was a divided country where supporters and detractors of the regime did not reconcile their harsh hostilities.

Finally, in 1946, the Italian Republic was erected as a modern state, and new legal, financial, and social agreements were belatedly established. The new constitution adopted in 1948 outlined the basic rules for reconstruction.[33] The sponsorship of the European Recovery Plan, better known as the Marshall Plan, as well as multiple national reconstruction programs, aimed initially to recover the agricultural sector as a way to counterbalance the enormous economic differences between the rural impoverished areas and the more prosperous cities, particularly those in the industrial north. Nevertheless, these efforts failed to curb the overwhelming migration towards urban centres. Reconstruction started with a pressing need for collective repre-

sentation of pain and sorrow after the massacre.[34] It was in those very first moments that discussions of material, its meaning, and its use emerged in the different proposals of Roman and Milanese architects. In 1945 Milan, Ernesto Nathan Rogers, Enrico Peresutti, and Ludovico Belgiojoso designed, as a memorial for those who had died in Nazi concentration camps, a small Cartesian steel grid based on the golden section, holding a vessel full of earth from *Mauthausen*.[35] The aesthetic challenge was to find agreement through abstract representation. The crumbling state of reason left its pristine structure as a reminder, harbouring the possibility of its reconstruction highlighted by a stereotomic absence unable to forget history. The materiality of the monument was not a coincidence: it referred critically to an unaccomplished modernity that had to place its past in the very ontological centre.[36]

But whereas the object of the Milanese design emphasised the void, in Rome, the memorial of the *Fosse Ardeatine* struggled between lightness and monumentality. After the liberation of Rome on 4 June 1944, the Allies were soon able to find the quarries where German troops assassinated 335 Italians as a revenge after the events of *Via Rassegna*.[37] The Roman City Council soon opened a competition to design a memorial in the area. Mario Fiorentino, Nello Aprile, Cino Calcaprina, and Aldo Cardelli (together with the sculptor Francesco Foccia) and the representatives of the Union of Young Architects, led by Giuseppe Perugini and the sculptor Mirko Basaldella, won the competition in 1946. The result of the competition, the construction of the monument at the *Fosse Ardeatine*, combined raw monumentality with apparent material austerity for its architectural representation. A rough concrete monolith supported at only six points covered the 336 gravestones beneath, leaving a thin slot of light between its massive volume and the ground. The ambiguity of the formal representation, between modernity and monumentality, suggests that the design could only become a piece of monumental

national unity if both losers and winners were able to feel a shared empathy in abstract terms without insisting on their differences. The void between the slab and the earth can be read precisely as the place for this encounter, since the refusal to touch the ground materially eliminates part of its monumental weight. It is significant that the complexity of representation was materially loaded, and quite differently so in Rome than in Milan, particularly if we consider both memorials in the light of past and future events.

The *Associazione per l'architettura organica* (A.P.A.O.) was established in June 1945 in the *Palazzo del Drago* in Rome, and coordinated by an executive committee that had among its members Gino Calcaprina, Mario Fiorentino, and Bruno Zevi. In September 1945, the Roman magazine *Metron*, directed by Luigi Piccinato and Mario Ridolfi, published three declaration principles of the recently created Association. The second one defined what they understood as organic architecture:

Organic Architecture means an architecture for the man, modelled according to the human scale, according to the spiritual, psychological and material needs of the man associated with. Organic architecture is therefore, the antithesis of monumental architecture that promotes state myths.[38]

In order to fulfil the needs of an abstract and ideal popular man, it was necessary to disdain, during the reconstruction that was going to take place, all types of myths together with the 'nationalist and autarchic resentments' that fascism had lavishly formulated.[39] The ideological problem was that, quite often, the autarchic heritage and its austerity matched too well with the perceived 'spiritual, psychological and material' needs of the average Italian postwar immigrant.

Architects were about to lead the urban reconstruction process. The *Consiglio nazionale delle*

ricerche promoted the study of housing prefabrication, discussed at a round-table with the *Scuola di architettura organica*, a pedagogic institution depending on the A.P.A.O. and founded by Bruno Zevi after his educational exile in the United States. The magazine *Metron* emphasised those prefabricated processes by showing the achievements in other geographies. Articles and images of technical systems, such as the experimental work by Conrad Wachsmann and Walter Gropius, were published with the hope to spread a technological seed for reconstruction on the Italian market. The efforts were partially compensated during the eighth Milan Triennale in 1947. The experimental complex QT8 by Piero Bottoni, one of the editors of *Metron*, brought up a question he had already formulated in 1934. The aim was to design an urban area of 66 hectares to accommodate services, facilities, and 1300 dwellings of which 300 would use prefabrication technologies. Housing was addressed in its multiple scales, searching for standardisation and prefabrication not only of its components but also of the whole process, namely in order to mass-produce the dwellings. But social needs and technical possibilities were far from rendering suitable the industrial utopia for the Italian market. The low employment rates after World War II discouraged activities that reduced labour: the building industry was one of the main sectors held responsible for accommodating an unskilled labour force. Nor did the backward technological conditions help in that direction. The lack of economic enterprise and industrial ambition led to the rejection of designed prototypes as a compelling solution for reconstruction. The utopian technological hopes faced a material, social, and economic defeat.

Nonetheless, a more pragmatic solution was soon to solve this impasse. If standardisation was to be jettisoned by industrially short-sighted entrepreneurs, traditional techniques, already standardised not in production but in manufacture, were about to take the lead. After ten months of research and

compilation, Mario Ridolfi published in 1946 the *Manuale dell'architetto*, a handbook financed by the *Consiglio nazionale delle ricerche* and The United States Information Service (U.S.I.S.) that managed to distribute 25,000 free issues among Italian architects and design professionals. The work was coordinated by Pierluigi Nervi, Bruno Zevi, Biagio Bongiovannini and Mario Ridolfi and edited by Gino Calcaprina, Aldo Cardelli and Mario Ridolfi himself. It was a response to 'the vastness of the program' that 'all the Italian buildings in the work of reconstruction' were about to face.[40] Unlike the comprehensive and celebrated *Bauentwurfslehre* published by Ernst Neufert in 1937, the Italian sequel revealed very little technological interest.[41] Preceded by past attempts to systematise construction in Italy,[42] the public presentation of the handbook in *Metron* magazine[43] distanced itself from Neufert's work because of the complexity of translation of the German terminology, according to Ridolfi. But the handbook did not lack direct influences. The patronage biased the editors towards American methods, which explains, for instance, the presence of 'balloon frame' systems, appreciated by Sigfried Giedion but completely alien to Italian traditions.

The *Handbook* had 266 plates in eight main categories, which were meant to be completed with new solutions and details in later editions.[44] Most remarkable is the absence, in dwellings, of space to accommodate appliances such as washing machines, used in developed countries, as Neufert had already acknowledged. This is not surprising though, if we take into account that according to an official 1939 census, as much as 21.6% of all the dwellings surveyed had no kitchen and over 40% had no drinking water and electric lighting.[45] But despite the technological backwardness, or perhaps precisely because of it, the *Handbook* became a resounding success and welcome guide for postwar Italian architects. Soon, new national agreements for reconstruction were reached. In 1949, the *Istituto Nazionale per l'Assicurazione, INA-Casa*,[46] a national institution to manage Italian public housing policies, was created from the ashes of previous social housing organisations, the *Istituto Case Populare* (ICP, 1903) and the *Istituto Autonomo per le Case Populari* (IACP, 1909, renamed during the fascist years as *Istituto Fascista Autonomo per le Case Populari*). The great migration of workers towards industrial areas in the north and the wealth of those urban areas rendered urgent the need for coordination between housing policies and urban development, in order to balance the uneven population distribution. Some of the most celebrated and memorable buildings from the period came out of the work by *INA-Casa*.

That same year, in 1949, Mario Ridolfi and Ludovico Quaroni started the design for the urban development *Via Tiburtina* in Rome, a housing project with a formal solution that resembled traditional rural constructions. The proposal organically articulated the different volumes by avoiding linearity and repetition, rejecting the mass standardisation associated with modernist cities, and instead nourished a picturesque, rural quality. This operational mode, which had its *raison d'être* in popular and rural values, and reinforced the concept of community through the austerity of its aesthetic proposals, was the common ideological ground for architects and the population during the first decade after the war. The development of the village *La Matera* (southern Rome) in 1951 by Ludovico Quaroni, Federico Gorio, Michele Valori, Piero Maria Lugli and Luigi Agati, amongst others, became the most conspicuous example of this kind of attitude. Urbanism tried to deploy a kind, soft, and traditional solution to sociological and environmental issues. But perhaps better known was the design by Mario Ridolfi and Wolfgang Frankl for *Viale Etiopia*, also in Rome (1950-54). More committed to the modernist city than the previous ones, the qualities of the small details in the groundsels, the articulation of volumes, the reduction in the thickness of columns to accommodate prefabricated elements, and the harshness

of the proposals are usually understood as formal architectural responses to the social postwar milieu. The unworried use of decorative elements took advantage of the artisan aesthetic capacities within the tradition of those small *laboratori*, also interpreted as an exhilarating and compelling critique of the rigorous abstraction of the modern movement.

The Swiss scholar and architect Bruno Reichlin has stated recently that the parallel use of 'rhetoric figures' (such as social mimesis, spontaneity, or chance), are the conspicuous links to legitimise the borrowed label of neorealism in architecture.[47] Literary and cinematographic criticism identified redundant narrative and plot techniques in the cultural representations as reactions to the devastation produced by warfare. Preoccupation with everyday social life, the use of language coming from the lower social strata, the display of the roughness of urban conditions, and the more or less explicit critique of moral habits and social attitudes were the common points around which the narrative was woven. But Italian architecture addressed some of those common concerns already before 1940, when it was still conditioned by autarchic policies. The cultural and economic milieu was reformulated after World War II by using the same traditional tools, giving birth to so-called neorealist architecture. It is not surprising then that some of the leading voices of this type of architecture were around Rome, close to the government's power and influenced not only by its industrial policies and state interventions but also by architects' reactions to them.

Neorealism, as applied to architecture, is perhaps a hasty and overlooked term: as there is no clear precedent to identify a precise formal and ideological style,[48] we tend to think that recuperation of the past, the over-stimulated attention to popular taste as it was represented in the lower classes, and the use of traditional materials are a self-evident result of warfare. Perhaps the powerful images that films such as *Germania anno Zero* (Rossellini, 1948) or more naive ones such as *Miracolo a Milano* (Vittorio de Sica, 1951) contributed to that aspect. But World War II did not stand for a fundamental gap in either architectural preoccupations or in formal architectural solutions. Certainly, the term realism was frequently used by those architects following fascist cultural intentions, as a populist, non-intellectual tool.[49] But predictably enough, postwar Italian architects found a way to deploy their professional skills and knowledge as representative of the national situation beyond material scarcity, ideological struggles, and utopian aspirations. An etiological analysis of buildings of that period would probably reveal their direct response to the spiritually decayed condition of a recently immigrated population, punished by the restrictions of the war, looking nostalgically at its rural past. But it also seems certain that their formal solutions were materially and ideologically affected by the historical, cultural, and economic context.

However, despite the excellent works of Italian modern architects and the intensity of their critical arguments, the technological ammunition that the country provided for the development of the modern movement before the 1950s was low-powered. This was due not only to its backward industrial conditions, but also to the role played by the fascist state in the economic management of the productive sectors and in its foreign policy. Those actions directly stained the architectural debate, politicising the use of materials and technology during the 1930s and fertilising the ground for new design attitudes after World War II. In Marxist terms, politics (superstructure) altered the mode of production (base) in order to fulfil military agendas. This modification generated a cultural conflict and response before World War II in both political sides of the architecture scene, and extended its influence to the reconstruction years. Autarky was the historical triggering agent that allowed austerity to play a dual role, playing in favour of official policies before World War II by seizing the possibilities of industrial and technological development in construction,

but also as a dynamic economic engine and a symbolic commonplace during the reconstruction years. The double capacity of austerity needs thus to be analysed within both historical contexts. Although paramount, material considerations are never enough for a full comprehension and critique of historical moments. Nonetheless materiality becomes an instrumental starting point to foster interdisciplinary readings within larger systems of social, cultural, and economic forces.

Notes

1. Manfredo Tafuri, *Storia dell'architettura italiana*, 1944-1985 (Torino: Giulio Einaudi Editore, 1986), p.14.

2. The adjective 'autarchic' responds to both the nouns 'autarky' (economic self-sufficiency) and 'autarchy' (despotism). Nonetheless, Italian publications at that time mistranslated the Italian form 'autarchia' for 'autarchy' even though they were referring to national economic and productive autonomy. The present text uses the 'autarky' and 'autarchic' forms, except in explicit references and quotes from Italian literature.

3. See Nicola Crepax, *Storia dell'industria in Italia, Uomini, imprese e prodotti* (Bologna: Società editrice il Mulino, 2002), pp. 304-14.

4. Vera Zamagni, *The Economic History of Italy (1860-1990): From the Periphery to the Centre* (Oxford, New York: Oxford University Press), 1993.

5. See Gulaberto Gualerni, *Lo stato industriale in Italia* (Milan: Etas Libri, 1982) and Rolf Petri, 'Innovazioni tecnologiche fra uso bellico e mercato civile', in *Come perdere la guerra e vincere la pace*, ed. by Vera Zamagni (1997), pp. 245-307.

6. Zamagni, *The Economic History of Italy*, p. 271.

7. Ibid., p. 287. Footnote.

8. The sanctions prohibited the exportation of military weapons to Italy and the imports from the country at the same time that all commercial agreements were frozen. Neither Germany nor the United States were among the signing countries, and kept the commercial trades flowing. Source: Istituto per gli studi di politica internazionale, *Autarchy* (Milan, 1938), p. 18.

9. The speech can be read at the following site: http://www.dittatori.it/discorso23marzo1936.htm. [Accessed in March 2009]

10. Ibid.

11. Istituto per gli studi di politica internazionale, *Autarchy*, p. 17.

12. Ibid., p. 47.

13. José Ortega y Gasset, *La deshumanización del arte* (Madrid: Alianza editorial, 2002), XIVth edition. Originally published in *Revista de Occidente*, 1925.

14. In order to track the autarchic debate in the magazine *Casabella* during those years see: Roberto Einaudi, 'Impiegare razionalmente i materiali', *Casabella*, 132 (December 1938), p. 45; Ignazio Bartoli, 'L'Edilizia all'esame autarchico', *Casabella*, 132 (December 1938), pp. 45-49; Umberto Ferrari; Ignazio Bartoli; Roberto Einaudi; Fausto Massi; Ercole Galassini, 'Approvvigionamento dei materiali ferrosi. La questione dei buoni di acquisto dal commercio', *Casabella*, 137 (May 1939), pp. 38-39; Bruno Damiani, 'L'acciaio nel pensiero del Duce', *Casabella*, 142 (October 1939), pp. 34-37; Giuseppe Pagano, 'L'autarchia e l'architettura del ferro', *Casabella*, 144 (December 1939), pp. 34-35; Pierluigi Nervi, 'Per la massima autarchia edilizia', *Costruzioni Casabella*, 147 (March 1940), p. 3; Ing. F.M., 'Il serramento autarchico a saliscendi', *Costruzioni Casabella*, 148 (April 1940), pp. 38-39; Giuseppe Pagano, 'Una originale mostra dell'autarchia nell'edilizia', *Costruzioni Casabella*, 154 (October 1940), p. 38; Augusto Cavalieri-Murat, 'Autarchia, Tecnica, Arte', *Costruzioni Casabella*, 154 (October 1940), p. 39.

15. Ignazio Bartoli, 'L'acciaio nell'economia nazionale', *Casabella*, 98 (February, 1936), pp. 18-19.

16. See for instance, Reyner Banham, 'A Throw-away Aesthetic', 1955, republished in *Design by Choice* (London: Academy editions), 1972.

17. The journal headed the section in all the issues during the year 1938 quoting Benito Mussolini: '*Autarchia: Tutta l'economia deve essere orientata verso questa suprema necessità. Da questo dipende l'avvenire del popolo italiano*'. See *Rassegna di Architettura* (January 1938). Tecnica Edile.

18. Ibid., p.3.

19. Ibid.

20. Ibid.

21. Salvatore Cardella, 'Punti Fermi della Nuova Architettura', *Rassegna di Architettura*, 7 (July 1939), p. 310.

22. Giuseppe Pagano,'Variazioni sull'autarchia architettonica I', *Casabella*, 129 (September 1938), pp. 2-3; and 'Variazioni sull'autarchia architettonica II', *Casabella*, 130 (October 1938), pp. 2-3. See also a previous article by Giuseppe Pagano, 'Chi si ferma é perduto', *Casabella*, 128 (August 1938), pp. 2-3. In this article, Pagano attacks the anachronistic monumentalism presented by Marcello Piacentini.

23. Marcello Piacentini, 'Per l'autarchia', 'Politica dell'architettura', 'Bilancio del razionalismo', 'Forme concrete', *Il Giornale d'Italia*, 13, 15, 17 and 28 of July 1938.

24. Ibid.

25. Ibid.

26. Cardella, 'Punti Fermi della Nuova Architettura', p. 310.

27. This schism between tradition and technological progress paraphrased to some extent Gio Ponti's old concerns, which in 1930 supported an idea of *italianeità* as a distinctive trace in a hypothetical European market. This was feasible either thanks to an apt interpretation of traditional heritage, or by unconditionally supporting investigation in modern objects to recover lost technological prestige: characterisation or excellence. For Ponti, it was a question of 'renew or die', not as 'aesthetic claim' or 'intellectual manifesto' but as 'immanent need'. See Gio Ponti, 'Il fattore "italianità" nelle nostre arti applicate moderne', *Domus*, 35 (October 1930), pp. 33-34.

28. Giuseppe Pagano, 'Urgenza do Parlar Chiaro', *Casabella*, 146 (February, 1940), pp. 8-9.

29. See, Augusto Cavalieri-Murat, 'Autarchia, Tecnica, Arte', *Casabella*, 154 (October, 1940), p. 39.

30. Paolo Portoghesi, 'Dal Neorealismo al Neoliberty', *Comunità*, 65 (December, 1958), pp. 69-79.

31. Giuseppe Pagano was deported to the concentration camp in Mauthausen where he died in 1945.

32. After the founding of the short-lived *Repubblica di Salò*.

33. Even though the dictatorship was extremely protective of its domestic production, the gap in the concentration of wealth between the North and South on the one hand, and between the rural agricultural areas and the industrial ones on the other, notably increased during the fascist period.

34. As Manfredo Tafuri points out, it was not a coincidence that the criticism started already with objects meant to represent a common sensibility. In that sense, Loos's definition of architecture was doubly fulfilled: the tomb and the monument, together in a double redemption of common past experience.

35. The monument was initially designed as a 182 x 182 cm cube placed on top of a pedestal 42 cm high. During the first reconstruction phase directed by Enrico Peresutti, the cube briefly reached 250 cm in its sides.

36. After the quick degradation of the monument due to the bad quality of its steel, it was rebuilt in bronze for a short time, and then back in steel during the 1950s.

37. On 24 March 1944, the German troops were ambushed in Via Rassegna by Italian partisans, resulting in the death of 33 German soldiers. As an act of retaliation, the German army then ordered a massacre in relation one to ten: ten Italians for every German dead. Jewish, prisoners, partisans, or just people who were in the wrong place at the wrong moment, were all executed in the *Ardeatine* quarries, South of Rome. The place was later sealed. Five more victims were assassinated without a clear reason, amounting finally to 335 dead.

38. A.P.A.O. 'La costituzione dell'associazione per l'architettura organica a Roma', *Metron*, 2 (September 1945), p.75.

39. Ibid., p.76.

40. Mario Ridolfi, 'Il manuale del architetto', *Metron*, 8 (March 1946), p.36; Mario Ridolfi, et al., *Manuale dell'architetto* (Roma: Consiglio Nazionale delle Richerce. A cura dell'Ufficio Informazioni Stati Uniti, 1946).

41. Wolfgang Frankl had worked in the past as a draftsman for Ernst Neufert in Germany while the latter was in charge of the supervision for the teachers' apartments in the Bauhaus in Dessau. Not even this close relation helped to recognise Neufert's *Bauentwurfslehre*

kinship for the Italian handbook, as the coincidence in the overall measures of man and its environment suggest.

42. Mario Ridolfi points out previous handbooks by Donghi and Breimann. Mario Ridolfi, et al., *Manuale dell'architetto*, p. 42.

43. Ibid.

44. *Sommario di norme e dati; Tecnica urbanistica; Materiali edilizi; progettazione statica; elementi strutturali; opere finite della construzione; Impianti Tecnici; Dati Caratteristici e misure di Ingombro.*

45. Source: 'Rassegna della propietà edilizia', Rome (July-September, 1937), published by Giuseppe Pagano in 'Case per il popolo', *Casabella*, 143 (November 1939), pp. 2-3.

46. The aim of the 1949 legislation was to provide increasing worker employment, facilitating the construction of labour housing.

47. Reichlin, Bruno, 'Figures of Italian Realism. Part I', *Grey Room*, 5 (Autumn 2001), pp. 78-101, and 'Figures of Italian Realism. Part II', *Grey Room*, 6 (Winter 2001), pp. 110-33, trans. by Tony Shugaar and Branden Joseph.

48. For a discussion on realism and architecture see Manfredo Tafuri, 'Architettura e Realismo', in Vittorio Magnago-Lampugani (ed.), *Architettura Moderna: L'avventura delle Idee, 1750-1980* (Milano: Electa, 1985), pp.123-48; Hannes Meyer, 'Der Sowietische Architekt', manuscrito para Arquitectura, México, 9 (1942). Quoted from Bruno Reichlin, 'Figures of Neorealism in Italian Architecture. Part I', p. 97.

49. Salvatore Cardella, using the ornamented fascist prose, defended a spiritual realism, enigmatic even though seemingly indispensable in order to potentiate the expressive and lyric qualities of the material. Cardella, 'Punti Fermi della Nuova Architettura', p.310.

Biography

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Vernacular Architecture as Self-Determination: Venturi, Scott Brown and the Controversy over Philadelphia's Crosstown Expressway, 1967-1973

Sebastian Haumann

The work of Robert Venturi and Denise Scott Brown is widely known for its influence on postmodern architecture. Their aesthetic, embracing symbolism and assemblage of various styles, is well publicised and has inspired architecture throughout the world. In contrast, the political context of their work and its political significance have been neglected, even though they promise valuable insights into the architectural culture of the late 1960s and early 1970s and the political dimension of architecture more generally. Examining Venturi and Scott Brown's little-known work on Philadelphia's South Street, an urban commercial area threatened by plans for an expressway, shows us how power structures were interwoven with arguments on aesthetic principles during this period, and can lead to a better understanding of the interaction between architectural theory and political history.

The South Street project, a community-sponsored alternative design to City plans, was carried out during the same period as the research for *Learning from Las Vegas* (*LLV*) and echoes many of its themes. Grounded in the politics of redevelopment and expressway construction in their hometown of Philadelphia, it shows Venturi and Scott Brown not only as architects but as political actors. Perhaps even more than *LLV*, it reveals how aesthetic standards were intertwined with the question 'who is to decide what to build?'. On the one hand vernacular taste could only flourish if individual owners and users were allowed to arrange the built environment as they pleased. On the other hand appreciating the vernacular aesthetic implied acknowledging the right of self-determination of residents and users in planning issues - thus legitimising the struggle against the inner-city expressway.

This contribution will assess the role of architects in society from the vantage point of political history. The first part of this article sheds light on discourses among urbanists, professional planners and architects, hence stressing architectural theory both as a guideline along which architects act and a reflection of architects' self-conception. It will embed Venturi and Scott Brown's influential book on the aesthetics of Las Vegas in the context of the debates of the 1960s. The second part will pursue a reverse approach, reconstructing the political history of the confrontation over the Philadelphia expressway. This part primarily draws on sources of local political significance, and tries to place Venturi and Scott Brown as actors in this specific context. Put together, both perspectives will shed light on how architects act within their professional community as well as in local political environments. In addition, the example indicates how the architects, acting in both spheres, shaped their theses and practices by reciprocal cross-referencing between these two spheres. They needed and managed to establish a coherent image of their theoretical assumptions and concrete action on the site of political controversy.

Learning From Las Vegas: the political message
Learning from Las Vegas, published in 1972,

contains one explicit political statement: 'Analysis of existing American urbanism is a socially desirable activity to the extent that it teaches us architects to be more understanding and less authoritarian in the plans we make for both inner-city renewal and new development.'[1] Even though Scott Brown, Venturi and their co-author Steven Izenour go on to analyse the aesthetics of vernacular architecture, the very legitimation for doing so is captured in this short declaration.

The claim for a 'less authoritarian' approach to architecture reflected the condemnation of what had come to be considered the negative side of modernism. The criticism was not only aimed at the bold aesthetic language in the tradition of the Bauhaus, but just as much at underlying political presumptions of Le Corbusier. The master of modernist architecture and urban planning had proposed to view the home as a 'machine for living'. For Le Corbusier, the standardisation of design would bring forth the desired standardisation of lifestyles. The modernist paradigm entailed an implicit form of coercion, so the argument of critics ran, forcing dwellers to reshape their lives according to planners' intentions.[2] What Venturi and Scott Brown criticised, in short, was the complete disregard of the inhabitants' own values and sense of aesthetics. *LLV* was not only a criticism in design, but also a critique of the unjustifiable impact of modernist architects and planners on the everyday users and inhabitants of their projects.

A more empathic and open-minded approach to urban society had first been discussed in sociology. William F. Whyte's landmark study *Street Corner Society*, published in 1943, helped inspire a shift in perspective.[3] In analysing the social organisation of an Italian 'slum' in Boston, Whyte argued that the urban underclass relied on its participation in dense social networks, albeit visibly different from those of middle-class Anglo-American society. In doing so, Whyte rebuked the idea that the urban underclass was disorganised and on the verge of social

decay - exactly the arguments that had legitimised interventions designed by modernist planners and architects.[4]

While Whyte's line of argumentation did not reach the planning professions throughout the 1950s, by 1960 a number of sociologists who were aware of the potential lessons to be learned from *Street Corner Society* had entered the academic community concerned with architecture and urban planning. Herbert Gans was one of them.[5] *Urban Villagers*, Gans' 1962 book on another Italian-American urban community in Boston, drew on Whyte's idea and transferred it to the context of urban planning.[6] Gans described planners' attitudes as being biased against the habits of the urban underclass whom they planned for: 'the professionals' evaluation of the behavior of slum residents is based on class-based standards that often confuse behaviour which is only culturally different with pathological or antisocial acts.'[7] Gans was appalled by the consequences of this deep misunderstanding, and went on to claim: 'Consequently, the cultural differences between working- and middle-class residential choice suggest that the prevailing professional housing standards - which reflect only the latter - could not be rightly applied to [the *Lebenswelt* of the urban underclass, S.H.].'[8] Gans urged urban planners and architects to reconsider their alleged middle-class perspectives on the social and built environment and rethink the modernist dogma, which had dismissed the conditions under which large parts of the urban underclass lived as 'harmful'. The values and opinions of the communities affected by planning had to be taken seriously, he argued. What could be concluded from Gans' line of argumentation was that only communities themselves could provide the necessary legitimation for urban development.

Due to the growing importance of the social sciences in research and policy-making around 1960, the pressure to engage sociologists as experts

in the planning process rose. One of the academic institutions that had taken this trend seriously was the School of Design at the University of Pennsylvania, where Gans had become an influential figure. Other scholars at the University's School of Design followed Gans' criticism, notably Paul Davidoff, whose concept of 'advocacy planning' gained prominence in the subsequent decade.[9] Both were very sceptical of the outcomes of modernist planning, and they were extremely critical of the legitimation of invasive plans. It was in this intellectual environment that Scott Brown started her academic career and met Venturi in 1960. As the changing political climate of the 1960s began to affect the planning community, Scott Brown and Venturi became familiar with the debate about the adequacy of urban planning and design strategies. Their work during this decade can be interpreted as an effort to position themselves between the perceived necessity to be responsive to community needs and an emerging political radicalism.

The students at the School of Design - representing a more radical approach - started to foster fundamental doubts about the planning profession's role in society. A series of discussions with planners and architects organised by the Student Planners Association in 1962 and 1963 was led by the question: 'Who is the planner? What permits him to use the name? To whom is he responsible? What is this "expertise" of his? What proof does he have for the "rightness" of his plans?'[10] One of the discussants was Philadelphia's chief planner Edmund Bacon, known for his stern approach to the planning process.[11] His argument was that the discussion around these questions - about the very legitimacy of the professions - could have devastating consequences. He criticised what he saw as a dangerous development in architectural theory: 'The great danger is the failure to provide concepts and images of a better life [...] of a far finer life for everyone based on a higher set of values [...]. The great danger in the planning profession today is an

abdication of leadership.'[12] Bacon then went on to blame his colleagues in academia for fostering this development. The minutes of subsequent student discussions in February 1963 taken by a student participant mention: 'Bacon claims that [their] teaching tends to undermine the self-confidence of the student.'[13]

The confrontation between many leading practitioners' still essentially 'top-down' approach, and the advocates of an alternative, more community-driven planning process, as suggested by Gans and promoted by students in the early 1960s, was in the first place political in nature. This becomes even more apparent when seen in relation to the emerging students' movement. Many of the attempts to renew society associated with the generation coming of age in the 1960s stressed the right of self-determination and shared a broad scepticism of authorities. The Students for a Democratic Society (SDS) elaborated on the concept of 'participatory democracy', students in Berkeley began a renewed struggle for free speech, while others joined the growing Civil Rights Movement. The push for a new approach to urban planning, centred on the ideal of the self-determination of communities, has to be seen in this broader context of the changing political thought during the 1960s. On the other hand Bacon's position had its own political rationale and implications, as he said: 'I think one shows far more respect for the democratic process to believe that the process itself has plenty of vigor to beat your own earnestly held values into proper shape, or reject them, than to try to second guess the process by attempting to set up a value system according to what you think somebody else wants.'[14]

What was being discussed in the 1960s was nothing short of the role of planners and architects in a society that linked the right to intervene in the individuals' rights with procedures that had to be justified as democratic. In effect, Gans' critique of modernist planning and design as being 'domi-

nated by middle-class values', was far-reaching as it entailed the conviction for the democratic right of self-determination: individuals from other backgrounds, more particularly the working classes he described, were not to be forced into a different way of living, values, or aesthetics. The observation that expertise in planning was unresponsive to forms of social organisation and taste other than middle-class was attributed to the fact that it was systematically removed from political discourse by stressing its 'objective' character. In essence, critics challenged the unassailable position of expertise in the planning professions, by pointing out how it conflicted with democratic principles.

Even though such questions were primarily discussed in academia, the critique of planning was not a low-profile issue in the 1960s. Popular criticism appeared in many forms throughout the decade. Jane Jacobs' *The Death and Life of Great American Cities* and Martin Anderson's *The Federal Bulldozer* being only the most influential treatises on urban renewal.[15] Another such public critique on the profession was the 1964 exhibition *Architecture without Architects* at New York's Museum of Modern Art. This exhibition celebrated the ingenuity of architecture without professional involvement through images of mainly traditional, non-Western buildings and urban fabrics.[16] On another level, US urban policy at this time was likewise engaged in reconsidering what architects and planners were able and allowed to do in society. When the Kennedy and Johnson administrations assumed the responsibility of improving living conditions of the urban underclass and especially those of African-Americans, they declared that the underlying problem was political in nature. In contrast to previous attempts to ameliorate 'slum life', the 'Great Society' legislation coming forth in 1964 no longer emphasised the role of the built environment. It aimed instead at strengthening the political impact of community-based development.[17] Debates about both the production and management of the built environ-

ment reached a broad public and slowly redefined the role of professionals working in those fields.

What this sociological reconsideration of architecture and urban planning - focused on questions of power and the built environment - did not reflect on very much, was the question of aesthetics. It was of only minor interest that the urban underclass had their own taste, one that was very different from what professionals proposed as 'good' design. Scott Brown later on suggested that such ideas about aesthetics did in fact exist, but that they were separated from the discourse on power in the planning process. To make this point she mentioned her profound impression with the British 'New Brutalists', a group of architects inspired by working-class aesthetics she had met while studying in London: 'The New Brutalism suggested to me that social objectives might be achieved with beauty, if we could only learn to broaden our definition of beauty.'[18] While the two ideas, that of planning as a political action, and that of a broadening of architectural aesthetics, emerged relatively separately during the 1950s and early 1960s, they increasingly merged by the end of the decade.

Not being political activists - at least not for the time being - Venturi and Scott Brown advanced their ideas first of all in terms of architectural criticism. In *Complexity and Contradiction in Architecture*, published in 1966, Venturi used the concept of self-determination as it was advocated by planning scholars but applied it to architectural form. He praised the 'richness and ambiguity of the modern experience' and asserted that '[e]verywhere, except in architecture, complexity and contradiction have been acknowledged'.[19] To discover such qualities in architecture it was necessary to look at the ordinary, the vernacular. The fact that the aesthetics of modernism was understood to have disrupted the tradition of endowing buildings with a rich assemblage of ornaments, and thus with symbols and signs that would have enriched the 'codification' of

the built environment, meant that the rediscovering of the rich symbolism of the vernacular became all the more important.

Venturi and Scott Brown's attempt to synchronise aesthetic ideas with the political thought of their peers - as *Complexity and Contradiction in Architecture* or *LLV* could be interpreted - was only the first step in developing an aesthetics that was coherent with the idea of self-determination in the planning process. This is not to say that complying with a certain political thought was the sole purpose of Venturi and Scott Brown's turn to vernacular architecture. In fact, it is hard to estimate to what extent they shared the political beliefs of many radical activists. What is certain is that by the late 1960s they consistently referred to the right of self-determination to justify their architectural aesthetics as being especially sensitive to what the average user of buildings *actually* wanted and liked.

Venturi and Scott Brown ended up identifying symbolism as a crucial aspect of the built environment, because of its potential to accommodate user needs previously neglected by modernists. In order to make sense of a building and hence to be able to actually use it, people relied on the imagery of the built environment.[20] In shifting the emphasis to symbolism, Venturi and Scott Brown also departed from stressing the role of the urban underclass, setting them apart from many political radicals of the late 1960s and early 1970s. While Gans and others on the border between sociology and planning had specifically talked about the world of the 'working class' and alleged 'slums', Venturi and Scott Brown broadened this notion to include the vernacular in general - explicitly including middle-class practices and customs. Las Vegas was not a place of the US-American underclass, and neither was Levittown, Pennsylvania, which they explored in a very similar way during the early 1970s.[21]

In fact, Venturi and Scott Brown showed that the 'ugly' and complex vernacular architecture adhered just as much to middle-class values. Accepting the ubiquity of American consumer culture, *LLV* demonstrated that the commercial architecture of the 'Strip' was appealing to middle-class customers.[22] Despite their reference to middle-class values, their discourse still echoed its distinctive origins in the social and political activism for the advancement of the marginalised, discriminated and powerless of urban society by granting them the right of self-determination.[23]

The 'Crosstown Community': vernacular design as political legitimation

Plans to replace seemingly run-down, minority neighbourhoods with inner-city expressways are not unfamiliar in postwar urban history.[24] The plans for a Crosstown Expressway on the southern edge of Philadelphia's Center City are hardly exceptional. The point here is to re-examine the way the planners' demand for this inner-city highway led to the complex political and professional involvement of Venturi and Scott Brown.

The idea of a thoroughfare had been on the Philadelphia City Planning Commission's (PCPC) drawing boards since the 1940s. In 1957 the project was promoted to Interstate status - meaning that the Federal government would sponsor it - and the name 'Crosstown Expressway' was beginning to be used officially.[25] This also implied a new quality of highway to be built. The PCPC stated its aims as follows: 'The [...] only satisfactory program is to build a primary system of express highways [...]. The mistake of "improving" purely residential streets for through traffic, including heavy trucks, can be avoided.'[26] As such, the expressway was to be part of a system of loops and radial connections with the suburbs. This highly abstract scheme was popular in planning theory at that time, based on ideas of the likes of Alker Tripp and Patrick Abercrombie or Robert Moses.[27] It was embedded in a discourse on the interrelationship between suburbanisation,

decentralisation and infrastructure, the assumption being that the inner cities would only be able to face the challenge of decentralisation if traffic was enabled to move swiftly into, from and around the city. The proposed solutions were extremely schematic, meaning that the basic idea of loops and radial expressways was indifferently imposed on cities.[28] One of the main proponents of such a system was the Greater Philadelphia Chamber of Commerce, representing to a large extent inner city business interests. The neighbourhoods where the expressways were to be constructed were of no specific interest, except that acquisition costs had to be low and that projects, as critics claimed, were placed so as to eradicate social problems. In any event, the opinion of people living or making business in the area affected did not matter much from this perspective.

As the plans for the Crosstown Expressway became public, a group of concerned citizens assisted by liberal-minded organisations joined forces in 1967 to form the Citizens' Committee to Preserve and Develop the Crosstown Community (CCPDCC). The group protested the City's and Highway Department's plans, but also fostered the idea of developing an alternative vision for the area.[29] The need for a vision for the 'Corridor', as it came to be called, was indeed paramount. South Street, the street identified for demolition in the official plans, was easily denounced as dysfunctional, run-down, and therefore not worth preserving. Its commercial use was dominated by low-budget stores serving local and low-income customers from throughout the city and the region. Its appearance corresponded to this function. Ever since the proposed expressway was announced, abandonment and decay due to disinterest in maintaining property and public space in the 'Corridor' had further worsened the conditions in the area.[30]

The CCPDCC had already been discussing a number of alternative proposals for the future of South Street, when in June 1968 Venturi and Scott Brown were introduced to the group. The connection stemmed primarily from Venturi's father, who owned a store on South Street, but also from the growing interest of the artistic community in the area where at this point cheap shops were to be had.[31] At first, the CCPDCC core members seemed to have been somewhat sceptical of the offer, but finally agreed to co-operate with the architects. Scott Brown took primary responsibility of the project.[32] The intention of the collaboration was to develop an alternative plan for the 'Corridor' to fend off the City's intrusive proposals effectively. Even as City officials accepted the demand for low-rent commercial space and community facilities in the area, they met those concerns by proposing a megastructure to be built on top of the expressway. Intended to pacify the citizens' initiative on the basis of being responsive to social issues, this proposal did not, however, address the core of the criticism which aligned the right of self-determination with a minimal intervention in the built environment.[33]

The citizens' initiative seems to have been familiar with Venturi and Scott Brown's opinions about the role of planners and architects and the right of self-determination. Yet it remains unknown how much the activists fighting the Crosstown Expressway exactly knew about Venturi and Scott Brown's architectural theories to be published in *LLV*. It was probably more of an underlying feeling that the architects were essentially on the same wavelength.[34] The parallels between the South Street and the Las Vegas projects are striking. Both streets were primarily commercial in their use and appearance, and both were in a sense aesthetically unregulated fields of vernacular architecture. Pictures taken by the architects on South Street in 1968 resemble photographs that were later published in *LLV*, showing how close the two projects were in the eyes of Venturi and Scott Brown.[35] It was not only the aesthetics, but also Venturi and Scott Brown's approach that indicates: 'South Street probably

relates to Las Vegas in its acceptance of reality [...]. It relates to the attempt to look non-judgementally, being sympathetic to the values and tastes of the South Street community.'[36]

Aspirations were high on both sides. Venturi wrote to Alice Lipscomb, one of the leading figures of the citizens' initiative: 'We too have high hopes for our association with you [the CCPDCC, S.H.]. This promises to be one of our most interesting and challenging projects we have ever worked on.'[37] In part it was the fascination of working together with the community that attracted Scott Brown and Venturi. The architects' work went beyond interpreting the prevalent features of the built environment as a source of design. Instead they were actually talking and interacting with the community, the 'architects' of the vernacular. Venturi and Scott Brown saw their involvement as a means to help out the community and the citizens' initiative. The architects shared with the concerned citizens the opinion that the plans for the Crosstown Expressway were racially and socially biased and therefore essentially unjust. The argument was that the expressway was intended to separate the poor African-American neighbourhoods to the south from the Central Business District and the upper-class neighbourhoods of Society Hill or Rittenhouse Square to the north. To make things worse, the proposed expressway was to run through an area where Philadelphia's black population was traditionally concentrated.[38] To white liberals, projects such as the Crosstown Expressway were anathema, and against the background of growing racial tensions in the late 1960s they seemed utterly reckless. Especially Scott Brown seems to have been genuinely motivated by the political implications of the project.[39] In retrospect, Venturi and Scott Brown still legitimise their involvement by citing the ultimate success of the opposition against the expressway. On their website they conclude: 'The plan proposed placed control of local planning in community hands [...]. This plan was successful and the expressway was defeated

and South Street is a vital neighbourhood today.'[40] The statement implies that their commitment made a political difference.

What then was the actual role of Venturi and Scott Brown in the conflict over the Crosstown Expressway that was eventually defeated? From the beginning, the citizens' initiative had an uneasy feeling about the co-operation. On the one hand they relied on Venturi and Scott Brown's expertise, and on the other hand they felt that the architects had to be kept under close control. After all, it must have seemed clear that Venturi and Scott Brown had an agenda of their own, which was aligned with the communities' goals but certainly not identical to them. While the CCPDCC mandated them to engage in very detailed negotiations with the Philadelphia City Planning Commission, who seemed to be the appropriate addressee for proposals to redevelop the 'Corridor', the citizens retained in a letter to the architects that: 'In this work you will co-operate with the staff of the Planning Commission to the extent consistent with community objectives, but you will at all times represent the objectives of the Citizens Committee.'[41] Even though the mission statement issued by the CCPDCC reveals the intention to control the architects tightly, there was no doubt that the citizens' initiative needed their expertise - and also their reputation.

In August 1968, Scott Brown presented a first proposal to redevelop the South Street Corridor to the members of the CCPDCC. In keeping with her aim to plan for a vernacular environment she posed: 'A local store owner may accept a yearly income well below that considered feasible by the market analysts and yet be comparatively well off on South Street.'[42] In doing so, she highlighted the connection between economic necessities and design. Taking into account the specific purpose of the commercial 'Strip' along South Street as a low-budget shopping area led to the conclusion that any kind of aesthetic refinement was neither desired nor needed. *LLV*

echoes this link between highly specific commercial purposes and the choice of design: 'words and symbols may be used in space for commercial persuasion.'[43]

The central proposition that Scott Brown made also reflected an issue addressed in Venturi and Scott Brown's analysis of the Las Vegas Strip the relationship between speed, space and size. Movement in cars required different symbols and hence aesthetics than did signage for pedestrians. South Street's exuberant commercial signage was a good example of complex and not conventionally pleasing yet functioning symbolism that Scott Brown argued was worth preserving. In analogy to Las Vegas, Scott Brown proposed a pedestrian version of the 'Strip'. She suggested a continuous ribbon of commercial development along South Street, concentrated around a number of 'nodes', which were to include clusters of public facilities. By concentrating efforts at these 'nodes' the proposal hoped to enhance its impact on future progress.[44] Most importantly, the alternative plan devised by Scott Brown on behalf of the CCPDCC was actually based on very minimal physical intervention - certainly when compared to the highway proposal and other alternative schemes such as the megastructure proposal. It built on the existing structures and aesthetics of South Street and made them into the core of the future development. The intended effect was to reduce outside intervention in the 'Crosstown Community' by gauging it against existing commercial use. To prove that such a development was possible - in the community there was some doubt that there were enough businesses left to support such a continuous commercial 'Strip' - Scott Brown launched a survey of the commercial enterprises along South Street. The surveyors found that: 'Of the 798 addresses along South Street 30% are vacant stores or empty shells and 13% are residences, but, 53% are occupied by functioning commercial enterprises. Despite its outward appearance, South Street is a street of considerable commercial activity.'[45] While the figures themselves appear to be low, this optimistic rhetoric reveals the potential Scott Brown and her collaborators attributed to South Street as it existed both in terms of its aesthetic appearance and the community's commitment.

The vision Scott Brown developed on the basis of these observations, which were closely related to those she and Venturi made in Las Vegas, went beyond retaining the character of the low-budget commercial district. The architects thought it was promising to exploit the characteristics of South Street and capitalise on its peculiarities. Again they struck a connection between the political goal of advancing the local residents' situation and the vernacular aesthetic. Scott Brown's proposal to the CCPDCC stated: 'Revitalization of the commercial activities along South Street to enable local store owners to attract a much wider market. Encouraging and assisting local residents to become store owners on a revived South Street. An accompanying physical renovation of existing storefronts emphasizing their unique architectural quality.'[46] Focusing on the 'main street' appearance and originality of South Street was also intended as a means of marketing that district and attracting outside businesses. But local residents did not seem to mind. On the contrary, Venturi and Scott Brown's visions were applauded by some in the local community as bringing up-scale development to the area. *The Queen Village Crier*, a neighbourhood organisation newsletter, concurred: 'One of the most exciting ideas in the South Street renewal plans concerns the Queen Village end of South Street. A San Francisco-style Fisherman's Wharf, with restaurants and small shops overlooking the Delaware River...'[47] To some extent economic success served as a benchmark for the viability of vernacular aesthetics, something that was not entirely compatible with the notion of self-determination.

Over the next few years the area underwent dramatic change. The 'South Street Renaissance'

had a decisive impact among the factors eventually halting the plans for the Crosstown Expressway in 1973. The turn-around in the 'Corridor' showed that Scott Brown's concept had reverberated. And it was indeed the vernacular aesthetics Venturi and Scott Brown had popularised that fuelled the influx of new stores and commercial activity. But, it appealed not so much to long-established resident entrepreneurs and customers as it did to the young alternative scene. The list of stores concentrating on arts and crafts, second-hand clothing and ecologically produced food that had opened on South Street between 1968 and 1972 reads like a caricature of 'hippie-capitalism': 'Dhanalakshmi: [...] Come here for some Cosmic Ice Cream [...] The Works Craft Gallery: [...] Exhibition of Batiks [...] Eyes Gallery: [...] Pre-Columbian & Pre-Incaic Ceramics, weavings & jewelry [...] Coyote: [...] Recycled clothes of every kind...'[48] These new entrepreneurs might have realised that their presence ran counter to the original residents' right of self-determination, but they also emphasised their positive influence on South Street: 'Though created by the new people, it is, in a very real sense, a renaissance for the many traditional merchants and residents too - people who have seen their homes and hopes stifled by 25 years of intensive bureaucracy.'[49]

This new development on South Street pointed to a dilemma inherent in propagating vernacular aesthetics. By the early 1970s it appealed to a growing proportion especially of young Americans. It did so primarily because it came to represent authenticity, and, in a way, the right of self-determination. The right to retain 'ugliness' became a political statement of the period shared with the views of a new generation of architects and urban planners. Venturi and Scott Brown played an important role in promoting and explaining the interconnection between the vernacular aesthetic and the right of self-determination.[50]

Conclusions: architectural theory and political history

Venturi and Scott Brown's engagement in the controversy over Philadelphia's proposed Crosstown Expressway highlights the duality of the architect's role as an actor in society. On the one hand they needed to position themselves within the community of professionals concerned with urban planning and architecture: sociologists who advanced the notion of a right of self-determination, such as Gans, and older, established planners like Edmund Bacon, who were not convinced of self-determination as the most promising foundation of urban planning. On the other hand they needed to interact with local inhabitants: with community organisers involved in the citizens' initiative against the Crosstown Expressway, but also with the Chamber of Commerce that relentlessly promoted the Crosstown Expressway. Consequently, the architectural discourse in which Venturi and Scott Brown were engaged related to political history on two levels. The intellectual environment in which their ideas developed throughout the 1960s was highly politicised in its theoretical premises, but also their everyday practice related to situations that were politically charged.

Venturi and Scott Brown were convinced that self-determination in urban contexts was a valuable source of sound architectural design and a legitimate political goal. Ultimately, their opinion about the planning process had its roots in beliefs about how society worked, a particular outlook on the rising rights-consciousness in American society, and opinions about how conflicting rights were to be weighted, fostered by their intellectual environment in academia. Through their engagement in the 'Crosstown Controversy' they wanted to show that the assumptions they extracted from their observations of the Las Vegas Strip served as a viable approach to architectural design and so demonstrate that the instructions they formulated from the passive perspective of an observer could actually be used actively in urban design.[51] It can further be

understood as an attempt to show that vernacular aesthetics were an equivalent of the notion of self-determination in the planning process.

This intention superimposed the actual interest in the fate of the inhabitants and their right to self-determination. This is not to narrow the architects' honest concern for the 'Crosstown Community'. And yet this concern was to some extent instrumental to their argument for vernacular architecture. With their involvement in the 'Crosstown Controversy', Venturi and Scott Brown - perhaps predominantly - addressed the academic community. To make their point elaborated in *LLV*, in an intellectual environment that saw the community's right of self-determination as a means of social advancement, it was essential to Venturi and Scott Brown's argumentation to invoke the struggle against the expressway as an example of that right.

In the confrontation over the Crosstown Expressway, Venturi and Scott Brown found themselves in a constellation of very different groups of actors. The group the architects felt most sympathetic towards was, of course, the CCPDCC. They shared with them the conviction that the proposed expressway was an outrage and a political matter. But, the citizens' initiative did not really want Scott Brown and her co-workers to come up with plans of their own. Instead, they postulated that the architects were willing to adjust their proposals to the political will of the organised local citizenry. This was not entirely the case. Venturi and Scott Brown accepted the political goals of the CCPDCC as legitimate and desirable but pursued their own agenda of proving the viability of vernacular architecture. In a sense the citizens group and the architects were in a win-win situation. And indeed, the CCPDCC was successful in pursuing this strategy. The citizens' initiative was able to enhance the legitimacy of its proposal for the revitalisation of the 'Corridor' by referring to the involvement of such prominent architects as the firm of Venturi and Scott Brown.

The combined influence of the CCPDCC, Scott Brown, and a number of other actors who rose against the expressway proposal was high, but its success was also assured by the simultaneous dithering of the city administration. As early as 1968, Mayor James Tate declared the Crosstown Expressway was 'either dead or dying a slow death'.[52] But this was not the last word on the issue and the Chamber of Commerce and the State Highway Department kept the idea alive - with some temporary success - until 1973. The Philadelphia City Planning Commission, in charge of designing whatever solution was politically feasible, subsequently moved ahead on very diverse and even contradicting plans: they made surveys for a depressed highway, on solutions for a 'cover' on top of the expressway, and planned for a revived South Street at different stages throughout this period.[53] In the context of such insecurity, the stern and convincing position of the CCPDCC in collaboration with Venturi and Scott Brown was crucial. For the Planning Commission the architects, and not so much the citizens' initiative, were an appropriate partner; as professionals, they had to be taken seriously.[54] For the concrete negotiations it seems to have been crucial that Venturi and Scott Brown confronted the staff of the Planning Commission with their visions that were coherent with the political values they built their reputation on. Responsiveness in the local power structure - be it through sympathetic citizens' initiatives or indecisive authorities - was a crucial precondition for the implementation of any idea derived from a specific standpoint of architectural theory.

The world view that Venturi and Scott Brown brought to this project was not necessarily very similar to that of other key actors - not even those of the citizens' initiative that mandated the architects. Reference to the 'community' was a widely accepted form of operationalising the concept of self-determination: the right of self-determination was attributed to the 'community' and came to be considered the

prime source of legitimation for urban planning.

The problem the opponents of the Crosstown Expressway had to face - and community-based planning in general - was that this 'community' remained in most cases an imagined entity. With Venturi and Scott Brown, a certain image of the vernacular intertwined with a certain image of the 'community'.[55] Problems became apparent when the CCPDCC set out to organise the affected neighbourhoods more formally. Most of them already had neighbourhood associations, while some additional ones sprung up during the conflict. They all claimed to represent the people of a certain area, while in fact most of them were based on ethnic groups - mostly African-, Polish- and Italian-American. Due to this fuzzy definition inherent in the concept of 'community' the areas they claimed to be responsible for not only overlapped, but there was a good deal of distrust and diverging interests among the neighbourhood organisations.[56]

Taking the right of self-determination seriously was easy when there was an expressway to be opposed, but it became a difficult tool for generating a positive vision, when it tended to be shaped by racist attitudes that impeded collaboration. Invoking the right of self-determination and appealing to the 'community' did not necessarily lead to the results intellectuals had thought it would. The discourse in academia that had preceded the many experiments in urban planning and architecture around 1970 centred on the idea that the 'community' was the source of alternative and inherently progressive solutions to urban problems. Many of those professionals developing their ideas in the 1960s believed that a new and more humane urban form could be derived from granting disadvantaged citizens a larger influence on the planning process. In reality, as the example of Venturi and Scott Brown's involvement in the revitalisation of the South Street 'Corridor' shows, making the right of self-determination the basis for urban planning and architectural

design was more complex than assumed: in many cases it became an extremely defensive tool often combined with conservative notions. So, collaboration with the 'community' could be a disappointing experience - leading again to a more disinterested and less overtly politicised current in architectural thought.[57] Perhaps this was one reason why Venturi and Scott Brown refrained from explicit political statements in *LLV* and did not refer to their South Street experience in any way.

Relating Venturi and Scott Brown's statements on architectural design to their engagement in the 'Crosstown Controversy' highlights a specific role architects play as actors in society. They were not merely 'translators' between parties or between the desires of the local citizenry and the official planning process but clearly followed an agenda of their own. The architects acted as political stakeholders, whose expertise carried weight, not merely as specialists for design commissioned by politicians, investors or, for that matter, citizens' initiatives, but in positioning themselves in relation to other actors the way they thought would best fit their own goals and convictions - with mixed results.

Notes

1. Robert Venturi, Denise Scott Brown and Steven Izenour, *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*, revised edition (Cambridge, Mass.: MIT Press, 1977), p. 6.

2. Cf. Peter Hall, *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century* (Oxford: Blackwell, 2002), pp. 219-25.

3. William F. Whyte, *Street Corner Society: The Social Structure of an Italian Slum* (Chicago: Chicago University Press, 1943).

4. Cf. Rolf Lindner, *Walks on the Wild Side: Eine Geschichte der Stadtforschung* (Frankfurt am Main: Campus, 2004), p. 162f.

5. Denise Scott Brown, 'Learning From Brutalism', in *The Independent Group: Postwar Britain and the aesthetics*

of Plenty, ed. by David Robbins (Cambridge, Mass.: MIT Press, 1990), pp. 203-06; Denise Scott Brown, 'A Worm's Eye View of Recent Architectural History', *Architectural Record*, 172 (1984), pp. 69-81 (p. 75).

6. Herbert J. Gans, *The Urban Villagers: Group and Class in the Life of Italian-Americans* (New York: Free Press, 1962).

7. Ibid., p. 309.

8. Ibid., p. 316.

9. Paul Davidoff, 'Advocacy and Pluralism in Planning', *Journal of the American Institute of Planners*, 31 (1965), pp. 103-15.

10. Letter from the University of Pennsylvania Student Planners Association to Paul Davidoff (October 3rd, 1962), Architectural Archives of the University of Pennsylvania (ArchA), 095, 228.

11. Letter from the University of Pennsylvania Student Planners Association to Edmund Bacon (May 21st, 1962), ArchA, 095, 213.

12. Edmund Bacon, *Current Problems of the Planning Profession: A Talk Presented to the Annual Conference of the American Institute of Planners* (October 27th, 1963), ArchA, 095, 256.

13. University of Pennsylvania Student Planners Association, Notes on a discussion with Paul Davidoff and Edmund Bacon (February 1963), ArchA, 095, 228, p. 4.

14. Edmund Bacon, *Current Problems of the Planning Profession: A Talk Presented to the Annual Conference of the American Institute of Planners* (October 27th, 1963), ArchA, 095, 256.

15. Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961); Martin Anderson, *The Federal Bulldozer: A Critical Analysis of Urban Renewal 1949-1962* (Cambridge, Mass.: MIT Press, 1964).

16. Bernard Rudofsky, *Architecture Without Architects: A Short Introduction to Non-Pedigreed Architecture* (New York: Doubleday, 1964).

17. Alexander von Hoffman, 'A Study in Contradictions: The Origins and Legacy of the Housing Act Of 1949', *Housing Policy Debate*, 11 (2000), pp. 299-326 (p. 321); Jon C. Teaford, *The Rough Road to Renaissance:*

Urban Revitalization in America, 1940-1985 (Baltimore: Johns Hopkins University Press, 1990), p. 181f.

18. Scott Brown, 'Learning From Brutalism', p. 204f.

19. Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art, 1966), p. 22.

20. Cf. Venturi, Scott Brown, Izenour, *Learning from Las Vegas*, p. 104f.

21. Cf. Jessica Lautin, 'Learning from Levittown. Venturi and Scott Brown's Approach to Architecture in Teaching and Suburbia', Paper presented at The Society for American City and Regional Planning History 12th National Conference (October 25-28, 2007).

22. Cf. Hall, *Cities of Tomorrow*, p. 323.

23. Cf. Sarah Chaplin, 'Heterotopia Deserta: Las Vegas and Other Spaces', in *Intersections: Architectural Histories and Critical Theories*, ed. by Ian Borden and Jane Rendell (London: Routledge, 2000), pp. 203-20 (p. 211f).

24. Cf. Raymond A. Mohl, 'Stop the Road. Freeway Revolts in American Cities', *Journal of Urban History*, 30, 5 (July 2004), pp. 674-706.

25. Philadelphia City Planning Commission, *City Planning in Philadelphia: A Record of Progress 1952*, p. 14; Greater Philadelphia Movement, *Annual Report 1957*, Temple University Urban Archives (UrbA), Acc. 294, 296, 307, 311, Box 1; Philadelphia City Planning Commission, *Annual Report 1958*, p. 21; Harriet Johnson and Thomas Reiner, *A Technical Critique of the Proposed South Street-Crosstown Expressway: Prepared for the Citizens Committee to Preserve and Develop the Crosstown Community* (1968), ArchA 225. II.A.178.23, p. 6.

26. Philadelphia City Planning Commission, *Annual Report for 1946*.

27. For New York, cf. Robert Fishman, 'The Regional Plan and the Transformation of the Industrial Metropolis', in *The Landscape of Modernity: New York City, 1900-1940*, ed. by David Ward (New York: Russell Sage Foundation, 1992), pp. 106-25 (p. 119ff).

28. Denise Scott Brown criticised this approach in 'On Pop Art, Permissiveness and Planning', *Journal of the American Institute of Planners*, 35 (1969), pp. 184-86.

29. Citizens Committee to Preserve and Develop the Crosstown Community, *Position Statement* (not dated), ArchA, 225.II.A, 24.29.

30. Citizens Committee to Preserve and Develop the Crosstown Community, *Planning Committee Report* (May 1968), ArchA, 225.II.A, 178.16; Gladstone Associates, *South Central Project Area Philadelphia. Phase One Submission* (July 1972), ArchA, 225.II.A, 102.15.

31. Denise Scott Brown, *Urban Concepts* (London: Academy Editions, 1990).

32. Denise Scott Brown, Notes (June 10th, 1968), ArchA, 225.II.A, 25.1; Venturi and Rauch, South Street Hours (1968), ArchA, 225.II.A, 178.22.

33. 'Mayor Orders Housing Project On Expressway', *The Philadelphia Inquirer* (August 27th, 1967); cf. Marvin Verman, 'A Proposal to Use Existing Federal Mechanisms to Make this Expressway a Seam in the City's Fabric', *Architectural Forum*, 135 (1971), pp. 44-45.

34. Scott Brown, *Urban Concepts*, p. 34; Denise Scott Brown, 'An Alternate Proposal that Builds on the Character and Population of South Street', *Architectural Forum*, 135 (1971), pp. 42-44.

35. For some photographs see: Venturi, Scott Brown and Associates, <http://www.vsba.com/projects/fla_archive/060slide1.html> [accessed 18 November 2008].

36. Nancy Goldenberg, *Venturi and Rauch and the Philadelphia Crosstown Expressway: A Fight to Save Main Street* (May 17th, 1977), ArchA, 225.II.A, 178.26, p. 6.

37. Letter from Robert Venturi to Alice Lipscomb (June 27th, 1968), ArchA, 225.II.A, 178.22.

38. People for Human Rights, *A Visitors Guide to Racist Planning in Philadelphia* (June 1968), ArchA, 095, 427.

39. David B. Brownlee, 'Form and Content', in *Out of the Ordinary: Robert Venturi, Denise Scott Brown and Associates - Architecture, Urbanism, Design* (New Haven: Yale University Press, 2001), pp. 2-89 (p. 47f.).

40. Venturi, Scott Brown and Associates, *The Philadelphia Crosstown Community*, <http://www.vsba.com/projects/fla_archive/60.html>[accessed 18 November 2008].

41. Letter from the Citizens Committee to Preserve and Develop the Crosstown Community to Venturi and Rauch (June 17th, 1968), ArchA, 225.II.A, 178.22.

42. Denise Scott Brown, *First Report to the Citizens' Committee to Preserve and Develop the Crosstown Community* (August 6th, 1968), ArchA, 225.II.A, 24.27, p. 13.

43. Venturi, Scott Brown and Izenour, *Learning from Las Vegas*, p. 9.

44. Denise Scott Brown, *First Report to the Citizens' Committee*, p. 5f.; Tim Barrow, Memo re. Initial Reactions to Crosstown Community Plan Prepared by Venturi & Brown for the Committee to Preserve and Develop the Crosstown Community (September 25th, 1968), ArchA, 225.II.A, 178.19.

45. Duane Ball, T*he Commercial Redevelopment of South Street* (not dated), ArchA, 225.II.A, 102.15.

46. Denise Scott Brown, *CC 2 Proposal* (September 26th, 1968), ArchA, 225.II.A, 25.3.

47. Queen Village Neighbors Association, *Queen Village Crier* (August 1969), ArchA, 225.II.A, 102.13.

48. South Street Renaissance, *Third Annual South Street Walking Tour* (March 1972), ArchA, 225.II.A, 102.13.

49. South Street Renaissance, Open Letter (October 1972), ArchA, 225.II.A, 102.13.

50. Robert Goodman, *After the Planners* (New York: Simon and Schuster, 1971), p. 132f.

51. Scott Brown, *An Alternate Proposal*, p. 44.

52. 'Crosstown Link Is "Dead" Tate Declares', *The Evening Bulletin* (March 25th, 1968).

53. Michelle Osborn, 'The Crosstown is Dead. Long Live the Crosstown', *Architectural Forum*, 135 (1971), pp. 38-41.

54. Denise Scott Brown, Addition to South Street Article (July 7th, 1971), ArchA, 225.II.A, 24.27.

55. Denise Scott Brown, Memo to Julia Robinson re. Scope of planning services described in SC-PAC's contract with the Redevelopment Authority (January 18th, 1972), ArchA, 225.II.A, 175.10.

56. South Central Project Area Committee Corporation, *ND 508 Citizen Participation Report* (not dated), ArchA, 225.II.A, 102.1; South Central Philadelphia Project Area Committee, *Monthly Report* (December 1971),

ArchA, 225.II.A, 102.6; South Central Project Area Committee Corporation, Board of Directors Meeting No. 26 (January 18th, 1971), ArchA, 225.II.A, 102.10; Ellen Goldberg, Note for Denise Scott Brown (December 1969), ArchA, 225.II.A, 178.26.

57. Goodman, *After the Planners*, p. 114f.

Biography

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The Art of Displacement: Designing Experiential Systems and Transverse Epistemologies as Conceptual Criticism

Rolf Hughes

It is equally deadly for a mind to have a system or to have none. Therefore, it will have to decide to combine both.
Frederich Schlegel (1798)

Each member of society can have only a small fraction of the knowledge possessed by all, and each is therefore ignorant of most of the facts on which the working of society rests ... civilization rests on the fact that we all benefit from knowledge which we do not possess. And one of the ways in which civilization helps us to overcome that limitation on the extent of individual knowledge is by conquering ignorance, not by the acquisition of more knowledge, but by the utilization of knowledge which is and which remains widely dispersed among individuals.
F.A. Hayek, *The Use of Knowledge in Society* (1945)

I put a picture up on a wall. Then I forget there is a wall. I no longer know what there is behind this wall, I no longer know there is a wall, I no longer know this wall is a wall, I no longer know what a wall is.
Georges Perec, *Species of Spaces and Other Pieces* (1974)

A theorist is one who has been undone by theory.
Irit Rogoff, *From Criticism to Criticality* (2003)

What would it mean to be a 'Conceptual critic'? To conceive of ideas and methodologies as 'emblems' and thereby create an *ars combinatoria* for the generation of theory? To investigate how meaning works

through 'playing' with science, as Roland Barthes suggests, 'like a gadget'?[1] This paper attempts such an experiment, exploring design, research and theory subjected to *transverse epistemologies* - a 'flow of transformations' through processual themes such as authorship, remediation, experience design, and smuggling, overflowing into political and philosophical areas such as social intervention, disruptive innovation, performative knowledge, gesture versus identity. I argue that 'trans-disciplinary' methodologies require a liminal, 'neither/nor' mindset, and this leads me to the central theme of the paper: boundary concepts. How should one identify the appropriate 'boundaries' of a given design or critical practice? What if each 'context' has become a moving target? Swept along on each current of inquiry, my aim is not to nail such concepts to the wall of reason with the hammer blows of scholarly argumentation, but rather to set a number of related themes rippling beneath the cool gaze of the reader.[2]

My stated concern is with 'neither/nor' logic - *between*, *across*, and *beyond* existing disciplines - and this implies in turn a concern with 'relationality' (i.e. *how* we establish relations, positions, borders between different disciplinary themes and methods) and thus the nature of distinction itself. Yet to distinguish (and thereby establish relations *between*) entities, obliges us to confront a problem that is both ancient and contemporary, that affects the way we think of disciplinarity, interdisciplinarity, networks of various kinds, and transdisciplinarity - namely the problem of 'substance' ('content' or 'matter'). What

is the fundamental property of, say, a creature, a subject, or the world itself that allows us to categorise matter within such terms? The answer is less likely to be found in the fact *that* a thing exists (a dodo, decision theory, or 'Planet Earth') than in *how* it works. The critic, curator, and systems theorist Jack Burnham anticipated the point in his 1968 essay 'Systems Esthetics':

Increasingly 'products' - either in art or life - become irrelevant and a different set of needs arise: these revolve around such concerns as maintaining the biological livability of the earth, producing more accurate models of social interaction, understanding the growing symbiosis in man-machine relationships, establishing priorities for the usage and conservation of natural resources, and defining alternate patterns of education, productivity, and leisure. In the past our technologically-conceived artifacts structured living patterns. We are now in transition from an object-oriented *to a* systems-oriented *culture. Here change emanates, not from things, but from the* way things are done.[3]

The paradigm shift that Burnham identifies from object to system is representative of a broader transition between major scientific, technological, artistic and theoretical concepts over the last fifty years or so, and corresponds to the 'morphological development' of such concepts that Thomas Kuhn has described in *The Structure of Scientific Revolutions* (1962). In what follows I will try to tease out some of the implications of this for architecture, design, and our relation to the notion of disciplinary identity.

A series of transformations
In opposition to what he characterises as a 'desperately static' view of architecture, one that regards buildings as inert masses of intention and execution, Bruno Latour argues that we should learn to look at architecture as a 'flow of transformations […] as movement, as flight, as a series of transformations'. Everybody knows, he claims, (and especially architects) that a building is 'not a static object but a moving project, and that even once it has been built, it ages, it is transformed by its users, modified by all of what happens inside and outside, and that it will pass or be renovated, adulterated and transformed beyond recognition'.[4] He concludes: 'Only by generating earthly accounts of buildings and design processes, tracing pluralities of concrete entities in the specific spaces and times of their co-existence, instead of referring to abstract theoretical frameworks outside architecture, will architectural theory become a relevant field for architects, for end users, for promoters, and for builders.'[5]

The question is: What should we expect from such 'earthly' accounts? What details, facts, atmospheres or affects should be included? To give an account of a *coming-into-being* - be it a person, a building, a process, or a nation - involves the problem addressed so memorably by Lawrence Sterne in *The Life and Opinions of Tristram Shandy*, namely, how far back should one trace a line of implied or assumed 'cause and effect' to understand the 'context' in which a new entity came into being?[6] And what of the 'earthliness' of these accounts? Are they swarming with 'angry clients and their sometimes conflicting demands […] legal and city planning constraints […] budgeting and the different budget options […] the logistics of the many successive trades […] the subtle evaluation of skilled versus unskilled practitioners […] the continuous demands of so many conflicting stakeholders - users, communities of neighbors, preservationists, clients, representatives of the government and city authorities', all the details that Latour finds lacking from the typical dehumanised renderings of 3D-CAD architectural fantasies?[7] Does this clamour from the real world make the representation more plausible, persuasive - in short, more 'real'? Or is this demand for greater 'authenticity' not part of the problem? Donald Preziosi writes that when 'seemingly secure oppositions between what we might want to believe are fact and fiction; history and poetry; reason and

emotion' are exposed by artifice, and particularly by what Plato called the pantomimic or mimetic arts, as 'circumstantial and mutable effects of human artistry', there are repercussions for the way we conceptualise 'primary' and 'secondary' conceptual orders:

If we believe that a particular made thing 'represents' some essence (either metaphorically 'contained' in some thing or absent and elsewhere - the 'soul' or 'spirit' of its time and place), then it is obvious that the essence purportedly 'represented' may be represented in other ways, problematising the existence of that essence itself. Leading one to imagine that the essence supposedly represented is in fact created by its so-called 'representation'. Such an awareness obviously has the potential to undermine the claims of any political or religious power to security and truth.[8]

Alongside conceptual orders, the same considerations can be applied to the formulation of 'primary' and 'secondary' professional roles - artist and critic, for example, or 'designer' and 'user'. If design is an actualisation of critical practice, the breathless arrival of design criticism 'after the event' becomes a form of *ekphrasis* around an abandoned site - the critical equivalent of the 'utterly unrealistic' Euclidian space of 3D-CAD rendering that so provokes Latour.[9] This is to dissolve boundaries between practitioner and theorist, a separation that at various epochs has served both interest groups, allowing them room to manoeuvre in relation to changing configurations of power. 'One of the invidious tests in the academy for whether a notion or a practice has any value,' Victor Vitanza writes, 'is whether or not it can be generalized (is generic, accountable) and whether or not it is transferable (codifiable, teachable). All of Socratic and Platonic thinking (dialectics) deals with the central question of whether or not something (justice, piety, virtue, rhetoric, etc.) can be taught. If not, then, it is a mere knack, irrational, and thus left to the forces of chance.' Believing that we

are today 'far from being ruled by this kind of thinking', Vitanza adds, 'Not all knowledge is objective; much is personal knowledge, as Michael Polanyi says: We can know a great deal more than we can articulate. Not all knowledge is to be determined by *physis* or *nomos* but also by *kairos*, which as Eric C. White reminds us is a principle of "spontaneity and risk".'[10]

Michael Speaks's notion of 'design intelligence' - defined as 'practices [that] allow for a greater degree of innovation because they encourage opportunism and risk-taking rather than problem solving'[11] - demands a new kind of synthetic imagination, one that can be seen in the increasingly interdisciplinary ways of working of many contemporary artists, architects, and designers drawing on shifting constellations of art, science, the humanities and technology. Design tools and methodologies are being transformed in the pursuit of new areas of relevance, which makes significant demands on our critical resources. Previous concerns with origin, intentionality, agency and accountability, for example, are less likely to be illuminating when applied to cultural production characterised by 'post-human' creativity or a computer manifesting complex adaptive behaviours. Should then we *adapt* our existing critical tools - by focusing, for example, on the *visual* aspect of a genre such as 'evolutionary' design, or asking film animators to discuss the aesthetics of motion, or asking designers of interactive interfaces to evaluate the interactive experience of users in other fields? Such approaches, while useful for specific purposes, are of somewhat limited significance. As Stephen Wilson observes, 'literacy' is a key problem in 'information arts' fields - artists, audiences, art historians and critics alike will need to learn about the research areas that this work explores.[12] Just like early computer art pioneers such as Herbert W. Franke, Charles Csuri and Kenneth Knowlton, many current 'metacreationists' or 'information artists' (in the absence of more compelling descriptive tags) are interested not so

much in the final image or artefact produced, but rather in devising abstract generative processes, new kinds of artistic skills involving the development of innovative algorithms, and understanding and experimenting with organic matter such as cell manipulation or working with the constraints and possibilities of genetic materials. So this 'art of managing complexity', made necessary when formerly distinct disciplines not merely co-operate (as in interdisciplinarity), but merge to form new disciplines (as in transdisciplinarity), puts a strong emphasis on the 'appropriateness' of the methodologies and forms of communication used to connect ideas from distinct fields. We can learn from theories of metaphor and analogy in this respect.[13] But the notion of *transverse epistemologies* designates not so much a confluence of methodologies as an epistemological displacement from one area of relevance to another - that is to say, a rhizomic praxis of 'linking', 'seeing connections', generating 'networks' to arrive at new knowledge - requiring, in turn, theories of 'edges', 'borders', 'slippage' and 'distinctions' (otherwise *how* can we know *what* we are linking?). Such concepts imply a notion of a boundary or edge condition of 'substance' ('content' or 'material') - the 'matter' between which we are seeking to operate our conceptual looms and weave our connective threads. To work the space *between* disciplines, we may have recourse to liminal thinking - paradox and contradiction, epistemic control and release.

Or perhaps we look elsewhere for liminal metaphors and analogies - instead of curating, for example, with its assumption of framing value in sanctioned or quasi-institutional settings, we might explore the implications of a less familiar analogy, such as that of 'smuggling' (as Irit Rogoff proposes):

Smuggling operates as a principle of movement, of fluidity and of dissemination that disregards boundaries. Within this movement the identity [sic] *of the objects themselves are obscured, they are*

not visible, identifiable. They function very much like concepts and ideas that inhabit space in a quasi legitimate way. Ideas that are not really at home within a given structure of knowledge and thrive in the movement between things and do not settle into a legitimating frame or environment. The line of smuggling does not work to retrace the old lines of existing divisions - but glides along them. A performative disruption that does not produce itself as conflict.[14]

In the project *Parcel*, by the architectural research group KRETS (based in Stockholm, Sweden, and affiliated both to AKAD, the Academy for Practice-Based Research in Architecture and Design, and the architectural group SERVO), we find a parallel process.[15] Seeking new ways of establishing relations between everyday materials, audiovisual and digital technologies, the investigations of KRETS led them to the use of ink, not as a conventional tool of architectural representation (the artisan's authentic mark, or the genius's moody spatter across the drawing table), but as a potential means of transmitting electricity and signals between circuits.[16] A repurposing of methodologies from other disciplines or practices, *as well as* the materials themselves, becomes characteristic of design strategies that pursue a constellation of hybrid techniques while yet seeking to innovate through the selection and adaptation of existing forms. Bolter and Grusin use the term 'remediation' to describe this process:

[W]e call the representation of one medium in another remediation, and we will argue that remediation is a defining characteristic of the new digital media. What might seem at first to be an esoteric practice is so widespread that we can identify a spectrum of different ways in which digital media remediate their predecessors, a spectrum depending on the degree of perceived competition or rivalry between the new media and the old.[17]

Information here is understood as 'difference' in

an otherwise homogenous (and thus meaningless) system; it may concern reformulating an existing problem, applying a technology in a way previously unforeseen, combining the metaphors and references of one community of practice with the products of another to create a third, separate system, and so forth.[18]

Some may prefer to reformulate the question by considering instead the difference between disciplinary *identity* ('I am an architect') and *gesture* ('Je est un autre', in Rimbaud's famous phrase), a distinction that may be central to disciplinarity's epistemological stranglehold on our imaginations. Architecture delineates a broad sphere of practice; architects are (among other things) negotiators par excellence, needing to communicate successfully with a wide range of stakeholders (including engineers in all their guises, politicians, economists, urban planners, environmentalists, interior designers, artists, management consultants, business professionals, facility managers, lawyers and so forth).[19] What does it take for such a fragmented practice to congeal around a core disciplinary identity?[20] One answer might be: the capacity to interact at the level not of *substance* (depth, weight, disciplinary specialisation etc), but of *gesture* (the ability to express and negotiate - or modulate - Latour's 'context-in-flight'). Gesture is here conceived as an essentially performative mode, an escape from the 'anxiety of influence' that seems bound to any consideration of biological, cultural and historical 'identity'. The Czech novelist Milan Kundera explores this insightfully in his novel *Immortality*: 'If our planet has seen some eighty billion people,' he writes, 'it is difficult to suppose that every individual has had his or her own repertory of gestures. Arithmetically, it is simply impossible. Without the slightest doubt, there are far fewer gestures in the world than there are individuals. That finding leads us to a shocking conclusion: a gesture is more individual than an individual. We could put it in the form of an aphorism: many people, few gestures.' If we follow the implications

of this line of reasoning, we must line up alongside Marco Steinberg in noting that 'academia is going to have to challenge itself to define the right frameworks, incentivizing students and faculty to work in ways that may inherently contradict the established structures of success. The institutional dilemma is that with success comes rigidity towards change. The future will be in the hands of those whose past success won't create an insurmountable barrier towards rethinking how they operate in this design driven age.'[21]

Origins / Repurposing

In the modern period, the ability to design something 'deliberately' and 'at will' implies that such skills can be taught, passed on via courses, apprenticeship or some other pedagogic technique. An artefact with an identifiable origin (or set of origins, as in the case of design teams working on component parts) usually has been made for a purpose, and its performance in serving that purpose is the designer's responsibility. The dispersed or fragmentary modes of production of many contemporary practices unravel this binding of artefact to origin. Consider ownership rights in science, for example. These are today typically dispersed across a paradigm of multiple authorship, 'a fragmentation of scale undreamed of even a generation earlier' (according to Biagioli and Galison), one that furthermore demands that collaborators devise 'increasingly more elaborate systems to integrate their subgroups and participants into a whole':

How do we distinguish who or what is an author in such collaborations? Defining the author is an ever more difficult, tricky business as increasingly specialized and interdisciplinary work casts authorship in a different light within the diverse species of Big Science. Academic laboratories, nuclear weapons laboratories, and industrial sites all carry dramatically different, if not contradictory, values of openness, secrecy, publication, and credit. Accordingly, each develops its own, often divergent,

standards of authorship.[22]

Contemporary cultural production similarly often involves designers and non-designers collaborating with materials and tools that are typically different and sometimes incompatible. In the process conventional roles such as producer and client, architect and engineer, as well as existing distribution models are reconfigured. New media theorist Lev Manovich goes so far as to propose that the medium may now have eclipsed the message - film editing software, for example, may now have surpassed the output of the avant-garde *auteurs*: 'The greatest avant-garde film is software such as Final Cut Pro or After Effects which contains the possibilities of combining together thousands of separate tracks into a single movie, as well as setting various relationships between all these different tracks - and it thus develops the avant-garde idea of a film as an abstract visual score to its logical end, and beyond.'[23] The American filmmaker and activist Craig Baldwin cuts, splices, mixes and edits his films almost entirely from samples recycled from the twentieth-century image-reservoir of film and television, particularly science fiction and fantasy B movies, as well as (what he calls the 'touchstones of surrealistic magic') ethnographic, documentary, and educational films. This mode of production has obvious affinities to the sampling and recycling culture of hip-hop.[24] Yet many contemporary artists, architects and designers are less concerned with the logic of origins (resemblance, reproduction, representation as well as their satellites such as agency, ownership and intentionality) than with manipulating (or 'hacking') the 'source code' of media itself to create 'new media'. In his version of Dolly Parton's version of *The Great Pretender*, for example, John Oswald, Plunderphonics founder, does not merely sample, alter, add to, and/or subtract from the original recording - in fact, Oswald does not alter the original in any way, with the exception of one of its many parameters.[25] What we hear is a recording of Oswald playing Parton's track all the way through,

but transformed via vari-speed media - first, via a high-speed cassette duplicator, then an infinitely variable speed turntable, and finally a hand-controlled reel-to-reel tape, all seamlessly edited together. Aside from this performance of controlled deceleration and re-acceleration, the original recording remains untouched. Yet while the integrity of the source material is respected - only its pitch is altered through changes in speed - the interpretation and 're-presentation' of the material is clearly the result of Oswald's compositional intention, technical skill and artistic vision. Thus a new composition is created with its own logic, structure, sensuous tones and humorous or despondent pleading between male and female rivals for the same lover (thereby foregrounding the sexual insecurity or ambiguity of the original).[26] Oswald uses the media of vari-speed recording devices as tools for a performance that blends interpretation and authorship to the extent that the distinction ceases to make any meaningful sense. Interdisciplinary artists, architects and designers similarly appropriate and recontextualise ideas, discourses, forms and methods from other practices, letting the specific project determine the applicability and relevance of the materials, references and discourses adopted, rather than any real or imagined affiliation to disciplinary or institutional authority. Such practitioners provide strategies for managing the uncertainty of practice within a research context. But because they do not operate within a zone of ethical, political and philosophical neutrality, their assumed pragmatism also requires critical self-reflexivity.

Experience Design / Disruptive innovation
Design, then, has taken over the mantel from conceptual art in exploring the implications of shifting focus from the 'object' (artefact, collection or archive - library or database), towards 'information', including the question how expertise is 'actualised' (performed, articulated) *in practice*. This may well include an element of interpreting, adapting and applying information stored in various collection

systems (historical, methodological, educational or technical archives), but it also involves the imperative to communicate a meaningful experience in (or across) time. Such expertise is simultaneously 'situated', 'embodied', 'connective' and 'performative'; that is to say it draws on both practical as well as highly theoretical knowledge. To change the terms by which we describe (and conceive of) our various knowledge concepts is not a mere academic fad or philosophical whim; it affects the way we set about 'problem-solving' - or, if we might raise our level of ambition, 'disruptive innovation'.

The shift from 'object-based' to an 'information-based' culture demands that we reconsider the role of art, craft and design within such a culture. Towards this end, faculty at the Department of Inter-disciplinary Studies at Konstfack in Stockholm, led by Professor Ronald Jones, have over the past two years been developing a unique perspective on an emerging discipline - that of Experience Design. Experience Design is here conceived not as a means towards understanding and improving so-called 'user experience' of designed products, processes, services, events and environments, but as the design of human experiences over time with real and measurable consequences, thereby 'to persuade, stimulate, inform, envision, entertain, and forecast events, influencing meaning and modifying human behavior'.[27] Industry's deepening appreciation of consumer preference for experience over more traditional commodities, coupled with the 'dematerialization of the art object', in Lucy Lippard's phrase, are taken as indicators of the paradigm shift already mentioned - here, the privileging of 'experience creation' over object-making.[28] Such a shift highlights the need to investigate what new relevance experience-based culture can bring to established disciplines such as those within art, craft and design. While existing approaches to Experience Design have spanned areas as diverse as entertainment design, lifestyle design or web design (with the aforementioned 'user' focus), we prefer to

emphasise designing 'experience' itself - this, in our formulation, is inseparable from designing 'time'. So we design 'meaningful experience' over (or across) 'time'. This means that 'time' itself is our designers' primary 'media'. Experience + time requires a systems approach, integrating perspectives from the likes of psychology, phenomenology, interactivity, narrative (story telling), performance studies, architecture and dance. Our designers of experiential systems accordingly develop a narrative and/or performative approach to time, supported by the skills and methods of the established design disciplines informed by research from the humanities and natural sciences. This is a form of design as social intervention - or (the phrase we prefer) 'disruptive innovation'. Here's Burnham again from 1968:

The priorities of the present age revolve around the problems of organization. A systems viewpoint is focused on the creation of stable, on-going relationships between organic and nonorganic systems, be these neighborhoods, industrial complexes, farms, transportation systems, information centers, recreation centers, or any of the other matrices of human activity. All living situations must be treated in the context of a systems hierarchy of values. Intuitively many artists have already grasped these relatively recent distinctions, and if their 'environments' are on the unsophisticated side, this will change with time and experience.[29]

In a recent article on how designers are adopting the strategies of conceptual art, Ronald Jones cites Robert Pincus-Witten's distinction between ontological Conceptualism (advanced by Joseph Kosuth, among others, as an assault on art's very identity) and epistemological Conceptualism, which Pincus-Witten characterises as making or doing things 'for the kinds of information, knowledge or data which things or activities reveal' - in other words, an emphasis on the experience of knowledge production rather than its ontological end. Citing the increasing value of experiences over commodities

in the entertainment, airline and sports industries, as identified already in B. Joseph Pine II and James H. Gilmore's (1998) article 'Welcome to the Experience Economy', Jones comments:

[T]he potential of this methodology to design experiences in order to project power and influence has been consistently underappreciated by artists, especially when compared with contemporary designers who co-opted epistemological Conceptualism as a platform for designing the experiences of knowledge production, reception and comprehension across disciplines - often furthest from their own - affording them an expanding sphere of influence. [...] The customization of epistemological Conceptualism represents the most significant paradigm shift in living memory, as design professions migrate from myopic design assignments - design me a toaster - towards conceiving the intangible commodities that feed the experience economy - design me a system.[30]

The demand for a system over an object recalls 'Systems Esthetics', in which Burnham stated:

The systems approach goes beyond a concern with staged environments and happenings; it deals in a revolutionary fashion with the larger problem of boundary concepts. In systems perspective there are no contrived confines such as the theater proscenium or picture frame. Conceptual focus rather than material limits define the system. Thus any situation, either in or outside the context of art, may be designed and judged as a system. Inasmuch as a system may contain people, ideas, messages, atmospheric conditions, power sources, and so on, a system is, to quote the systems biologist Ludwig von Bertalanffy, a 'complex of components in interaction', comprised of material, energy, and information in various degrees of organization. In evaluating systems the artist is a perspectivist considering goals, boundaries, structure, input, output, and related activity inside and *outside the system. Where the object almost always has a fixed shape and boundaries, the consistency of a system may be altered in time and space, its behavior determined both by external conditions and its mechanisms of control. [...] [A] system esthetic is literal in that all phases of the life cycle of a system are relevant. There is no end product that is primarily visual, nor does such an esthetic rely on a 'visual' syntax. It resists functioning as an applied esthetic, but is revealed in the principles underlying the progressive reorganization of the natural environment. [My emphasis]*[31]

Architects, as has been noted, excel at designing systems, but Jones's point is applicable more widely than to the practice of architecture as conventionally conceived - it is the belief that 'designers should be critical thinkers and strategists first, capable of addressing cross-disciplinary problems by designing the social, political, economic and educational "systems" that give them greater reach, responsibility, influence and relevance'.[32] This is a more expanded role for the designer than simply that of problem-solver (with its associations of intervention in localised situations of intellectual spillage or accident); the problem-solver typically works within prescribed limits - 'fix it and be gone!' - while experience designers are required to synthesise a broad range of information from a diverse range of knowledge traditions. Even a 'simple' experience design project, for example, would likely involve research-related activities spanning behaviour that can be classed as teleological ('goal seeking'), conceptual, analytical, evaluative, quantitative, qualitative, hermeneutical ('interpretative'), generative, explorative and so forth. Each activity produces its own class of outcomes that need to be synthesised without damaging the integrity of the findings or the coherence of the experience design project as a whole.

This, then, is one reason why architecture may be a useful analogy to a nascent field such as that of

experience design. Both sets of designers increasingly face problems that are neither predictable nor simple, but rather highly complex. As a result, as Julie Klein has noted, 'the art of being a professional is becoming the art of managing complexity'.[33] In both cases (architecture and experience design), as in transdisciplinary practice-based research more generally, a particular synthesis of design intelligence and creativity is required. We have already mentioned Michael Speaks's notion of 'design intelligence'. The three types of creativity identified by Margaret Boden - combinatorial, exploratory, and transformational creativity – also help outline the particular style(s) of thinking involved:

Combinatorial creativity involves the generation of unfamiliar (and interesting) combinations of familiar ideas. […] Exploratory and transformational creativity are different. They're both grounded in some previously existing, and culturally accepted, structured style of thinking - what I call a 'conceptual space'. […] In exploratory creativity, the existing stylistic rules or conventions are used to generate novel structures (ideas), whose possibility may or may not have been realized before the exploration took place. […] It can also involve the search for, and testing of, the specific stylistic limits concerned. Just which types of structure can be generated within this space, and which cannot? Transformational creativity is what leads to 'impossibilist' surprise. The reason is that some defining dimension of the style, or conceptual space, is altered - so that structures can now be generated which could not *be generated before. Imagine altering the rule of chess, which says that pawns can't jump over other pieces: they're now allowed to do this, as knights always were. The result would be that some games of chess could now be played which were literally* impossible *before. The greater the alteration, and the more fundamental the stylistic dimension concerned, the greater the shock of impossibilist surprise.*[34]

In the *ars combinatoria* of 'Conceptual criticism' with which I began this discussion, as in transdisciplinary practice and the notion of 'disruptive innovation', Boden's three types of creativity - combinatorial, exploratory, and transformational - come together to generate new structures that, as described above, *could not* be generated before. It is the purpose of the next section to explore *why* this might be important.

Managing complexity / Disruptive innovation: the 'secret bridges' between knowledge

Certain problems or challenges (poverty, space exploration, health, security, play, for example) exceed the reach of any single conventional discipline and therefore require a co-ordinated, synthesising approach. 'Society has been served well by the pursuit of deep knowledge (the cornerstone of any self-respecting academic institution),' Marco Steinberg writes, 'but more and more the nature of today's "big picture" problems resides at the intersection of what we know. What is - for example - healthcare? It's not medicine, law, buildings, therapies, doctors, processes, ethics, or business but rather the convergence of all of them in a complex system. We need to first see the nature of these system problems to define the path towards more complete solutions. Not reductively, not as fragments, but in the complex, integrated and synthetic ways that drive them. These are the cornerstones of design, yet it's not design as defined by our professions, rather design as defined by our needs.'[35] These 'big picture' problems are typically engaged through transdisciplinary approaches. The Academy for Transdisciplinary Learning and Advanced Studies (ATLAS) states:

In following the transdisciplinary concept, researchers representing diverse disciplines work jointly to develop and use a shared conceptual framework that draws upon discipline specific concepts, theories, and methods, but addresses common problems through a new synthesis of a common ontology,

theories, models, and methodology.[36]

'If joint problem solving is the aim,' Helga Nowotny notes, 'then the means must provide for an integration of perspectives in the identification, formulation and resolution of what has to become a shared problem.'[37] As the prefix 'trans' indicates, transdisciplinarity denotes that which is *between*, *across*, and *beyond* the different disciplines (or, as Diana Domingues remarks, it 'establishes the "secret bridges" between knowledge, the unknown passages of theories, the hidden shared operations in knowledge generation at microbiological levels').[38] The assumption is that the uncertain space *between* and *beyond* disciplines is a rich seam of untapped information and potential insight, not least at the methodological level. At the same time, disciplinary research is not eclipsed or rendered obsolete by transdisciplinary research; rather the two approaches complement and clarify each other.

For designers, establishing the limits of professional practice must remain an open question. The designer who sets prescribed limits to his or her field of operations runs the risk of irrelevance in a rapidly changing economic climate. What, however, would it mean to design a genuinely transdisciplinary curriculum? What type of problems would such transdisciplinarians choose to address, using what synthesis of methods and materials? Would they even be considered designers, as we understand the term today?[39] In the logic of disciplinary identity - the partitioning of appropriate topics, references and methods, the opposition, juxtaposition, or integration of theory and practice, the inclusion and exclusion of categories, their 'binding' and dissemination - we see the power of the *how* alongside that of the *what* in the formation of disciplinary 'substance', 'content' or 'matter'. In his essay 'Borges and Conceptual Art', Gregory Ulmer writes: 'We have come around at last to the same relation between theoretical or pure research and applied knowledge that exists in

many other disciplines. One consequence of this shift, best exemplified in the work of the Tel Quel group in Paris, is the creation of an interdisciplinary genre in which theory precedes practice, which is a theoretical praxis. With this praxis criticism joins the vanguard - it is theory oriented towards the future of art, which concerns itself with the modes of art yet to be realized as well as with those now past.'[40]

We see an increasing number of disciplines that have been formed around no conventional 'content' per se: logistics, statistics, game theory, network theory, decision theory and so on.[41] What might we call the pursuit of unknowing, or *not* knowing? Is it a discipline, as George Steiner has claimed, of 'respect' in front of what the questions really are? And, if so, is such respect also the defining feature of our relation to 'higher' perspectives - the 'non-earthly' in contrast to the 'earthly' accounts that Latour called for - such as those promised both by religion and philosophy - that is to say a respectful acknowledgement of our extremely limited human capacity for understanding?

Let us take, as a final example, the Swedish artist duo Bigert and Bergström, whose project *Everybody Talks About the Weather, but Nobody Does Anything About It* (2007), dabbles in the stuff of weather itself, using dry ice to puncture a hole in a cloud and thereby produce 'physical nothingness'. Thus do we confront the question of 'substance' directly, while also circling back to our initial question of boundary concepts (i.e. what are the 'boundaries' of a given practice?) - to modify the weather may seem to be the work of, if not an *auctor vitae*, at least a pair of seriously over-extended egos. 'Cloud seeding' (to give the technique its official name) has been of considerable interest since the Second World War to the US Air Force as a means of weather control for military offensive purposes, as Ronald Jones has chronicled in his essay 'A gun in a knife fight'. But it is also worth remarking that projects such as *Everybody Talks About the Weather, but Nobody*

Does Anything About It reveal a shift in roles (a shift we find in bio-art too) from art as mere imitation of nature to nature as the material for artwork. Here then is one interesting problematisation of the concept of 'substance' - for, as Jones points out, what links both bio-art and Bigert and Bergström is (once again) a contested connection to 'the real':

The desire to transform the natural world as a work of art is an affinity Bigert and Bergström share with Steven Kurtz and other bioartists whose field has grown in direct proportion to advances in biotechnology. Controversial and topical subjects - genetically altered plants and animals, cloning - are bioart subjects and like environmental modification, whether for art or war, they are not only relevant subjects but they are real*. They are* more real *than Chris Burden's 747, 1973 where he took ritualized 'what if' pistol shots at a 747 departing Los Angeles International Airport. And where Burden never had to face up to culpability and catastrophe, for Kurtz, Bigert and Bergström it is unavoidable.*[42]

Is a discipline of unknowing, or not-knowing, rather a form of intellectual 'cloud seeding' whereby we risk facing, either when we return to earth or soar above the fog in our military-sourced hardware, a major epistemic hole of our own devising? One of the pioneers of systems applications, E. S. Quade, stated that 'Systems analysis, particularly the type required for military decisions, is still largely a form of art. Art can be taught in part, but not by the means of fixed rules...'[43] We might turn this the other way around and ask (as does Latour) why our art critics and humanities scholars have failed to revise their methodologies and learn from other forms of practice in the way that military planners, for example, routinely undertake; 'military experts constantly revise their strategic doctrines, their contingency plans, the size, direction, technology of their projectiles, of their smart bombs, of their missiles: I wonder why we, we alone, would be saved from those sort of revisions. It does not seem to me that we have been

as quick, in academe, to prepare ourselves for new threats, new dangers, new tasks, new targets.'[44]

A cautionary word to end: the concepts foregrounded in this essay - blurrings of boundaries, indistinctness, gesture, the 'trans' prefix as calculated epistemological slippage, and so forth - are admittedly seductive, not least (I have discovered) to architects, perhaps because they seem to promise imaginative emancipation and 'delirious' self-invention. This promise is at best deceptive - adaptable to emancipatory and reactionary ends equally. Bertold Brecht's warnings, issued from 1934 Germany in 'Writing the Truth: Five Difficulties', remain valid today, applying not only to writers, but to designers of experiential systems of all types. Thus I choose to close by recalling Brecht's words:

Nowadays, anyone who wishes to combat lies and ignorance and to write the truth must overcome at least five difficulties. He must have the courage to write the truth when truth is everywhere opposed; the keenness *to recognize it, although it is everywhere concealed; the* skill *to manipulate it as a weapon; the* judgment *to select those in whose hands it will be effective; and the* cunning *to spread the truth among such persons.*[45]

Notes

1. Barthes writes 'la modernité est essayée (comme on essaye tous les boutons d'un poste de radio dont on ne connait pas le maniement)', *Roland Barthes par Roland Barthes* (Paris: Seuil, 1975), p. 78. Cited in Gregory L. Ulmer, 'Borges and Conceptual Art', *boundary* 2, 5, 3 (Spring 1977, Duke University Press), pp. 845-62 (p. 854).
2. Compare the gaze of the ice fisherman or woman - the *vintermetare* or *pimplare* in Swedish - poised in the dark above the ice hole they have bored, ready to strike with spear or rod when their prey finally swims within sight; it is a gaze of keen concentration despite the demands of the monotonous vigil - hence 'cool'.

3. Jack Burnham 'Systems Esthetics', Reprinted from *Artforum* (September, 1968), http://www.arts.ucsb.edu/faculty/jevbratt/readings/burnham_se.html [accessed 18 March 2009].

4. An example, already mentioned, is that of *parkour*, or *l'art du déplacement*, whereby the urban landscape - irrespective of the original purposes of its component buildings and structures - becomes a series of obstacles or facilitators of human movement. According to David Belle, one of the founders of *parkour*, 'the physical aspect of parkour is getting over all the obstacles in your path as you would in an emergency. You want to move in such a way, with any movement, as to help you gain the most ground on someone or something, whether escaping from it or chasing toward it'. From 'Cali meets David Belle', http://www.pkcali.com/parkour_plugins/content/content.php?content.8 [accessed 18 March 2009].

5. Bruno Latour and Albena Yaneva, 'Give me a Gun and I will Make All Buildings Move: An ANT's View of Architecture', in *Explorations in Architecture: Teaching, Design, Research*, ed. by Reto Geiser (Basel: Birkhäuser, 2008), pp. 80-89. Available online: http://www.bruno-latour.fr/poparticles/poparticle/P-138-BUILDING-VENICE.pdf [accessed 18 March 2009].

6. As one example, Simon Barraclough's poem 'Bounded in a Nutshell' (2008) seeks to trace the material and resonant origins of a performance space by imagining the concert hall of Kings Place unfolding ('as history hurtled by') from 'a German acorn sweetened on the branch / until it reached its crucial mass / and blew the bolts to give itself to gravity', through 'six thousand moons', until fully grown and cut into 'an acre of veneer / to line this room, this snug nutshell, replanted in the earth / in which we sit and feel the taproot of the bass notes shift, / hear sonic tendrils lift.' Published online, http://www.guardian.co.uk/global/2008/oct/21/poetry-architecture-hardy-larkin-betjeman [accessed 18 March 2009].

7. Latour and Yaneva, 'Give me a Gun', p. 81.

8. Donald Preziosi, 'Afterword: Artifice and Interactivity', *media-N*, Fall 2006, 2, 3, on the theme 'Art in the Age of Technological Seduction'. Available on-line: http://median.shiftingplanes.org/issues/html_only/2006_fall/media_N_S2006v2n3.pdf [accessed 18 March 2009].

9. Latour and Yaneva, 'Give me a Gun', p. 81.

10. Victor J. Vitanza, 'Writing the Paradigm', review of Gregory L. Ulmer's *HEURETICS: The Logic of Invention* (1996). Available: http://www.altx.com/EBR/EBR2/R2VITANZA.HTM [accessed 18 March 2009].

11. Michael Speaks, 'Theory was interesting . . . but now we have work', *Architecture Research Quarterly*, 6, 3 (September 2002), pp. 209-12.

12. Stephen Wilson, 'Artificial Life and Genetic Art', in *Information Arts: Intersections of Art, Science, and Technology* (Cambridge, Mass.: MIT Press, 2002), p. 364.

13. See, for example, Jon Cook, 'Reflections on Metaphor', in *The Book of Models: Ceremonies, Metaphor, Performance*, ed. by Rolf Hughes and John Monk (Milton Keynes: Open University, 2003).

14. Irit Rogoff, '"Smuggling" - An Embodied Criticality'. Available online: http://eipcp.net/dlfiles/rogoff-smuggling [accessed 18 March 2009].

15. AKAD: http://www.akad.se; SERVO: http://www.s-e-r-v-o.com/ [accessed 18 March 2009].

16. 'With *PARCEL*, the research group Krets installs a three-dimensional intelligent wall panel system. PARCEL suggests new ways of establishing relations between the material, audiovisual and digital techniques that are increasingly forming the environments around us. The project considers off-the-shelf technologies normally used in the packaging industry and consumer electronics as integral parts of an architectural design. Punched plastic sheets equipped with computational intelligence through microprocessors, printed circuits, and variations of sensors, lighting and speakers, are folded into volumes. When combined they form a wall-panelling system integrating information technology and infrastructure as well as illumination and sound. The folded sheets create depth from surface and respond to the color scheme of the Stockholm Concert Hall. The rendering of the color shifts as a result of the inherent curvature in the pieces and the integrated light. The formal logics of the PARCEL prototypes are imported from printed matter and disposable articles, transfer-

ring their qualities to an interior scale. The material and immaterial aspects of PARCEL suggests a light mode of operation, where the ambience of an environment can be shifted from one moment to the next.' From http://www.akad.se/krets.htm [accessed 18 March 2009].

17. Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, Mass.: MIT Press, 1998), p. 45.

18. In *Difference and Repetition*, Deleuze defines 'repetition' as an idea that 'cannot be exchanged' and is therefore 'singular'; he contrasts this idea with the notion of the 'particular,' which he relates to an exchangeable generality that is obedient to the law. Repetition emerges singularly and resists the idea of generality/law, which enables the operations of comparison and analogy. Repetition does not entail consciousness and memory, but rather is manifested with intensity. In other words, when one is in the state of repetition, it is impossible to be aware of or to report one's state. This would seem to have implications for one's critical capacities within an acquired disciplinary mindset. Deleuze claims that repetition can only be recalled from the perspective of the future, that is, as recollection. Since repetition is unexchangeable, it is unrepresentable; it is a singular event which speech inevitably fails. For a more detailed discussion of the concept of repetition with reference to the 'singular' and 'particular', see Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (London & New York: Continuum, 2004) (especially 'Introduction: Repetition and Difference' and Chapter 2: 'Repetition in Itself').

19. Dagny Stuedahl makes a similar point in his paper 'Designing as Performance': 'By integrating […] contextual and multidisciplinary influences in the understanding of design, the design process may also be seen as a negotiation. This is a negotiation not only between professional groups or between diverging translations of the participants in the design group but between diverging sets of cultural, social and commercial values and politics. Design is the point where worlds collide and disciplinary categories dissolve and melt into new ones.' Available online: http://imweb.uio.no/seminarer/designingdesign/papers/Designing_as_

performance.htm [accessed 18 March 2009].

20. The question is explored through historical case studies by many of the contributors to *Architecture and Authorship: Studies in Disciplinary Remediation*, ed. by Tim Anstey, Katja Grillner, and Rolf Hughes (London: Black Dog Publishing, 2007).

21. Marco Steinberg, 'Systems and Systems of Change' (2008). Available online: http://www.changingthechange.org/blog/2008/06/01/systems-and-systems-of-change/ [accessed 18 March 2009].

22. Mario Biagioli & Peter Galison, 'Introduction', *Scientific Authorship: Credit and Intellectual Property in Science* ed. by Biagioli & Galison (NY and London: Routledge, 2003), pp. 6-7.

23. Lev Manovich, 'New Media from Borges to HTML', in *The New Media Reader*, ed. by Noah Wardrip-Fruin and Nick Montfort (Cambridge, Mass.: MIT Press, 2003), p.15.

24. For information on Craig Baldwin and his films see http://www.othercinema.com [Accessed 18 March 2009]. An interview with Craig Baldwin ('No Text/No Truth/Jouissance and Revolution' by Jack Sargeant) appears in *Tribulation 99*, available online at: http://www.sensesofcinema.com/contents/01/13/baldwin-revolution.html [Accessed 18 March 2009].

25. A recording is available at the time of writing on http://www.plunderphonics.com [Accessed 18 March 2009].

26. Chris Cutler's description in his essay 'Plunderphonia' is worth citing at length: 'Sounds like a dive downwards as a sped up tape slows rapidly to settle into a recognisable, slightly high-pitched Dolly Parton. It continues to slow down, but more gradually now. The instruments thicken and their timbres stretch and grow richer. Details unheard at the right speed suddenly cut across the sound. Dolly is changing sex, she's a man already; the backing has become hallucinatory and strange. The grain of the song is opened up and the ear, seduced by detail, lets a throng of surprising associations and ideas fall in behind it. The same thing is suddenly very different. Who would have expected this extraordinary composition to have been buried in a generic country song, one thousand times heard already and one thousand times copied and forgotten?' Available online:

http://kaganof.com/kagablog/2008/11/22/plunderpho-nia-by-chris-cutler/ [accessed 24 March 2009].

27. Ronald Jones, *Konstfack Vårutställning* (Spring exhibi-tion catalogue, Stockholm 2008).

28. Lucy Lippard and John Chandler, 'The Dematerializa-tion of Art', *Art International*, 12, 2 (February 1968), pp. 31-36. Lippard also used the term as the subtitle of her anthology, *Six Years: The Dematerialization of the Art Object from 1966-72* (New York: Praeger, 1973).

29. Burnham, 'Systems Esthetics'.

30. Ronald Jones, 'Are You Experienced?', Frieze, 120 (Jan-Feb 2009). Available online: http://www.frieze. com/issue/article/are_you_experienced/ [accessed 18 March 2009].

31. Burnham, 'Systems Esthetics'.

32. Jones, 'Are You Experienced?'.

33. Julie Klein in 'Rethinking Interdisciplinarity'. Available online: http://www.interdisciplines.org/interdisciplinar-ity/papers/5/7/1#_7 [accessed 24 March 2009].

34. Margaret A. Boden, 'Creativity and Conceptual Art', in *Philosophy and Conceptual Art*, ed. by Peter Goldie and Elisabeth Schellekens (Oxford: Oxford University Press, 2007), p. 219.

35. Steinberg, 'Systems and Systems of Change'.

36. From 'Transdiscipline'. Available online: http://theatlas. org/index.php?option=com_content&task=view&id=10 2&Itemid=82 [accessed 24 March 2009].

37. Helga Nowotny, 'The potential of transdisciplinarity', in *Rethinking Interdisciplinarity*. Available online: http:// www.interdisciplines.org/interdisciplinarity/papers/5 [accessed 18 March 2009].

38. Diana Domingues and Eliseo Reategui, 'Collabo-rative and Transdisciplinary Practices in Cyberart: from Multimedia to Software Art installations'. Avail-able online: http://www.banffcentre.ca/bnmi/programs/ archives/2005/refresh/docs/conferences/Diana_ Domingues.pdf [accessed 18 March 2009].

39. I am grateful to my students and colleagues on the MA in Experience Design at the Department of Interdiscipli-nary Studies, Konstfack, and particularly to Professor Ronald Jones, for helping me to explore the implica-tions of this question in practice as well as theory.

40. Gregory L. Ulmer, 'Borges and Conceptual Art', p.

858.

41. I am grateful to Professor Gerard de Zeeuw, my colleague at Sint-Lucas School of Architecture in Brus-sels, for sharing this observation with me at a recent research meeting.

42. 'Indeed,' Jones continues, 'after sizing up his own culpa-bility, the first pilot Bigert and Bergström contracted to seed clouds with dry ice, ultimately expressed doubts and backed out. They found another pilot. Once engaged in practices the UN (see the United Nations Declaration on Human Cloning) and other international organizations have sought to proscribe, are Kurtz or Bigert and Bergström acting as artists any longer? And if not artists, are they more like hooligans who know just enough about science to be dangerous? Or are they simply artists acting immorally? Should the right to free expression extend to artists who are self-appointed amateurs in the realm of science? Should free-expression, as artists understand it, be allowed to cross over disciplines? Some say not. Kurtz was arrested by the F.B.I. under the Biological Weapons and Anti-Terrorism Act on charges of illegally obtaining biological samples that could send him to prison for 20 years.' Ronald Jones, 'A gun in a knife fight', *Everybody Talks About the Weather, but Nobody Does Anything About It*, ed. by Bigert and Bergström (Exhibition cata-logue, Uppsala Art Museum, 2007), p. 14.

43. Burnham, 'Systems Esthetics'.

44. Bruno Latour, 'Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern', *Critical Inquiry*, 30, 2. Available online: http://www.uchicago. edu/research/jnl-crit-inq/issues/v30/30n2.Latour.html [accessed 18 March 2009].

45. Bertolt Brecht, *Galileo*, edited and with an introduction by Eric Bentley, English version by Charles Laughton (New York: Grove Press, 1966); essay translated by Richard Winston, Appendix A, pp. 133-50.

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Architecture and its Mythologies (2006); *Auto-poiesis and Design: Authorship and Generative Strategies* (2008); and The *Poetics of Critical Writing in Architecture, Art and Design Research* (2010).

Biography

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Notes on Post-criticality:
Towards an Architecture of Reflexive Modernisation

Robert Cowherd

In his *The Language of Post-Modern Architecture*, Charles Jencks famously pinpoints the moment of the death of 'Modern Architecture' at 3.32 P.M. 16 March 1972.[1] This was the instant that dynamite summarily destroyed the first of St. Louis's Pruitt-Igoe public housing towers designed by Minoru Yamasaki. If one tolerates the notion of something as globally dispersed and feral as 'modern architecture' dying at all (it didn't), the absurdity of freezing the clock of modern architecture begs our forgiveness as a dramatic literary device designed to entice and propel the reader into Jencks's novel work.

In the past five years there has been a surge of critical work suggesting a similar turning point has occurred in relation to postmodern theory, particularly in architecture. Reproducing the trope of history as a teleological succession of 'isms', one dying to make room for the next, several authors have declared the death of theory, the end of 'critical architecture', the demise of postmodernism, etcetera. The degree to which this turn is cast in the mould of 'the death of…' is more a matter of writing style than historiographic rigour; no one has yet indulged in the Jencksian device of recording the time of passing on postmodernism's death certificate. Acknowledging the absurdity of such an endeavour, let us suggest the following as a poignant and useful reference point in the unfolding of the discourse around the changing role of theory.

A conference called by the editors of one of the premier institutions of postmodern theory, the

journal *Critical Inquiry*, assembled its most valued contributors for a rare public discussion on the future of theory. On 11 April 2003, the University of Chicago's W.J.T. Mitchell introduced the discussion on an optimistic note pronouncing the journal's aspirations to become 'the Starship Enterprise of criticism and theory'.[2] Opening up the panel of prestigious authors to questions from the audience, a graduate student asked what good is criticism and theory if 'we concede in fact how much more important the actions of Noam Chomsky are in the world than all the writings of critical theorists combined?' Noam Chomsky, the Massachusetts Institute of Technology Professor Emeritus in Linguistics, is doubly distinguished as the father of the generative grammar theory of linguistics that revolutionised several disciplines, and the most articulate and damning critic of the collusion between the media and the global projection of hegemonic political and economic power. Despite Chomsky's distinction as the eighth most cited scholar in history (after Marx, Lenin, Shakespeare, Aristotle, the Bible, Plato, and Freud), the unnamed graduate student was referring instead to Professor Chomsky's impact on the critique of power as a 'public intellectual'.[3]

The idea to demolish Pruitt-Igoe did not emerge fully cooked from expert-driven deliberations in the halls of power, but as a chant from an auditorium packed with Pruitt-Igoe's few remaining residents. As theatrically described by Tom Wolfe, it started as a low pulse in the back of the hall and grew in volume to proclaim a rowdy consensus: 'Blow it

up!'.[4] If the paragons of *Critical Inquiry* assembled in Chicago had shrugged off the unfavourable comparison between the utter toothlessness of critical theory and the relative traction of Noam Chomsky, the event would have been just one more unremarkable insistence of 'speaking truth to power' (with no discernible consequence). In this case however, and seemingly to its own surprise, 'power' embraced its own denunciation. Referring to events from the civil rights struggle to the launching of the second Iraq war just days before their colloquium, the standard bearers of critical theory concurred, adding, in the words of University of Illinois at Chicago Professor Sander Gilman, 'not only have intellectuals been wrong almost all of the time, but they have been wrong in corrosive and destructive ways'.[5] The eminent postcolonial literary critic and Harvard Professor Homi Bhabha found himself virtually alone in defending the social and political relevance of intellectual work, although his statement that 'even poetry' has served the cause of resistance movements may in fact be another way to make the same point. Bhabha would appear to be asking: if much intellectual work of the past, 'even poetry', has proven relevant to the negotiations of power and the meaningful improvement of the human condition, how are we to account for the apparent irrelevance of critical theory?

If the voices of change emanating from St. Louis led to the literal destruction of an architectural idea, what do the voices of change in Chicago have to do with architecture? The cross-fertilisation between literary theory and architecture during the 1980s has been both heralded as the welcome source of renewal in the wake of the disaffection with the built outcomes of high modernism, and cursed as a distraction from architecture's core principles and values. Whether blessing or curse, the connection remains significant and the discontents in both literary criticism and architecture became suddenly more vocal in the years and months before and after the April 2003 *Critical Inquiry* colloquium. In 2002,

the first explicit articulations of what has become known as the 'post-criticality' argument were ventured. Both the insights *and* the shortcomings of this argument have fuelled a partial re-examination of postwar architectural thought and production in potentially useful ways.

Critical theory

The history of 'critical architecture', put forward by the 'post-critics', traces back to the Italian architect/historian/theorist Manfredo Tafuri's introduction to his 1968 *Theories and History of Architecture* and the subsequent readings and misreadings of this work. In the context of a failing 'modern project' and discredited expert knowledge, Tafuri pointed out that the architect/critic could no longer judge the value of a work based on a set of merits and faults from the perspective of everyday life in the manner of a Jane Jacobs.[6] Instead, the architect/critic was to evaluate a work based on that work's relation to its larger ambitions, the framing of theoretical aspirations, accessible to the critic only 'through a temporary suspension of judgement'.[7]

After Tafuri, two figures loom large in the propagation of a new ethos of 'critical architecture' that came to dominate the elite US East Coast architecture schools in the 1970s and 1980s. The theoretical 'autonomy' of the design work by Peter Eisenman served as the key reference point for the critical architecture further developed through teaching at his Institute for Architecture and Urban Studies and The Cooper Union in New York. Eisenman transmitted his ideas through the journal *Oppositions* (1973-1984), which he founded, and the Architecture New York (ANY) conferences and publications. In keeping with Tafuri's call, Eisenman offered processes of architectural production safely removed from the conditions of technocratic governments and the commodifying forces of the free market. Pointing at Tafuri's Marxian critique of the corrupting influences of capitalism, Eisenman constructed a theoretical framing for his projects, set apart from

the commercial interests that make up the bulk of architectural commissions. Instead he developed his forms in a series of Petri dishes untainted by the impurities that might force compromise in the quest for a theoretically rigorous architecture.

K. Michael Hays provided the canonical interpretation of Tafuri for the US, foreshadowing and preparing the soil for the further penetration of literary theory into the realm of architecture.[8] He edited the influential journal *Assemblage* (1986-2000) and teaches history-theory courses at Harvard. Tafuri had, apart from being the first to articulate the conditions of a critical architectural production, also been the first to point out the risk that such an approach might produce, namely an 'architecture of the boudoir' that is insufficiently engaged to affect meaningful social change.[9] This note of caution was no longer emphasised by Eisenman and Hays. In Europe, Frankfurt School critical theory retained a commitment to radical social change in contrast to the depoliticised American theory-of-criticism. Europe's 'critical architecture' appears to have developed 'through a *temporary* suspension of judgement' in which experimental cultures spawned in Petri dishes are eventually brought out of the laboratory into the hothouse, and perhaps even transplanted to the field. The apotheosis of postmodern theory and the penetration of literary criticism into the world of architecture came with the techniques of 'deconstruction' as performed by French theorist Jacques Derrida. In 1988, Philip Johnson and Mark Wigley co-curated the exhibition *Deconstructivist Architecture* at the Museum of Modern Art, self-consciously echoing the paradigm-establishing significance of Johnson's 1932 exhibition *The International Style*. Building upon critical theory's position that language, and thus all cultural production, is contingent upon the system of signs and symbols radically disconnected from human experience and dominated by operations of hegemonic power, Derrida held that 'there is no meaning outside the text'.[10] Derrida's textual 'autonomy' was brought together

with the autonomous framing of critical architecture in a series of collaborations between Derrida and Eisenman around the time of the *Deconstructivist Architecture* exhibition. What Derrida celebrates in prose, Eisenman induces through poetic effect. The loose association between text and its interpretation extends to a promiscuously open relationship between architectural form and meaning or experience. Even readers uncomfortable with authors more or less openly complicit in their own '(mis)readings' feel liberated by the absence of any one-to-one association between an architect's intentions and the dweller's experience. Thus the common critique during the 1980s and 1990s, that the cross-fertilisation of the two disciplines has produced both bad philosophy and bad architecture, would appear to be more damning for philosophy than it is for architecture. Indeed the 'deconstructivist architects', Frank Gehry, Zaha Hadid, Rem Koolhaas, Bernard Tschumi, Coop Himmelblau, Peter Eisenman and Daniel Libeskind, have thrived in the ensuing two decades. Though the notion of deconstruction has slipped out of the lexicon of popular criticism, three of the seven 'deconstructivist' architects have won the Pritzker Prize, and all have seen their paper visions move from the exhibition halls into the built reality of some of the most significant commissions of the new century.

The story posited by the authors of the 'post-criticality' argument traces its critique back to Rem Koolhaas's 1979 'Delirious New York' and subsequent deviation from the anything-but-commercial orthodoxy of critical architecture in the 1990s.[11] Even though Koolhaas was not the first to point out the troubled relationship between critical theory and the creative act, the post-critical retrospective history highlights his apparent defection as salient.[12] The common ground of the 'post-critics' lies in the disaffection with critical theory's 'negation' of the Vitruvian imperative to build our way towards a better world.[13] How long, they seem to ask, can critical architecture delay the inevitable moment when its hermetically

sealed laboratory cracks open under the impact of widening social disparities, wars of choice, and an unfolding environmental cataclysm?

While there is a sense of convergence among the post-critics on the key reference points they consider relevant to their developing story, they remain cautious in too quickly jumping to what happens next. With a nod to Hickey,[14] Somol and Whiting proceed within the recognisable framework of theory while venturing beyond the critical autonomy of a 'hot' avant-garde to examine a set of 'cool' projects with an eye towards their performance in solving (non-theoretical) problems in the world of everyday experience. Here the works of Rem Koolhaas anchor claims to theoretical rigour while gaining currency by engaging 'real world' problems along with issues of popular culture, commerce, globalisation, etcetera. Violating the sterility of critical architecture's Petri dishes, Koolhaas drops in a handful of dirt to see what happens next. Where Somol and Whiting proceed from a position of the critical insider, dissatisfied with what they identify as a stagnating orthodoxy, Michael Speaks starts out from a similar critique but veers sharply towards a rejection of not just critical theory, but theory itself. Echoing Gilman's renunciation of postmodern theory at the 2003 *Critical Inquiry* colloquium, Speaks writes, 'I would argue that theory is not just irrelevant, but was and continues to be an impediment to the development of a culture of innovation in architecture.'[15] In the place of theory, Speaks offers 'intelligence' (as in information, CIA-style), and the serial speculations of emerging practices employing Computer Numeric Control (CNC), rapid-prototyping technology. Speaks's market-driven 'innovations' are in opposition to Hays and Eisenman's critical 'alternatives'.

The response to Speaks's attack on theory (the piece was provocatively titled 'After Theory'), was overwhelmingly a plea: 'Don't throw the [theory] baby out with the [postmodern theory] bathwater'.[16]

Despite this outcry, curriculum committees already uncomfortable with theory found new support for their struggle to squeeze sustainability and computer skills into an already packed course schedule of professional accreditation requirements. Even if 'Theory' the college course goes away, theory itself is not going anywhere. As a precondition for moving forward, theory, like memory, doesn't disappear, it simply goes into hiding while we struggle to find a language that allows us to discuss it openly once again. We have travelled this path before. The danger is not that we proceed *without* theory; the danger is *thinking* we can proceed without theory.

More troubling than the attack on theory, is the suggestion that being 'critical' is a problem. Any argument in favour of being *less* critical fails to acknowledge properly the political economy of forces that architecture as a profession imposes upon architecture as a discipline. Given that the post-critical argument was christened during the same period that gave us the contested 2000 American presidential election, the destruction of Manhattan's World Trade Center (Minoru Yamasaki's other towers), and the launching of the second American war on Iraq, is the problem then about being 'critical' or about not being critical *enough*? Is it the problem that 'resistance is futile' or that, having withdrawn from the conversation, hardly anyone notices? The unflattering comparison between the authors of *Critical Inquiry* and Noam Chomsky derives from Chomsky's traction as both a theorist *and* a social critic. In *Perspecta 33: Mining Autonomy*, Hays's reminder that what makes architecture 'critical' is the production of 'alternatives' to the dominant social order, would seem to neutralise the post-critical position declared a few pages later.[17] The evidence suggests the problem is not about being critical but instead about how these 'alternatives' have been inscribed by limitations, imposed by the formal orthodoxies reproduced in the schools associated with 'critical architecture'.[18] The emerging engagement celebrated by 'post-crit-

icality' threatens to displace an aesthetic hegemony with a technology-driven free-market hegemony. A perhaps more socially relevant interdisciplinary move is suggested by a more precise location of the problem in architecture's orthodoxies and its resonance with a growing literature around the notion of a reflexive modernisation.

Reflexivity

Facing their own disciplinary crises, sociologists turned towards a 'new pragmatism' that has proven remarkably productive. Building upon Bourdieu's work, a rich literature has been increasingly informed by problems of everyday life. In contrast to the course proposed for a 'post-critical' architecture, recent scholarship growing out of sociology demonstrates the benefits of being both engaged *and* critical. The better-targeted critique of 'critical architecture' echoes a sociological literature on the ossification of modernisms that not so long ago were still characterised by 'movement, flux, change, and unpredictability' and by the phrase 'all that is solid melts into air'.[19] Scott Lash has moved freely among several disciplines to examine the nature of modernity. Like the post-critics, Lash re-examines the postwar history of modernity, but draws his insights from a rich cultural studies literature, and particularly on modern urbanism via Baudelaire, Benjamin, Bourdieu and Berman.[20] The history of high modernism imprinted on American cities offers a particularly vivid demonstration of how powerful utopian diagrams suffer when physical and social infrastructures impose ideological fixity. The stunning failures of the American city are both cause and effect of the 'critical' distance maintained by American architecture, and stand in stark contrast to the successful engagement of architecture in the Dutch landscape at the intersection of post-criticality and reflexivity. Bart Lootsma has hinted at the possibilities for understanding the growing body of primarily Dutch architectural production as constituting an architecture of reflexive modernisation.[21] Working at a distance from the American debate between 'criti-

cal' and 'projective' architecture, Lootsma points at much of the same Dutch architectural work identified by the post-critics. Given the stakes, Lootsma's speculations seem to offer a firmer basis for moving beyond the critique of late twentieth-century architecture than that produced by the debate in North America. Lootsma's key reference point is the 1994 publication of separate essays by Ulrich Beck, Anthony Giddens, and Scott Lash in a single volume bearing the title *Reflexive Modernization*. The term 'reflexive' is used in both its technical sense, as 'a relation that exists between an entity and itself', and refreshingly in the more familiar sense of the term 'reflex': 'an automatic and often inborn response to a stimulus […] without reaching the level of consciousness'.[22] As developed by Beck, Giddens and Lash, 'reflexivity' is not only the most characteristic attribute of the systems associated with the second modernity, it also provides a means for identifying processes that signal the transition from the first or 'simple' modernity, to the second or 'reflexive' modernity.

Before examining what a reflexive system looks like, we first elaborate on how the notion of reflexivity helps to draw a distinction between first and second modernity. The *first* process of modernisation operates radically to challenge, transform and ultimately displace the institutions and practices of pre-modern societies that history has documented from around the eighteenth century to the present. For example, the process of modernisation is conventionally credited with replacing God and a set of life chances fixed at birth, with the institutions of the nation-state, modern science, democracy, the corporation and its infrastructures, disciplinary knowledge, the nuclear family, and the aspirations of class mobility.[23] The second process of modernisation operates upon these very institutions previously established by the first modernisation - reflexively, as defined above, as a relation that exists between the process of modernisation and itself. Thus the products of the first modernisation are subsequently

subjected to a further stage of modernisation. The examples used to illustrate this second or reflexive modernisation are familiar enough to those who have followed the recent critiques of globalisation, much of which has been elaborated elsewhere by Beck, Giddens and Lash. As the process of modernisation turns to operate on entities themselves wrought by an earlier modernisation, the nation-state recedes from dominance with the rising role of trade blocks (European Union, ASEAN, etc.) and the regional city-state (Shanghai, the Randstad, Southern California, Dubai). The scientific certainty, rational discourse, and expert knowledge that swept aside earlier ontological sources of meaning and authority, are themselves increasingly contested by competing claims on truth, many of which are resurrections of modernisation's earlier victims, as with the rise of religious fundamentalisms and indigenous belief systems. Finally, just as modernity breached class borders between the proletariat and the bourgeoisie (culturally if not materially), the second modern phase is witnessing multiple border re-mappings that allow subject identities to become increasingly a matter of personal choice (often negotiated remotely over the internet) against a shifting and disorienting grid of reference points. These are the markers by which the second modernity has come to be identified.

Returning now to the nature of reflexive systems, it is useful to first describe Beck, Giddens, and Lash's central critique of the first modernity. The growing discrepancy between the promises of modernisation and the actual outcomes experienced is largely produced by a set of unexpected side effects of the modern project. These secondary consequences of technological progress, rather than being minor inconveniences, have proven resistant to further 'technological fixes'. Instead they have grown in significance to such an extent that they are unacceptable to a growing segment of humanity. While some unpredictable outcomes have yielded to further efforts, or proven manageable over time,

others have come to loom so large over the human condition that it is increasingly difficult to avoid a re-examination of our core faith in modernisation itself. Unfortunately, denial remains a popular alternative to facing these challenges head-on. As Jared Diamond and others have shown through histories of social 'collapse', human societies are capable of ignoring evidence of the cliff up ahead and just keep on running.[24] Beck, Giddens and Lash add their own far-reaching evidence to the mounting body of work by suggesting that the global environmental crisis is just such a threat.

The appeal of the technological fix can be difficult to curb as seen in the fanciful, but still well-funded, notions that a nuclear missile can be shot out of the sky, or that mirrors can reflect just enough sunlight back into space to compensate for the heat trapping effects of greenhouse gases, without causing significant side effects of their own. But where the modern mega-project would proceed without consideration for side effects, and the postmodern critique would dash the hopes of any chance of success, the second modern project seeks out positive feedback loops capable of responding to changing conditions in real time - reflexively, as defined above, as an automatic response to a stimulus - including the emergence of unintended consequences.

The most famous of all such reflexive systems is the law of supply and demand as articulated in the eighteenth century, most famously in 1776 by Adam Smith.[25] When called upon to account for the ominous persistence and even acceleration of inequities in the distribution of the benefits of modernisation, proponents of the new global neoliberal economic order are quick to celebrate the reflexive qualities of capitalism in terms of a liberating self-regulation. It is perhaps a useful reminder that prior to September 2008, it proved difficult to resist the seemingly something-for-nothing magic of free markets. Behind the rhetoric of free market reflexivity, the legion of capitalist cogs spends most of its time actually working

against the reflexive operation of markets. The cultural infrastructures of capitalism reproduced in the media, business schools, and a steady flow of new books on business practices dominated by the task of consolidating and fixing 'competitive advantages' and 'dominant market positions' to resist the corrective mechanisms of financial and ideological marketplaces better. The Adam Smith portrayed in neoliberal mythology is almost unrecognisable to the Adam Smith who espoused the necessity of government intervention against these monopolistic tendencies of firms, until conditions approach a status of 'perfect competition'. This conditional necessity of regulation was justified by the recognition that the profit motive drives the engine of social progress in reverse just as fast as it drives forward – 'bads and disservices' contribute just as much to the economic bottom line as goods and services.

About a half century after Adam Smith first described the magic operation of the free market's invisible hand, an amateur mathematician published a pamphlet entitled 'The Tragedy of the Commons' that has become, since its rediscovery and study in 1968, a seminal work of the environmentalist movement.[26] Using the model of shared grazing rights, Garrett Hardin points out that markets do a poor job of accurately modelling the capacity of environments to supply natural resources for production and receive the trash, effluence and smoke of factories. Classical economic models are notoriously flawed in their basic assumption that nature is both a virtually endless source of raw materials and a bottomless repository for waste products. In the absence of either assertive governance, or reflexive feedback mechanisms to moderate the excesses of capitalism, the more one reaps and the more one dumps, the higher the profits. In terms of systems theory, the feedback mechanism of modern capitalism rewards negative social outcomes. In terms of economics, these negative social outcomes carry the label 'externalities', indicating that their impacts are only poorly, or not yet, factored into the operation of markets. The economic mechanisms capable of registering the limitations of both supply of raw materials and the capacity for dumping only kick in as the system approaches the extreme margins of its operating range. Even then, rising prices can sometimes accelerate the rate of depletion and negative impacts. Firms also benefit from finding ways to cheat the invisible hand of free markets to establish monopoly conditions while maintaining appearances of healthy competition. While financing the onward propagation of (reflexive) free market rhetoric, firms are driven to create rigid (non-reflexive) systems of monopoly arrangements, the 'externalisation' of true costs, and the by now familiar configurations of human society that favour low labour costs and willing markets. The nuclear power industry for example, by 'externalising' the incalculable costs of waste disposal (no technically viable solution yet exists) and the costs of plant decommissioning (more expensive than the original construction), industry proponents manage to tout electricity that is 'cheap and clean'. In a second modernity, many of the monopoly practices thinly veiled by 'free market' masks would be displaced by an extension of self-regulating mechanisms like supply and demand rhetorically celebrated by the cultural infrastructures of capitalism.

Similarly, the monumental failures of twentieth-century state socialism are revealed through the retrospective lens of second modernity to stem from its dependence upon non-reflexive bureaucratic command and control. The reflexive alternative would be to activate the instantaneous feedback loops of a more local social scale where the play of pride and embarrassment has for centuries done a more or less effective job at regulating human associations and tempering inevitable excesses of antisocial behaviours, mostly without themselves becoming tyrannical. Seen through the lens of reflexivity, conventional responses to often-epochal questions of system design are revealed as unnecessary distractions or false dichotomies.

The urgency of choices between modernity and postmodernity, socialism and capitalism, paper and plastic, etcetera, give way to other questions: how can reflexivity inform our responses to new challenges? What is the best way to increase the reflexivity of established systems? What is the best way to displace the feedback loops that favour socially negative outcomes with those that optimise the cost-benefit ratio for the largest majority? How do we best address feedback loops that favour the reproduction and further concentration of power?

Whither postmodernity?

If the notion of reflexive modernisation operates in terms of first and second modernities, what is the role, if any, of our own familiar 'condition of post-modernity'? This question cuts a line parallel to the notions of post-criticality as articulated since 2002, but it cuts through a thicker body of social evidence. Once we step back from the modernity-postmodernity construct, it appears somehow more precisely as a phenomenon limited in its scope to the challenges of the 'short' twentieth century roughly corresponding with the period of 'high modernism'.[27] In this perspective, postmodernity is less a response to the larger trajectory of modernity than it is a response to the far more limited, even aberrant, aspirations of high modernism from the 1920s to the 1970s (including the demolition of Pruitt-Igoe). From this critical distance, the early flourish of divergent modernisms take on a renewed significance suddenly beyond the reach of postmodern criticism. Born of the revolutionary paintings of Manet and Cézanne, the early modern movements each embarked from different cultural capitals of Europe to chart their own courses through an unprecedented explosion of new forms, concepts, and media.[28] But in each case, the rising arcs of these visions were caught in mid-flight and stopped short just as they seemed to be picking up speed. The segue into Fascism of the Italian Futurists can only partly be blamed on a fascination for the violence of fast cars and war. The return to origins of the Supre-

matists and the utopian constructions of the early Soviet period disappeared under Stalin's iron fist. The German Werkbund, Bauhaus and Glass Chain were displaced by the architecture of Hitler himself, working through Speer.[29] It is perhaps the genealogy of the Dutch De Stijl that has cut the widest arc with survivals in The Netherlands and elsewhere after the Second World War.

In the cold war conditions of postmodernity, discourse was all we had to work with, caught as we were, in the crosshairs of nuclear Armageddon to be triggered by a remote concentration of power caught up in a moment of ideological excess.[30] There are better problems to have. For example, we might take some measure of comfort in the fact that the currently perceived dominant threat to human existence has dispersed from the singular push of a button to the collective impacts of individual choices, vastly distributed in time and space. Even if it all went away in a nuclear winter, at least it wasn't the direct act of anyone we knew personally. By contrast, in the conditions of second modernity, 'we are not *in* the traffic jam, we *are* the traffic jam'.[31] Taken to the logical extremes of eco-fascism (and why not?), what used to be trivial daily choices of whether to drive or to take public transportation, whether to have a burger or go vegetarian, whether to buy a clothes dryer or plant a tree and hang a clothes line from it, now require an enhanced capacity for taking on a pallor of planetary life or death. In the absence of an easily accessible means of quantifying the relative impacts of different choices in everyday life, comparison between very large and very small impacts are flattened into a sameness that inspires a feeling of powerlessness and resignation.

As conditions of architectural production have undergone a significant transformation in the past half century, so have the responses offered by each generation. If war, social injustice, and environmental crisis once compelled street demonstrations, and the triumph of late capitalism inspired a critique

of discourse and examinations of power, the new conditions of war, social injustice, and environmental crisis would seem to inspire changing light bulbs and presidents, but little else.[32] The expansion of options beyond the old responses and transcending the conventional false dichotomies are perhaps the prerequisites for taking more effective action.

If the late twentieth-century popular rejection of the modern project salted the earth against further crops of high modernism, perhaps one account of what we are witnessing is the sprouting of the long-dormant seeds of early modern movements opportunistically sending up new shoots to fill the void.[33] One of the significant differences in this generation of seedlings is that we now have tools of representation and fabrication better able to model and, though to a more limited extent, produce the forms that the early modernists dared to imagine. Computation has shifted dramatically in a very short time from being an elaborate (and inelegant) pencil - limited as it is to producing representations of architecture in two dimensions - to a more interactive three-dimensional modelling platform for testing spatial relations and anticipating experiences. From an earlier focus on *representing* forms generated in actual materials and space (crumpled paper), it is now common for architects, and architectural students, to *generate* forms digitally within the virtual context of computational environments independent of any material, spatial or temporal framework. Software developed to produce three-dimensional models has been extended, supplemented with add-on programs, and/or combined with other applications, to create dynamic relationships between various quantifiable 'parameters', thus entering the realm of 'parametric design'.[34] Thus far, the most celebrated work explored under the various banners of parametric design remains predominantly formal exercises, often not much more than a three-dimensional screensaver pattern given scale. The promise of moving beyond mere modelling and moving digital models directly into full-scale produc-

tion remains a tantalising goal even as it remains prohibitively expensive.

If computational tools have expanded our capacity to realise some of the formal ambitions of the early modern movements, what of the accompanying utopian social aspirations? Or acknowledging the pitfalls of utopia, what of the more modest interest in distributing the benefits of human progress more widely? Is it even possible to entertain such aspirations in the context of withering welfare states? Has once-'triumphal' capitalism turned sufficiently introspective to make room for a pragmatic retooling of governance? Can a critical attitude in architecture escape the ossification of 'critical architecture' to mobilise new tools in a more effective social engagement, and simultaneously offer alternatives that transcend the 'merely' pragmatic? While parametric design is best known for generating a startling variety and complexity of forms, designers are not limited to working with form alone. The considerations available to generate or influence architectural outcomes are limited only to performance characteristics that can be quantified numerically. Tremendous possibilities for structural analysis have been opened up through these tools by dynamically modelling interrelated structural characteristics. Other performance characteristics that are being modelled using parametric design tools include: construction costs, energy use, carbon footprint and other environmental impacts. In each case, the performance characteristics are inherently quantitative in nature. However, the important far-reaching considerations of architecture and the built world are not universally well-represented in the form of numbers. The larger challenge lies in expanding the capacity of parametric design for dealing with architectural performance characteristics that are not conventionally captured in quantitative analysis. Do the critical techniques of postmodern theory have useful application beyond simply demonstrating the malleable nature of associations between meaning and experience? While the power of Derrida's technique of textual decon-

struction has been repeatedly demonstrated, the insistent critique of 'instrumentality' has locked potentially useful tools of deconstruction away from applications that might betray a sense of social intention. In the name of 'autonomy', the selection of the texts for deconstruction is adamantly *asocial*, and seemingly unconcerned about the risks of slipping into the realm of the *antisocial*. Rather than being merely personal or arbitrary, the methodological lenses of history, political economy, and culture yield associations between meaning and form as being *constructed*. Terry Eagleton's 1983 *Literary Theory: An Introduction* earned him a special place for unabashedly asserting the inherently political project of critical theory.[35] In his 2004 work, *After Theory*, he revisits these aspirations only to acknowledge their failure in terms similar to those heard in the 2003 *Critical Inquiry* colloquium. Though he remains committed to the social project of critical theory one cannot help but hear a note of defeat in the title *After Theory* - the same phrase chosen by Michael Speaks for his frontal assault on the role of theory in architectural education.[36] The question remains: can critical theory be redeemed in application to solving the problems that architecture has historically addressed? To what extent can the tools of critical hermeneutics contribute to deeper understandings of complex processes that result in the mappings of meaning onto form at different moments in history? Is any aspect of this relationship quantifiable?

After a period when theory served to impede rather than propel action, a healthy dose of pragmatism is a good start towards more effective engagement.[37] Rather than suffering the consequences of having 'thrown the [theory] baby out with the [critical theory] bath water', can we instead re-examine the tools that were so carefully forged in the rich period of postmodern criticism and test them against the challenges of the twenty-first century? The embrace of complexity as a positive attribute is sure to have benefits for the world we find ourselves in now,

three decades later. Where the choices of everyday life were once driven by individual self-interest and the logic of a simply quantitative bottom line, they are now infused with latent significance as the front line of the battle for human survival. The very local scale of consumer choice and human behaviour is inextricably connected, through a distributed web, to large scale and long-term consequences. The internet has vividly demonstrated how a new set of tools can turn what a few short years ago was undreamt of complexity, into a mundane matter dispatched through a swift babble of acronyms hammered out by suddenly nimble thumbs. The agile management of ever-increasing levels of complexity and interconnectedness is one of the essential prerequisites of the new reflexivity. More importantly, the new conditions call for reflexive design processes that produce architectures in support of socially reflexive systems capable of displacing the non-reflexive mechanisms of high modernism, and the negative feedback loops of late capitalism. It will not suffice meekly to fill voids left in the wake of the linked collapses of Pruitt-Igoe, the World Trade towers, and that of critical theory as suggested in the *Critical Inquiry* colloquium. During an earlier time of rapidly changing conditions, Thomas Paine famously articulated the alternatives as: 'lead, follow, or get out of the way'. Of these, the 'post-critics' have suggested that theory should 'get out of the way'. Others have started to develop theory that promises to illuminate the significant ongoing technological advances, following the lead of practitioners working to slow the pace of the unfolding environmental disaster. Beyond these two roles, what opportunities for leadership have yet to be identified?

Notes

1. Charles Jencks, *The Language of Post-Modern Architecture* (New York: Rizzoli, 1977), p. 9. The story of Pruitt-Igoe stands as a potent historical myth examined in Katharine G. Bristol, 'The Pruitt-Igoe Myth', *Journal of Architectural Education*, 44, 3 (May 1991), pp. 163-71. Among the several historical misreadings of Pruitt-Igoe is the date of demolition, which Jencks reports as being 15 July 1972.

2. Emily Eakin, 'The Latest Theory Is That Theory Doesn't Matter', *New York Times* (19 April 2003); and Emily Eakin, 'The Theory of Everything, R.I.P.', *New York Times* (17 October 2004).

3. Samuel Hughes, *The Pennsylvania Gazette* (July/August 2001); Wikipedia, 'Noam Chomsky' <en.wikipedia.org/wiki/Noam_chomsky> [accessed 21 April 2007].

4. Tom Wolfe, *From Bauhaus to Our House* (New York: Bantam, 1981), pp. 63-64.

5. Emily Eakin, 'The Latest Theory Is That Theory Doesn't Matter'.

6. Jane Jacobs, 'Downtown is for People', in *The Exploding Metropolis*, ed. by William H. Whyte (Berkeley: University of California, 1993(1958)), pp. 140-47; Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961).

7. Manfredo Tafuri, 'Introduction to *Theories and History of Architecture*', in *Architecture Culture 1943-1968: A Documentary Anthology*, ed. by Joan Ockman (New York: Columbia Books on Architecture/Rizzoli, 1993), pp. 449-55.

8. K. Michael Hays, 'Critical Architecture: Between Culture and Form', *Perspecta 21* (1984), pp. 14-29.

9. Tafuri, 'Introduction to *Theories and History of Architecture*', p. 450; George Baird, '"Criticality" and Its Discontents', *Harvard Design Magazine*, 21 (Fall 2004/Winter 2005), pp. 16-21.

10. Jacques Derrida, 'Why Peter Eisenman Writes Such Good Books', in *Restructuring Architectural Theory*, ed. by Marco Diani and Catherine Ingraham, trans. Sarah Whiting (Evanston, Illinois: Northwestern University Press, 1989), pp. 99-105.

11. Robert Somol and Sarah Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism', in *Perspecta*, 33 (theme: Mining Autonomy), ed. by Michael Osman, et al. (New Haven: Journal of the Yale School of Architecture, 2002), pp. 72-77; Michael Speaks, 'After Theory', *Architectural Record* (June 2005), pp. 72-75; and Dave Hickey, 'On Not Being Governed', *Harvard Design Magazine: Urban Design Now*, 25 (Fall 2006/Winter 2007), pp. 74-76.

12. See especially Somol and Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism', and Baird, '"Criticality" and Its Discontents'.

13. To the extent that the postmodern rejection of high-modernist solutions called into suspicion any collective attempt to solve problems, the Vitruvian triad of durability, usefulness and beauty raises the prospect of a return to solving problems without necessarily repeating the mistakes of the modern project.

14. Dave Hickey, 'Mitchum Gets Out of Jail', *Art Issues* (September/October 1997), pp. 10-13. Cited in: Somol and Whiting, 'Notes Around the Doppler Effect and Other Moods of Modernism'.

15. Speaks, 'After Theory', p. 74.

16. 'Letters to the Editor', *Architectural Record* (July 2005).

17. K. Michael Hays, Lauren Kogod and the Editors, 'Twenty Projects at the Boundaries of the Architectural Discipline Examined in Relation to the Historical and Contemporary Debates Over Autonomy', *Perspecta*, 33 (theme: Mining Autonomy), ed. by Michael Osman et al. (New Haven: Journal of the Yale School of Architecture, 2002), pp. 54-71.

18. Daniel A. Barber, 'Militant Architecture: Destabilising Architecture's Disciplinarity', in *Critical Architecture*, ed. by Jane Rendell et al. (London and New York: Routledge, 2007), pp. 57-66.

19. Scott Lash and Jonathan Friedman (eds.), *Modernity & Identity* (Cambridge: Blackwell, 1992).

20. Scott Lash and Jonathan Friedman, 'Introduction: Subjectivity and Modernity's Other', in *Modernity & Identity*, ed. by Scott Lash and Jonathan Friedman (Cambridge: Blackwell, 1992), pp. 2-4.

21. Bart Lootsma, 'Towards a Reflexive Architecture', *El Croquis*, 4 (1997), pp. 34-42; 'Rem Koolhaas, In

Search of the New Modernity', *Domus*, 800 (January 1998), pp. 38-51; 'Reality Bytes: The Meaning of Research in the Second Modern Age', *Daidalos*, 69/70 (December 1998/January 1999), pp. 8-21; 'Architecture for the Second Modernity', in *Space Design*, (February 1999), pp. 81-84; 'Synthetic Regionalization: The Dutch Landscape Toward a Second Modernity', in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. by James Corner (New York: Princeton Architectural Press, 1999), pp. 251-74; *Superdutch: New Architecture in the Netherlands* (New York: Princeton Architectural Press, 2000).

22. *Webster's Ninth New Collegiate Dictionary*, 'reflexive' and 'reflex' (Springfield, Mass.: Miriam-Webster, 1885), p. 990.

23. Ulrich Beck, Anthony Giddens and Scott Lash, *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order* (Palo Alto, Calif.: Stanford University Press, 1994); Ulrich Beck, Wolfgang Bonss and Christoph Lau, 'The Theory of Reflexive Modernization: Problematic, Hypotheses and Research Programme', *Theory, Culture & Society,* 20, 2 (April 2003), pp. 1-34; Gerard Delanty, 'Reflexive Modernization: Beck and Giddens', in *Social Theory in a Changing World: Conceptions of Modernity* (Cambridge, UK; Malden, Mass.: Polity Press; Blackwell, 1999), pp. 148-78.

24. Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking, 2005).

25. Adam Smith, *The Wealth of Nations* (New York: Penguin Classics, 1982 (1776)).

26. William Forster Lloyd's 1933 pamphlet: 'Two Lectures on the Checks to Population' (Oxford: Oxford University Press) excerpted in *Population, Evolution, and Birth Control*, ed. by Garrett Hardin (San Francisco: Freeman, 1964); Garrett Hardin, 'The Tragedy of the Commons', *Science*, 162 (new series), 3859 (13 December 1968), pp. 1243-48.

27. Eric Hobsbawm, *The Age of Extremes: A History of the World, 1914–1991* (New York: Pantheon Books, 1994); James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

28. The several manifestos of the early modern movement are well represented in: *Theories of Modern Art: A Source Book by Artists and Critics*, ed. by Herschel B. Chipp (Berkeley, Cal.: University of California Press, 1968).

29. *Programs and Manifestoes on 20th-Century Architecture*, ed. by Ulrich Conrads (Cambridge, Mass.: MIT Press, 1970); Frederic Spotts, *Hitler and the Power of Aesthetics* (Woodstock, New York: Overlook Press, 2004).

30. Mary McLeod, 'Architecture and Politics in the Reagan Era: From Post-Modernism to Deconstruction', *Assemblage*, 8 (February 1989), pp. 22-59.

31. The graffiti on a bridge as recorded by Christina Feldman, *The Buddhist Path to Simplicity: Spiritual Practice for Everyday Life* (London: Thorsons, 2001), p. 5.

32. Thomas de Monchaux, 'Solving for X.', *Architecture Boston* (March-April 2006), pp. 29-31.

33. Marshall Berman, *All That Is Solid Melts Into Air: The Experience of Modernity* (New York: Penguin, 1982).

34. The author is indebted to Aaron Willette of the Live Architecture Network for his guidance through recent directions in parametric design.

35. Terry Eagleton, *Literary Theory: An Introduction* (Minneapolis, Minn.: University of Minnesota Press, 1983).

36. Terry Eagleton, *After Theory* (New York: Basic Books, 2004); Michael Speaks, 'After Theory'.

37. Michelle Provoost and Wouter Vanstiphout, '"Facts on the Ground" Urbanism From Mid-Road to Ditch', *Harvard Design Magazine: Urban Design Now*, 25 (Fall 2006/Winter 2007), pp. 36-42.

Biography

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Theatrical Tectonics: The Mediating Agent for a Contesting Practice

Gevork Hartoonian

Opening

In *Design and Crime*, Hal Foster has proposed the concept of 'strategic autonomy' for criticism of contemporary visual culture.[1] Exploring the historical formation of the concept of autonomy and its importance for art history, he argues that the antinomy between 'autonomy' and socio-historical determination still shapes cultural studies today, despite the domination of the image in contemporary cultural production. Starting from Kant's discourse on autonomy, recalled by Foster, two important implications for architecture are suggested. First, eighteenth-century architecture enjoyed a momentary independence from the classical wisdom, which soon had to give way to the imperatives imposed by the production and consumption cycles of capitalism.[2] Secondly, Kant sought 'a basis for artistic understanding within a mental realm which imparts unified artistic understanding to the perception of appearances and change in nature'.[3] This is clear from the attempt to connect artwork with social history in the 1920s, when the situation was foggy enough for architecture to claim formal autonomy despite the fact that aspects of the culture of building were still deeply rooted in the traditions of craftwork. To solidify a sense of autonomy, architects had to consider the classical Orders a surface-related issue (Le Corbusier), and frame architecture in reference to images, the aesthetic dimension of which had little to do with the traditions of the culture of building. By the 1950s however, the architecture of Brutalism launched an internal shift, challenging the major ethos of modernism. Particular to Brutal-

ism was a perception of image that was not yet separated from materiality and the kind of design decision-making that is architectural in essence. The slow processes of architectural thinking and making were, during the 1950s, still associated with a capitalist system that had not yet tasted the velocity internal to a digital mode of reproductivity.

Today, the situation has changed dramatically: the commodification of everyday life is total and the subjective world of artists and architects is constantly defined and redefined by an everydayness saturated with visual images. Today, the predicament of the discipline centres on the fact that architecture by definition is a collective work and might never touch the kind of autonomy other visual arts have. One might even argue that modernism's claim for autonomy was nothing but a foil meant to disguise its complicity with capitalism, an ideological delusion that needed only a couple of decades to be unveiled.

This article analyses the tectonic of (New) Brutalism, arguing that architecture cannot avoid the cultural logic of capitalism, to recall the title of Fredric Jameson's famous book. The argument presented here benefits from the modernist theorisation of the schism between surface and structure, and works toward a discussion of the image that is internal to the provisions of the constructed form. This argument implies a shift away from architectural autonomy towards a dialectics of semi-autonomy. Such a notion is more capable of taking into account

the material and perceptual conditions induced by the latest technologies of architectural design. By developing the notion of the tectonic - going back as far as Gottfried Semper - this essay brings to light 'the lines with which we can reconnect our present with a past that is continually being reinvented in function of the viewpoints from which we examine it'.[4] In other words, the tectonic turns out to be crucial for understanding the complex relationship of architecture with the reproductive system of capitalism.

From the point of view of tectonics, architecture is materialised through construction, though the final result is not transparent to the constructed form. After Semper, one can argue that there is always *excess* involved in architecture, the agent of which, if it is not reduced to formal and symbolic elements of some kind, is simply tectonic. Without subjecting architecture to the world of 'image building', a subject discussed in another essay of Foster,[5] it is the cultural that underpins Semper's tectonics, in which the image mediates between the core-form and the art-form of a building.[6] Aside from the title's paradoxical juxtaposition of image with building, Foster's essay alludes to historicism as one of the main facets of theories that discuss architecture alongside contemporary cultural discourses. Implied in Semper's mapping of tectonics in the broader constructive culture of a given period is a vision of historiography that informs much of what 'contesting practice' wishes to deliver in the title of this essay.

What then is the nature of excess in Brutalist architecture? And how does the work's revealed poetics of construction resist becoming part of the image-laden implications of the pop culture that spread throughout the Anglo-Saxon world of the postwar era? To answer these questions, this essay will explore Brutalism's criticism of the established ethos of the International Style architecture. The first part of this article will underline the move-

ment's tendency to replace the painterly with the sculptural in reference to the contemporary interest in monolithic architecture. In particular, this paper will address Reyner Banham's 'New Brutalism' in order to highlight the notion of image for a tectonic discourse that was not popular at the time when the British historian, following the Smithsons' work, formulated his own understanding of Brutalism. This discussion establishes the premises for the second part, which explores the import of disciplinarity in architecture, and argues that the theme of agency in architecture is tectonic in nature. This part examines various discourses of autonomy permeating the 1970s architectural discourse in order to show that, if one accepts tectonics as the agent of architecture, then criticality does not necessarily involve 'applied theory', but instead, emerges in the *distance* that is taken from architectural praxis of the recent past. To shed light on the capacity of the tectonic of theatricality in occupying the grey area shared by autonomy and semi-autonomy, the last part of this essay takes the notion of 'parallax' for a reading of two projects, Zaha Hadid's Phaeno Science Center and OMA's Casa da Musica, where some tectonic aspects of New Brutalism have been revisited.

History I

The turn to New Brutalism highlights a moment in the recent history of architecture that provided the architects of the 1950s with the theoretical means, starting with Britain, to distance their work from the modern architecture of the early 1920s. I will argue in this part of the paper that their central achievement was the transformation of the architectural image, first popularised through Mies van der Rohe's experimentation with various structural systems, from a painterly to a sculptural tectonics. Mies's work, even before moving to America, had already begun to dismantle the modernist architectural image, which was centred first of all on volume. These observations are suggested in Banham's theorisation of British architecture of the postwar era.[7] Of particular interest to the argument

presented in this essay is Banham's demonstration that the scarcity of skill and manpower played an important role in architects' choice of materials: brick and *béton brut*, to name the two most favoured dressing materials used in Brutalist architecture.[8]

In contextualising the idea of New Brutalism it is important to underline two interrelated developments, both formulated by Banham, and hinging on the architecture associated with Brutalism. In the first place, he criticises that understanding of tradition, which forgets all that has been achieved at the expense of selected traditions. The 'new' view of tradition, Banham wrote, demands 'total recall - everything that wasn't positively old-fashioned at the time it was done was to be regarded as of equal value'.[9] The earlier dislike of the modernists for British building townscape theories and the picturesque was balanced by a turn towards some aspects of classicism. The move was in part motivated by the publication of Rudolf Wittkower's *Architectural Principles in the Age of Humanism* (1949), le Corbusier's 'Modulor', and in particular the tradition of British Palladianism, circa 1940.[10] From this emerged the singularity of Brutalist architecture: its attention to tactile sensibilities associated with the vernacular; the idea that the building should be virtuous; and, most importantly, the idea that the building's meaning should be in itself. Thus, it was central to Brutalism, according to Banham, 'to construct moving relationships out of brute materials'.[11] All these were sought as the attributes of an architecture that, in addition to structural clarity, enjoyed a feeling for materiality, and spatial simplicity. It is the realisation of a deep respect for the affinity that the material provides, so the Smithsons declared in 1955, 'between building and man - which is at the root of the so-called Brutalism'.[12] It is this concern for the communicative side of architecture that renders image central to Brutalist architecture, and this in consideration of the fact that postwar mass-media culture was taken over by commercial interests.[13]

The question concerning what it is that provides architecture with internal meaning is discussed in one of Banham's essays, interestingly enough, entitled 'Stocktaking'. The text is printed in two parallel columns, respectively subtitled 'tradition' and 'technology'. Of particular interest is the fact that tradition carries equal weight in Banham's article, even though, and this seen in retrospect, it is the issue of technology that will enable the author to provoke an image of architecture centred on technique. The singularity of Banham's approach to technology is implied in the epigram of his essay, which reads: 'the world of "what is" suddenly torn by the discovery that "what could be" is no longer dependent on "what was"'.[14] Thus, his emphasis on 'what could be' draws the reader's attention to the potentialities of technologies available then, including the technologies of mass communication that were sought to foster postwar consumer culture.

Directing one's attention to the Hunstanton School (1949-54) and the Ham Common building [fig. 1] - designed by Stirling and Gowan (1958) - Banham ends the column on tradition with an emphasis on the positive role science and technology play for architecture. Underlining the differences between the Smithsons' and Mies's architecture, he writes: 'the nature of its [Hunstanton's] ultimate performance under stress is acknowledged in the use of plastic theory by the engineer responsible for the structural calculations.' There is a sense of realism in his statement that alludes to the British interest in scientific matters of the 1950s, aspects of which can be traced in the traditions of the arts and crafts movement - and this in reference to the clarity involved in Brutalist architecture, in making a distinction between what is structural and what is infill, brick or metal, or where and how to show the demarcation line between floors. These architectonic elements induced a departure from the painterly implications of the early modern architecture, in particular the concept of free-facade and its relation to structure, which more often than not evokes the volume rather

than the sculpted mass. Still, Banham's interest in materiality and its expression in the building was strong enough for him to admire the Hunstanton School, even though the building does not enjoy the perception of heaviness attributed to the best of Brutalist architecture.

Both the Hunstanton and Ham Common buildings utilise the notion of embellishment. Deeply rooted in the craft traditions of architecture, this term connotes refinement, and handling and detailing to suit the material chosen. In the Ham Common housing, 'load-bearing, fair-faced brickwork aspires to a common telluric sensibility: a treatment to the existential authenticity of brick'[15] and its many tectonic manifestations, walling and enclosure, roofing (vaulting) and covering. The presence of exposed brick, cast concrete and architectural details such as gutter elements, not only illustrates the Brutalist attempt to seek meaning in the poetics of construction, but also signals a resolute critique of the priorities of interwar modernism, which professed a radical departure from such detailing. In addition to the association of Hunstanton with the tectonics of Mies's buildings on the campus of IIT (circa 1942), it is the ethical involved in the Smithsons' handling of material(s) which makes their work different from the aesthetic of abstraction implicit in Mies's American period.[16] Banham follows a similar line of considerations to differentiate the Ham Common from Le Corbusier's Jaoul House. The reader is told that the cuts in the brickwork cladding of the Ham Common are 'calculated to the limits of the load-bearing capacity - a decision that is more responsible than any Twenties-revivalism for the use of dropped windows for their inverted-L shape'.[17]

The cut frame windows of the Ham Common building are remarkably similar to those of Louis I. Kahn's Richards Medical Research Building (1957-61), whose brick cladding at the corners gives into a tectonic figuration of beams. The analogy is important here because Banham ends the technology

section of his essay with Kahn and what is called the 'topological' science of the Richards Medical Building. Recalling Mies again, he concludes that Kahn's solution 'brings us to the point of fusion of the technological and traditional aspects in architecture today. Kahn is sympathetic to, and has been classed with, the Brutalists'. And he continues, 'on both sides, enterprising and intensive scrutiny of tradition and science appears to suggest a way out of a dilemma, if not a solution to a problem'.[18] What is involved here is of historico-theoretical import: that any re-thinking of architecture, within the traditions of modernism and after Brutalist architecture, should pay attention to the dialectics informing the two opposing poles of tradition and technology. Even though Banham will soon embrace the ethos of Futurism, the opposition between tradition and technology he establishes here has obviously got a foot in the door of the nineteenth-century architectural discourse. Noteworthy is the fact that the idea of topology, once overshadowed by the modernist tendency for elementary Platonic geometry, had long been current in British architectural theory, going back to the second half of the nineteenth century, and resurrecting in the townscape and picturesque movements.[19] What was new in Banham's view of topology, however, was an image of architecture whose structural concept had achieved both organisational and aesthetic expression. There is enough substance in Banham's discussion of issues such as tradition, technology and topography to support the weight given to the architecture of Brutalism in this essay's re-thinking of the tectonic in the purview of digital techniques and their aesthetic implications.

In retrospect, but also in consideration of the contemporary state of architecture, one might suggest that Banham's formulation of Brutalism has forced architecture to take an inward turn, reiterating its disciplinary themes in the light of technical developments and, at times, motivated by discourses unfolding outside of architecture. Under this condition, call it postmodernism if you wish, the image

Fig. 1: James Stirling & James Gowan, Ham Common apartment, London, 1958. Image from David Leatherbarrow and Mohsen Mostafavi, *Surface Architecture* (Cambridge, Mass.: MIT Press, 2002).

has emerged as the main communicative aspect of architecture, if not that which architects value the most. This is not only suggested in Banham's advocacy for Brutalism and its wish to depart from the principles of the International Style architecture. Anthony Vidler reminds us of the significance of the notion of 'image' for art history, first posed by Ernst Gombrich's introduction of the role the beholder plays in projecting an image into the thing looked at,[20] and resurfacing in Banham's characterisation of Brutalism. For Vidler, Banham's rapprochement to the idea of image 'was not only a passive symbol of everyday life or technological lenses, but an active participant in the viewer's sensory perception'.[21] Reading these lines in the context of the 1960s turn to semiotic theories and structuralism, it is not too far-fetched to say that a concern for communication was already at work in the architecture of Brutalism. This concern was suggested in the very sub-title of Banham's book on Brutalism, 'Ethic or Aesthetic'. The notion of ethic[22] in Brutalism for Banham was image-laden in its fascination with naked materials: a commitment to 'truth to material' in reference to vernacular architecture and its effectiveness in communication, but also to the affective qualities of a building.[23]

Not all works associated with Brutalism drew from vernacular familiarities and classical-inspired massing. Consider James Stirling's Engineering Building, Leicester University (1959), where a preference for weighty static effects is balanced with poised dynamics that are absent in the mainstream of the architecture of the late 1920s. In this building, Sterling uses architectonic elements whose communicative potentialities do not tally with those of the Ham Common, where the observer can speculate on the architectonic logic underpinning the cuts implemented in the facades by counting layers of brick. This is evident in the massing of the Engineering Building's lecture hall and its composition in reference to the tower. The image registered here draws from what might be called a constructive

montage. It relies on the beholder's potential experience of weight and support in a theatrical moment. To sustain the suggested image, 'certain elements of structure are deliberately suppressed'. The tower, for instance, Kenneth Frampton continues, 'rests on supports of deliberately minimized dimensions, and the surface of relation between these exposed concrete supports and the tiled skin of the concrete/cantilevered lecture hall is left ambiguous'.[24] Still, the section demonstrates the tectonic rapport between the earth-work and the so-called frame-work. The cuts and juxtaposition of the heavy massing of the lower level make the tower soar high. If this building of Stirling marks a departure from the notion of tectonic registered in the Ham Common and in Maison Jaoul, the ethical side of Brutalism is lost in the general postmodernist tendency to simulate historical forms.

The Brutalist concern for the ethics of materiality and construction, however, was given a new twist in Frampton's formulation of the thematic of a 'critical practice', first discussed in his famous 'Six Points of an Architecture of Resistance'; then in 'critical regionalism', later to be channelled through the historicity of the tectonic in contemporary architecture.[25] In addition to issues central to his theorisation of the tectonic, what makes Frampton's work of interest here has to do with a semi-autonomous notion of architecture that interestingly enough hinges on Jürgen Habermas's famous claim for the incompleteness of modernity.[26] The paradox between universal and national, implied in Frampton's critical regionalism (in opposition to Robert Venturi's idea of both/and), demands a rereading of the culture of building, the tectonic being the most critical one, in the bedrock of the radical aspect of modernisation, and its implications for contemporary neo-avant-garde architecture.

While Frampton did not go this far, one can take the suggested paradox and propose a different reading of the incompleteness of modernity. The

idea is not to say that 'modernity is still alive' and that there is no validity to postmodern discourses. The intention rather is to make a pause - suspend all good and bad expectations, and thus 'to provide culture with running room'.[27] What is involved in this reading is the very possibility of weakening the notion of zeitgeist while accepting the singularity of modernity, that is, the pressure for constant change, flux and uncertainty. Two issues need to be addressed. Firstly, a weak idea of modernity enables architecture to re-code the thematic of the culture of building based on its own internal dialectics.[28] Secondly, a quasi-autonomous approach to architecture is useful if reiterated beyond dichotomies framing modernity and tradition, or global and local. What is involved here is that, accepting the nihilism of modernity, the very traditions of architecture should be re-coded in the light of a project of deconstruction implicit in Semper's theory of architecture. This is important because in his theorisation of architecture, elaborated in the last part of this essay, there is no room for the so-called spirit of time, or the long-lived classical hegemony. What makes Semper important for the objectives of this essay is that, on close examination, his theory provides 'running room' for a different interpretation of the matrix of a semi-autonomous architecture. This is evident in his argument that through embellishment the literal dimension of material and technique is transformed into artistic expression, which belongs to the cultural domain.

The idea that *technique* can play a mediating role is important since, in the aftermath of World War II, technology has not been operating merely at the technical level; the cultural has become a technical apparatus in its own right, both in production and consumption processes. By the 1950s however, architects had to address the limitations the International Style architecture had imposed on the art of building. It is in this line of consideration that this essay wishes to present the New Brutalism as a critical practice, broader aspects of which, as far as

contemporary debates on autonomy are concerned, are registered in Antonio Negri's 'grammar of politics'.

One cannot but agree with this Italian thinker and activist that in late capitalism we are 'engulfed in commodity fetishism - without recourse to something that might represent its transcendence. Nature and humanity have been transformed by capital.'[29] Under these conditions, and having lost the window of opportunity to reach *outside* the world produced by capital, Negri suggests that the thematic of a creative resistance should be motivated by the present ontology,[30] and not by readymade prescriptions that fail to recognise the historicity of postmodern conditions, understood either in terms of what has already been said about the notion of the incompleteness of modernity as a project (Habermas), or the acceptance of postmodernism as a periodic shift in the long history of modernity (Jameson). These two positions and many others available, the discussion of which should not take place here, map a specific state of subjectivity, which in return has considerable bearing on contemporary architectural debates. For Negri, however, subjectivity could not 'be allowed to lose itself in the postmodern context, and be dissolved in the flat circulation of commodities and significations. The resisting subject emerged as an inventor of meaning, as the synthesis of intelligence and cooperation.'[31]

With this having been said, then, it is plausible to map a critical architectural praxis that in one way or another perpetuates the singular benchmarks set by New Brutalism. Of particular interest to this proposition is the movement's sensibility to material, construction, and the tectonic of heaviness. The latter should not only be seen in contrast to the 'painterly' implied in the architecture of the 1920s, first addressed by Heinrich Wölfflin's theorisation of style in art history.[32] The weakening of the hegemony of the painterly since and through the architecture of Brutalism offers the chance to rethink the tectonic

in association with sculpted forms. Furthermore, aside from issues such as whether there should be a gap between an architect's rapport with theory (Smithsons) and that of the historian's theorisation of history (Banham), the preceding discussion wanted to highlight the strategic distance Brutalism maintained from the tropes of the International Style architecture. Central to the implied departure is the movement's redefinition of the scope of architectural discipline. Of further interest is Brutalism's aspiration for monolithic massing, which, if re-approached in the purview of the tectonic of theatricality, has the potential to present an alternative to the current architectural tendencies for abstract and digitally-charged playful forms. This is important not only because in the architecture of Brutalism the aesthetic and the structural coincide, but also because the image implied in the tectonic is unique in many ways; be it topological (Banham), a derivative of the simulation of historical forms (Venturi), or finally, formalistic of the kind propagated by Eisenman, to mention a few interpretations of image in contemporary architectural theories. The significance given to the New Brutalism in this essay also demonstrates the movement's unnoticed tendency towards autonomy, the criticality of which is better understood if considered alongside various theories of autonomy permeating the architecture of the 1970s, a subject that will be taken up in the next section.

History II

Writing in the late 1930s, Clement Greenberg suggested that, in order to isolate itself from the imperatives of a market economy and the revolutionary fever experienced by the Soviets of those decades, the avant-garde had to navigate in a realm devoid of any contradiction. In search of art's purity, Greenberg speculated that the avant-garde had 'arrived at abstract or non-objective art'.[33] What should be underlined here is the aesthetic implication of the concept of abstract art, which, as Greenberg reminds his reader, alludes to the interest in autonomy, and the turn for the 'disciplines and

crafts, absolutely autonomous, entitled to respect for their own sakes, and not merely as vessels of communication'.[34] In making the point that in a given situation diverse artistic tendencies operate simultaneously, Greenberg benefited from the aesthetics implied in the Kantian concept of autonomy, one important consequence of which was the claim that each art has its own specific language the opacity of which should be emphasised.[35]

Even though Greenberg's theory of art was primarily concerned with the state of modern painting, the only way to sustain architecture's 'opacity' is to highlight its rapport with techniques, the main intention of which is to break into architecture's opacity in the first place. The implied paradox is central to Banham's remarks concerning the dialectics involved in Brutalist architecture's relations with its own conditions of production processes: how to retain the overall project of modernity, and yet stand against prevailing formal and aesthetic conventions? Earlier in this essay it was suggested that, besides the issue of technology and tradition, what was also unique to Brutalism was its noted inclination for autonomy. This last observation suggests that the interest of the New Brutalism in materiality and other aspects of the culture of building heralded the 1970s move towards autonomy in architecture.

Bernard Tschumi, for one, has argued that the 1970s drive for autonomy was sought against those who would propagate architecture as a means of representing cultural and regional identities. Both formalism and regionalism, according to him, dismiss 'the multiplicity of heterogeneous discourses, the constant interaction between movement, sensual experience, and conceptual acrobatics that refute the parallel with the visual arts'.[36] Tschumi's statement speaks for architecture's occasional move to internalise ideas and concepts that are extraneous to the discipline. His notion of autonomy, however, pushes architecture away from those aspects of the culture of building that were formative for the archi-

tecture of Brutalism.

Now, if it is correct to say that through modernity architecture had to adjust its disciplinary history to the forces of modernisation, then, the historicity of that awareness and its relevance to the situation of postwar architecture can be detected in Eisenman's following statement: 'If in the interiority of architecture there is a potentially autonomous condition that is not already socialized or that is not already historicized, one which could be distilled from a historicized and socialized interiority, then all diagrams do not necessarily take up new disciplinary and social issues. Rather, diagrams can be used to open up such an autonomy to understand its nature.' And he continues: 'If this autonomy can be defined as singular because of the relationship between sign and signified, and if singularity is also a repetition of difference, then there must be some existing condition of architecture in order for it to be repeated differently. This existing condition can be called architecture's interiority.'[37] This rather long quotation, written in retrospective view of his work, reveals issues pertinent to any discussion that concerns the return of autonomy to architectural theory. Since, and through, the inception of New Brutalism, it is not a stretch to say that there might have been something in the intellectual air of the 1970s encouraging architects to see autonomy as a conceptual tool capable of re-energising the situation of architecture.

To reinvent itself during the 1970s, architecture was left with a number of choices. Several architects theorised architecture's borrowing of concepts and ideas developed in other disciplines. One is reminded of Tschumi's notion of event derived from film; Rem Koolhaas's strategic re-rapprochement to surrealism, and Steven Holl's aspiration for a phenomenological interpretation of the architectural object. Others, including Eisenman and Aldo Rossi, chose to look into the interiority of architecture, a position radically different from New Brutalism's

interest in tradition, as discussed previously in this paper. For Eisenman and Rossi, the autonomy of architecture is centred in a formalistic interpretation of grid, plane, and type. Eisenman's inclination for autonomy concentrates on a postmodernist reading of Le Corbusier's Dom-ino frame. Having established the latter's conceptual contribution to modernism, Eisenman revisited formalism in what is called 'cardboard architecture'. Regardless of Eisenman's criticism of the Italian architect,[38] the fact remains that Rossi's work sheds light on the political dimension of architecture, a subject dismissed by Eisenman and the architects who supported the idea of Brutalism.

Pier Vittorio Aureli has recently presented a picture of Rossi's work, the historical significance of which is associated with the discourse of autonomy developed by the Italian left movement of the 1960s. Criticising the American interpretation of autonomy, championed by Eisenman and Colin Rowe, Aureli discusses the architectonic implications of an autonomy that set out to reverse the interests of working class people, primarily defined and implemented by capitalism. For Rossi 'the possibility of autonomy occurred as a possibility of theory; of the reconstruction of the political, social, and cultural significances of urban phenomena divorced from any technocratic determinism'.[39] While in the late 1960s the ideological dimension of capitalism found a temporary home in the renewed interest in humanism, Rossi sought the *poiesis* of architecture in typological reinvention.[40]

In retrospect, one can argue that Rossi's radicalism did not go far enough. Whilst re-interpreting architecture's autonomy, typological research did not open itself to the forces essential for the very need to reiterate autonomy. What this criticism wants to establish is that autonomy cannot stand without its opposite. Foster, for one, is correct in saying that the antinomy between aesthetic autonomy and its socio-historical imbrication are the two sides of the

same coin. His enumeration of a great number of art history concepts formulated in different periods ensures the need to couple the historical dimension of the subject with a theoretical inclination that sets out to establish the necessary rapport between a particular work of art and its subject.[41]

While there is more to follow of the centrality of communication for the tectonic of theatricality, what needs to be added here is the way in which the idea of the tectonic (as presented in this essay) responds to the historicity of the dialectics between autonomy and semi-autonomy. It was suggested earlier that the tectonic of theatricality has the potential to communicate with the cultural at large. Affirming the nihilism of technology, the tectonic of theatricality seeks new ways of articulating the dialogical relation between cladding and structure, the roof-work and the earth-work, to mention themes central to Semper's theory of the tectonic. What is involved here is a strategic reversal showing the extent to which the external, digital reproductivity for instance, can be progenitor of a different tectonic figuration.

Parallax

Discussing the work of Kant and Marx, Kojin Kara-tani suggests that parallax is something 'like one's own face in the sense that it undoubtedly exists but cannot be seen except as an image'.[42] The philosoph-ical position on parallax centres on the antinomies informing the subject/object dialogue.[43] Following Merleau-Ponty, Steven Holl suggests that the spatial 'criss-crossing' experienced in the Helsinki Museum of Contemporary Art, 'involves turns of the body and the parallax of unfolding spaces'.[44] Here the term is used to present a non-organic relationship between the core-form and the art-form, between construc-tion and architecture. To repeat what has already been said, the excess in architecture alludes to the gap that informs the tectonic. 'Inform' here does not operate in a deterministic way. The art-form does not mirror the core-form. Rather it performs like this: 'sure, the picture is in my eye, but I am also in the

picture'.[45] Therefore, 'excess' is already included in the construction: it is neither part of the subjective projection of the architect, nor a mirror image of a constructed form. One implication of this reading of the tectonic suggests that the very constructive logic central to tectonics might, paradoxically, decon-struct the positivistic interpretation of the impact of technology on architecture. Only in this way can one do justice to Semper's theory of the tectonic, and discuss the import of material and technique, but also do justice to the aesthetics registered in the work of Hadid and Koolhaas, to be discussed in the following pages. Another implication is the possibil-ity to differentiate the formative nature of 'technique' in the formation of the culture of building, and to rewrite the history of architecture in consideration of the economic and technological transformations that were endemic to the transgressive move from *techne* to technique, and from that of the tectonic to montage.[46] In this mutation, 'image' does not vanish. Its transformation remains internal to construc-tion. And yet the image permeating contemporary architecture differs from that attributed to the archi-tecture of Brutalism. In the latter case, the image was informed by the fusion of the aesthetic with the structural. In the age of digital reproduction, instead, the spectacle Guy Debord attributed to commodities is tailored, reproduced, and personalised *ad infini-tum*. This historical unfolding will be taken here to demonstrate 'the kind of critical thinking that image can make possible'.[47]

There are many ways to explain the usefulness of the proposed historical paradigm. It allows for a comprehensive understanding of the dialectics involved in the visibility and/or invisibility of construc-tion in different periods of architectural history. That the theme of construction was invisible in Renais-sance architecture, for example, is suggestive of a situation in which metaphysics takes command, and the objects are displaced 'in the illusory space, and not according to their relative value within the culture', to recall Frampton's reflections on perspec-

Fig. 2

Fig. 3

Fig. 4

Fig. 2, 3 & 4: Zaha Hadid, Phaeno Science Center, Wolfsburg, Germany 2005. Images courtesy of Hadid Architects.

tive.[48] To understand the full connotation of the theoretical premise presented here, the discussion should turn to the landscape of modernity, and Semper's discourse on the tectonics.[49]

Briefly, central to Semper's theorisation of architecture is the transgression of its limits framed in the classical theory of imitation. Semper's argument that the constructive aspects of architecture are driven by the four industries (textile, ceramic, masonry and carpentry), and the importance he attributed to the notion of clothing, suggests that the German architect was neither a materialist nor a positivist. In explaining how skills developed and motifs emerged in the four industries mentioned above, he goes further suggesting that the essentiality of technique in making, even in weaving a simple knot, should not be dismissed. This is implied in Semper's discussion of *Stoffwechsel*, where skills and techniques immanent in the art of building play a significant role in transforming and modifying motifs from one domain of cultural productivity into those of architecture. The modification is, however, carried out by techniques that are architectural, in particular the primacy of the principle of cladding, and the *lawful* articulation of 'surface': not the actual surface of the raw material, but one that has already been prepared (the constructed form) to receive motifs, linear or planar. Thus we see the criticality of a Semperian notion of semi-autonomy that aims to establish an immanent relation between purpose, material/technic and the actualisation of what is called the structural-symbolic dimension of the tectonics of theatricality.[50]

Considering his passion for Renaissance architecture, in contrast to the Gothic, it is plausible to say that Semper saw architecture both in the light of the disintegration experienced at the dawn of modernisation, and the richness of Renaissance architecture in covering masonry-constructed form anew. His methodology neither makes a linear connection between a presumed origin and the architecture of the nineteenth century, nor intends

to replace one style by another. Seemingly, Semper was able to see in modernity the very disintegrated nature of the art of building. Semper's theory of the tectonic allows for a different reading of the import of image in architecture.

In discussing architecture in terms of the tectonics of the core-form and the art-form, Semper's theory retains an image which is architectural by nature. What this means is that architecture is not a direct product of construction; and yet the core-form (the physical body of the building) inevitably puts architecture in the track of technological transformations and scientific innovations. Herein lies the ethical dimension of the tectonics, which not only recalls the architecture of New Brutalism, but which can also be traced back to the long history of architecture's confrontation with technique. Discussing the notion of *techne* in Alberti's discourse, Tafuri wrote: 'surely it is tragic that the same thing that creates security and gives shelter and comfort is also what rends and violates the earth.' He continues, 'technology, which alleviates human suffering, is at the same time an implacable instrument of violence.'[51] This is to counter Banham's over-valourisation of technology. The paradox evoked in Tafuri's statement can be extended to the Semperian notion of art-form: in suspending the Kantian notion of beauty, centred on the subjective inner imagination, the art-form remains the only venue by which architecture is charged with aesthetic sensibilities that are, interestingly enough, informed by perceptual horizons offered by the world of technology. The art-form also reveals tactile and spatial sensibilities that are accumulated through the disciplinary history of architecture. Therefore, while the core-form assures architecture's rapport with the many changes taking place in the 'structure' of construction, the art-form remains the only domain where the architect might choose to confer on the core-form those aspects of the culture of building that might side-track the formal and aesthetic consequences of 'image building', and yet avoid dismissing the latest tech-
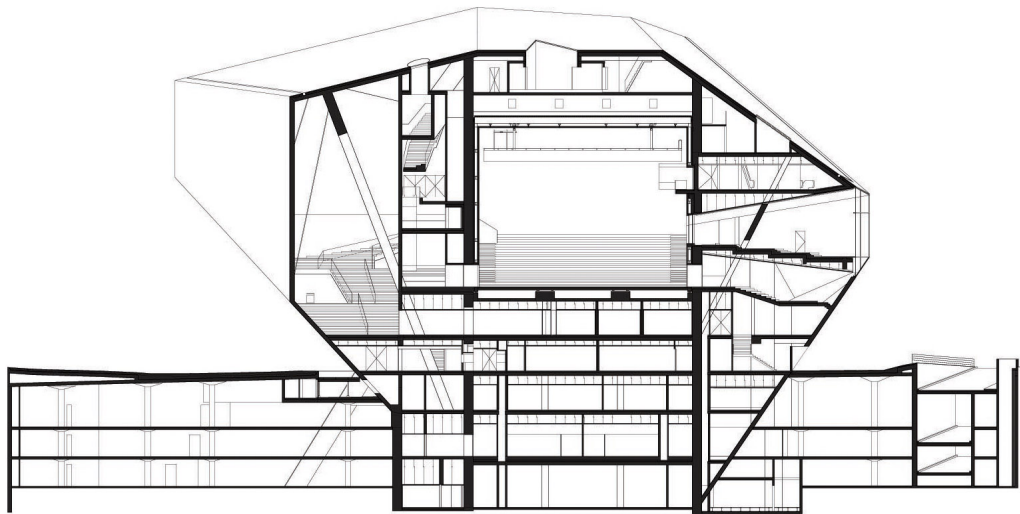
Fig. 5

Fig. 6

Fig. 7

11   02

Fig. 5, 6 & 7: OMA, Casa da Musica, Porto, Portugal, Images courtesy of the Office for Metropolitan Architecture (OMA)

nological developments.

One can provisionally conclude that any theorisation of 'criticality' for the present situation should take into account the importance Banham charged to technology. He went so far as to take it on himself to 'free the mechanics from the academics'.[52] If one agrees with the proposition that construction is ontological to architecture, then, image prevails over architecture even when freed of the so-called academics. The discussion can be applied to the image of mechanics implied in the work of Cedric Price, Archigram, and Buckminister Fuller, to recall a few heroes of Banham. To stay with the premises outlined earlier in this essay, it would be more useful to examine one of Zaha Hadid's projects where heaviness in the architecture of New Brutalism is transfigured into the tectonic of theatricality. Her architecture is of further interest: the stereotomic-looking architecture of the Phaeno Science Center (2006) purports a dynamic image different from the mechanical playfulness of Russian Constructivism, a body of work attended by the architect since her early career.

Starting from the generic potentialities of the Dom-ino system, the Phaeno Science Center pushes the Semperian notion of the earth-work and the frame-work to a dramatic stage [fig. 2]. Standing above a buried volume, the building's ten huge cone-shaped support elements hold up a concrete slab, itself the ground for the building's main steel frame structure. The underground volume effectively acts as a raft, floating the whole structure above less than adequate subsoil for traditional pad and footing construction. Recalling Kahn's notion of 'empty column', the conical piers are conceived as part of the spatial organisation of the volume [fig. 3]. They are purposely detailed to appear to be rising up from the sculpted ground plane. Their dynamic figuration, however, distinguishes them from the heavy *pilotis* of the Marseille apartment block. The theatricality of the entire volume, including the

pleats and cuts introduced in the concrete enclosure, mark another departure from the ethos of the New Brutalism. In the Phaeno Center, like many other contemporary cases, the ingenious attempt to animate and smooth the surface of concrete has weakened the dull and porous tactile qualities of this material remembered from the early industrial structures.[53] Gone also is the logic of cuts informing the facade of the Ham Common building, for example. In Hadid's hands, every design decision is used to exaggerate the animated body of the building. Along the southern face, for example, the cut is used to express a glazed opening on the diagonal, adding more dynamic movement to the poised form. Even the massive truss system of the roof folds and bends, here and there, as in a dance with the floor plane whose undulating surface blurs the boundary between the wall and the floor elements [fig. 4].

Call it 'social construction of technology',[54] the tectonic of theatricality allows a material such as concrete to operate as an agent of architecture. It also brings forth various dichotomies shaping the transformational process and versatility of building materials. In Hadid's work, the heaviness evaporates into an image that is in focus with the spectacle permeating the present culture, and thus turning architecture into an ornament. This aspect of contemporary architecture, discussed in a different context,[55] is reiterated here to connect the subject with the art of stereotomy. Having roots in stonecutting, military engineering, mathematical geometry, and in architectural composition, stereotomy succeeded in casting a different light on the tectonics of column and wall, and in making a stylistic distinction between Gothic and classicism.

Throughout pre-modern theories of architecture it was believed that a structure should both look and stand stable. In seventeenth-century France, according to Robin Evans, '*trompes*, the most advanced theory of stonecutting, flouted this rule by appearing to defy gravity'.[56] While used to facilitate
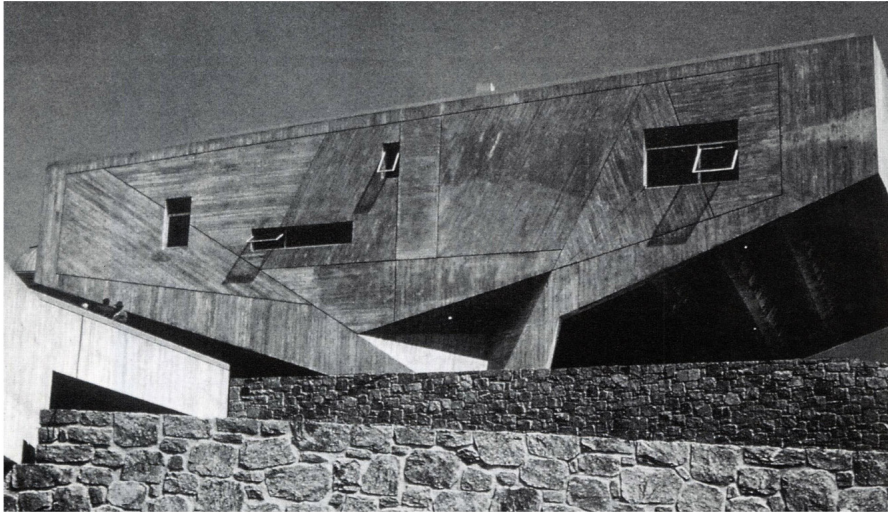
Fig. 8

Fig. 9

Fig. 8: Marcel Breuer, University Heights, New York University, New York, 1961. Photograph courtesy of the author.

Fig. 9: Zaha Hadid, Cagliari Museum, Italy. Image courtesy of Hadid Architects.

the addition to an exciting building, the *trompe* was conceived as a structure in its own right. It was built out of drawings (called *traits*) where the geometric matrix of lines defined the stereotomic nature of the surface. The implied shape then dictated the cuts to be introduced into the various pieces of stone used in a *trompe*. In Evans's investigation, there is an explicit hint at the contrast between the perception of lightness of geometry in a drawing and heaviness of the depicted stone. Also suggested is the fact that stereotomy lends a means for differentiating the tectonic at work in the classical and Gothic buildings. In the latter case, for example, the rib was built first and the surface between filled in later. Still, a number of architects used stereotomy to think of forms that could be 'ungothic and also unclassical', and yet not baroque. In the choir vault of Gloucester cathedral (1367), for example, ribs are seemingly attached to a huge cambered sheet that covers the entire choir. Thus, in this cathedral the emphatic distinction between column and wall is erased, along with the tectonics that hinged on the relation between structure and ornament.[57] According to Evans, there are two kinds of line in the drawings used for stonecutting: one light and the other heavy, 'the imaginary lines of geometrical construction and the lines indicating contours of the thing drawn'.[58] This observation recalls Hadid's long-time occupation with drawings, most of which deliver a pleasant image of lightness and dynamism, and an architecture that recalls the qualities of *trompe*, a constructed ornament. Here is what Frampton has to say about one of the architect's early works, the Hong Kong Peak, where 'to conceive of the building as an artificial mountain is to render the floor as a faceted escarpment and to project the roof as a dematerialised cavern'.[59] Furthermore, concepts such as fold and nonlinearity, and the popularisation of digital software press for complex geometries, the architectonic of which, next to the tectonic, underpin the architecture of the closing decade of the last century.[60]

Whilst geometry is central to the image-laden drawings produced by digital machines, there are several contemporary architects whose work attempts to intermingle geometry with sculptural tectonics. Beside Hadid's architecture, one is reminded of OMA's Casa da Musica in Porto [fig. 5], which, similar to Claude-Nicolas Ledoux's House of Agricultural Guards, looks as if it has been tossed into its territory like a stone [fig. 6]. The theatrical positioning of this monolithic volume in relation with the ground is evident in the way that the entry slab protrudes as it steps down. Here also, theatricality is associated with the stereotomic cuts, the two major ones being those that charge the building with directionality. These, interestingly enough, parallel the orientation of the building with the city. The secondary cuts are introduced to support the suggested orientation, which happens to follow the spatial organisation of the building, detectable in its longitudinal section [fig. 7].

There are other contemporary architectural examples where the concept of cut is used to suspend the spectacular look permeating digital architecture.[61] Instead of emulating the playful forms that relate architecture with the present image-oriented culture, the cuts implemented in the monolithic mass of the Casa da Musica should be understood in the context of 'competing mediating disciplines, of rival forms of knowledge, to which architecture, with its occasional claim to autonomy, has long sought to belong'.[62] The present turn to monolithic architecture is of further interest; its tectonic cuts have the potential to shortcut the postmodern approach to communication. In the second place, the anonymity implicit in a monolithic form (its un-approachability) is of critical importance in reference to both the autonomy issue, and contemporary architects' euphoria for the spectacular images garnishing digital architecture.

To give further twist to the issues discussed here, it is useful to return to Hadid. In the Phaeno Center,

the idea of cut is implemented to produce an art-form (image) standing on the borderline of spectacle and theatricality of the kind attributed to the *Casa da Muscia*. These two buildings demonstrate a tectonic figuration that avoids the two main problems which 'arose as soon as the illusion of imitating stone structures was abandoned; the first had to do with the exterior expression of the interior structure, and the second dealt directly with surface of the building'.[63] In addition to its structural possibilities, what occupied the architects most during the 1950s was the aesthetic (appearance) of exposed concrete. Consider Marcel Breuer's design for the Begrisch Hall (1967-70), the theatricality of which precedes the two contemporary buildings discussed here [fig. 8]. In the Begrisch Hall, the aesthetic is enhanced through stereotomic surfaces.[64] Similar to most architectural monolithics, the exterior economy of these buildings is achieved 'at the cost of formal and material excess and calibrated for intended effects'.[65] The main volume of the Phaeno Center, for one, is seemingly the result of cuts and pleats implicated in a rectangular prism. It was suggested that the building is generically a Corbusian *piloti* structure. The tectonic of theatricality (stereotomic surfaces) that informs Hadid's building departs from both modern and classical traditions, for which structure 'was less a preoccupation of the collapse of buildings than a precaution against the collapse of the faith in the rectangle as an embodiment of rational order'.[66] This aspect of the Phaeno Center is what makes it different from a more recent project of the architect, the Cagliari Museum in Italy [fig. 9]. The latter is baroque and atectonic; its epidermal smoothness justifies the surface on its own terms.

The analysis of buildings as presented here is of critical importance. On the one hand, it proceeds with the knowledge that ontologically, the state of modernity experienced in late capitalism is changed; on the other, it intends to perpetuate a different understanding of disciplinary tradition(s) of architecture. The trajectory of these two ontological

projections confirms the importance of the idea of parallax for a critical practice that is centred on the tectonic of theatricality. The latter can be defined as a parallax object, but it does not connote L. Kahn's famous aphorism, 'what the building wants to be'. In late capitalism, and thanks to the digitalisation of architecture, the art of building has stepped into the realm of commodities, the world of image building. The current public esteem for architecture has little to do with the tectonic. Rather it is induced by 'traumatic distortion', to use Žižek's words, that is central to the present state of cultural consumption. The smooth surface-envelope of the Cagliari Museum, for example, displays a collection of biological and zoological images. This phenomenon in architecture, paradoxically, can be apprehended through a perspectival shift in the tectonic discourse. The aim is not to write design prescription for architects. As a project, and following the reading of Brutalism presented in this essay, it intends to 'rescue' those elements of the culture of building that in the present image-laden circumstances are anamorphically distorted.[67] Finally, there is a degree of anonymity in the tectonic that is not opaque and inaccessible, and yet stops short of communicating either as a familiar sign of historical origin, or an image extraneous to the thematic of the culture of building. The tectonic has the capacity to reach for a perception of surface that neither is calculated to the limits of load-bearing forces (to recall Banham), nor tallies with the skin dressing of the organic forms produced by digital means. In the dialectics of autonomy and semi-autonomy, tectonics operates like an antinomy. In an attempt to reach that which is architectural, the tectonic facilitates architecture's entanglement with the constructive structures of capitalism.

Earlier in this essay it was suggested that there is a historiographic dimension in Semper's investigation of the cosmogonic origin of architecture. Starting from this premise, and presenting a different reading of New Brutalism, this essay wanted to establish the thematic of a constructive criticism of

contemporary architecture. Dismissing both histori-cism and the canon that relies on the delirium of 'once upon a time', the two projects, the Phaeno Center and the Casa da Musica, were chosen with the purpose of discussing the significant role the architectural traditions of Brutalism play in exhibiting the tectonic essence of architecture without effacing the aesthetic belonging to the contemporary image-laden culture.

Notes

1. Hal Foster, *Design and Crime* (London: Verso, 2002), pp. 100-03.

2. This departure, nevertheless, embodied the great many contradictions that modern architecture had to face in the course of its historical development. For the complete list of the recurrent themes that, according to Tafuri, the project of the enlightenment enforced on architecture, see: Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development* (Cambridge, Mass.: MIT Press, 1976), p. 3.

3. Mitchell Schwarzer, 'Ontology and Representational in Karl Botticher's Theory of Tectonics', *The Journal of the Society of Architectural Historians*, 3 (Sept. 1993), p. 271.

4. Bernard Cache, 'The Tower of Winds of ANDRONIKOS of KYRROS', *Architectural Theory Review*, forthcoming, 14, 1 (2009).

5. Hal Foster, 'Image Building', in *Architecture Between Spectacle and Use*, ed. by Anthony Vidler (New Haven: Yale University Press, 2008), pp. 164-79.

6. See: Gevork Hartoonian, *Ontology of Construction* (Cambridge: Cambridge University Press), 1994.

7. For a comprehensive analysis of these issues, see: Stanley Mathews, *From Agit-Prop to Free Space: The Architecture of Cedric Price* (London: Black Dog Publishing, 2007).

8. I draw the reader's attention to the series of the journal *Architectural Review* published in the 1960s and edited by Reyner Banham, starting with 'Architecture After 1960', *Architectural Review*, 427, 755 (January 1960).

9. Reyner Banham, 'Stocktaking', *Architectural Review*, 127, 759 (February 1960), p. 98.

10. Reyner Banham, *The New Brutalism: Ethic or Aesthetic* (London: The Architectural Press, 1966), pp.12-15.

11. Ibid., p. 16.

12. From the Smithsons' manifesto first published in January of 1955, here taken from Banham, *The New Brutalism*, p. 46.

13. See Lauren Stalder, 'New Brutalism, Topology, and Image: some remarks on the architectural debates in England around 1950', *The Journal of Architecture* (June 2008), pp. 263-81.

14. Banham, 'Stocktaking', p. 93.

15. Kenneth Frampton, *Studies in Tectonic Culture* (Cambridge, Mass.: MIT Press, 1996), p. 360.

16. On this subject see Stalder, 'New Brutalism, Topology, and Image'.

17. Banham, 'Stocktaking', p. 99.

18. Ibid., p. 100.

19. Stalder, 'New Brutalism, Topology, and Image', p. 268.

20. E. H. Gombrich, *Art and Illusion* (Princeton: Princeton University Press, 1960), Part III in particular.

21. Anthony Vidler, *Histories of the Immediate Past* (Cambridge, Mass.: MIT press, 2008), p. 137.

22. Banham, *The New Brutalism: Ethic or Aesthetic.*

23. Richard Llewelyn-Davies, 'Human Science', *Architectural Review*, 127, 757 (March 1960), p. 189.

24. Kenneth Frampton, *Labour, Work and Architecture* (New York: Phaidon Press, 2002), p. 262.

25. For Kenneth Frampton's contribution to 'critical practice', see Frampton, *Labour, Work and Architecture*.

26. Jürgen Habermas, 'Modernity-An Incomplete Project', ed. by Hal Foster, *Anti-Aesthetic* (Washington: Bay Press, 1983), pp. 3-15.

27. Foster, *Design and Crime*, p. 25.

28. Here I am benefiting from: Gianni Vattimo, *The End of Modernity* (Baltimore: John Hopkins University Press, 1988). Also see: Gevork Hartoonian, 'A Monument to the End of Modernity: the Implications of Gianni Vattimo's Discourse on Architecture', in *On Architecture, the City and Technology*, ed. by Marc M. Angelic (Stoneham: Butterworth-Heinemann, 1990), pp. 77-79.

29. Antonio Negri, *The porcelain Workshop* (London: Semiotext(e), 2008), p. 25.

30. Ibid., the last two chapters.

31. Ibid., p. 94.

32. Heinrich Wölfflin, *Principles of Art History*, trans. M.D. Hottinger (New York: Dover, 1950).

33. Clement Greenberg, 'Avant-garde and Kitsch', in *Art and Culture: Critical Essays* (Boston: Beacon Press, 1961), p. 5. For a critic of Greenberg, see T. J. Clark, 'Clement Greenberg's Theory of Art', *Critical Inquiry*, 9, 1 (Sept. 1982).

34. Clement Greenberg, 'Towards a Newer Laocoon', in *Collected Essays* (Chicago: The University of Chicago Press, 1986), p. 28. The essay was originally written in 1940.

35. Ibid., p. 32. He continues, the 'history of avant-garde painting is that of a progressive surrender to the resistance of its medium, which resistance consists chiefly in the flat picture plane's denial of efforts to "hole through" it for realistic perspectival space'. This is a provocative statement even though his understanding of 'functionalism' as the medium of architecture is short-sighted. Ibid., p. 34.

36. Bernard Tschumi, 'Architecture and Limits III', *Art Forum*, (September 1981), p. 40.

37. Peter Eisenman, 'Diagram: An Original Scene of Writing', *Diagram Diaries* (New York: Universe Publishing, 1999), p. 31.

38. Peter Eisenman, 'The House of the Dead as the City Survives', in *Aldo Rossi in America: 1976-1978* (New York: Institute of Architecture and Urban Studies, 1979), pp. 4-15.

39. Pier Vittorio Aureli, *The project of Autonomy* (New York: Princeton Architectural Press, 2008), pp. 12-13.

40. If one accepts that Rossi formulated one aspect of critical practice available at the time, another, according to Aureli, is a 'critique of ideology of the capitalist city, as this ideology manifested itself in the postwar recuperation of the Modern Movement and a new wave of technological avant-gardism in the 1960s', discussed by Manfredo Tafuri and Branzi. See Aureli, *The Project of Autonomy,* p. 55.

41. Hal Foster, 'Antinomies in Art History', in *Design and Crime*, pp. 83-103

42. See Kojin Karatani, *Transcritique: on Kant and Marx* (Cambridge, Mass.: MIT Press, 2003).

43. Slavoj Žižek, *The Parallax View* (Cambridge, Mass.: MIT Press, 2006).

44. Steven Holl, *Parallax* (New York, Princeton Architectural Press, 2000), p. 38.

45. Ibid., p. 17.

46. Hartoonian, *Ontology of Construction*.

47. T. J. Clark, *The Sight of Death* (New Haven: Yale University Press, 2006), p. 185.

48. Kenneth Frampton, 'Excerpts from a Fragmentary Polemic', *Art Forum* (September 1981), p. 52.

49. The following discussion profits from this author's work on the tectonic, see: Hartoonian, *Ontology of Construction*.

50. On the difference between theatricality and theatricalisation, see: Gevork Hartoonian, *Crisis of the Object; the architecture of theatricality* (London: Routledge, 2006).

51. Manfredo Tafuri, *Interpreting the Renaissance*, trans. Daniel Sherer (New Haven, Conn.: Yale University Press, 2006), p. 51.

52. Vidler, *Histories of the Immediate Past*, p. 123.

53. Jean-Louis Cohen and G. Martin (eds.), *Liquid Stone* (Basel: Birkhauser-Publishers for Architecture, 2006), p. 7.

54. Ibid., p. 12.

55. On this subject see the last chapter in: Hartoonian, *Ontology of Construction*.

56. Robin Evans, *The projective Cast* (Cambridge, Mass.: MIT Press, 1995), p. 180.

57. Ibid., pp. 220-39.

58. Ibid., p. 206.

59. Kenneth Frampton, 'A Kufic Suprematist: The world culture of Zaha Hadid', *AA Files*, 6, (May 1984), p. 101.

60. Harry Francis Mallgrave and Christina Contandriopoulos (eds.), *Architectural Theory Volume II. An Anthology from 1871-2005* (Malden, Mass.: Blackwell Publishing, 2008), pp. 535-36.

61. See the last chapter in: Hartoonian, *Crisis of the Object.*

62. Rodolfo Machado and Rodolphe el-Khoury, *Monolithic Architecture* (Munich: Prestel-Verlag, 1995), p. 67.

63. Cohen and Martin (eds.), *Liquid Stone*, p. 27.

64. See Isabelle Hayman, *Marcel Breuer Architect* (New York: Harry N. Abrams Inc., 2001), p. 155.

65. Machado and el-Khoury, *Monolithic Architecture*, p. 13.

66. Evans, *The projective Cast*, p. 212.

67. See this author's discussion of the return of the two themes of 'organic' and 'surface' in the last chapter of: Hartoonian, *The Crisis of the Object*.

Biography

Dr. Gevork Hartoonian is Associate Professor in architectural history and theory at the University of Canberra, Australia. He has taught in many schools of architecture in the United States, including Columbia University (New York City). He is the author of numerous books and essays, including *Crisis of the Object: the Architecture of Theatricality* (Routledge, 2006) and *Ontology of Construction* (Cambridge University Press, 1994). He is also the editor of *Walter Benjamin and Architecture* (Routledge, forthcoming). Most recently, he has published 'Mies: The Window Framed', in *Fabrications* (December 2008). He has served as a member of the editorial group of *Architectural Theory Review* (Routledge) since 2001, and is guest editor of a special issue of this journal focusing on the subject of architectural drawing (vol. 14, no. 3, 2009). A Korean edition of his *Ontology of Construction* is scheduled for publication in 2010.

Beyond Discourse: Notes on Spatial Agency

Tatjana Schneider and Jeremy Till

From a sociological point of view, discourse includes all that a particular category of agents say (or write) in a specific capacity and in a definable thematic area. Discourse commonly invites dialogue. However, in architecture (as in all professions), discourse is not open to everyone but based on social appropriation and a principle of exclusion. Laypersons are not entitled to participate in the production of the profession as a discipline.[1]

Power can be taken, but not given. The process of taking is empowerment itself.[2]

The word 'agency' is becoming increasingly used and with this perhaps abused. In standing for almost anything, the idea of architects acting as agents can be associated with the most conservative of actions. In the worst-case scenario, agency just denotes 'acting on behalf of': on behalf of a contractor, a client, developer, etcetera. So, what - if not that - may the notion of agency mean within architectural production if it is to gain a more empowering sense? If we take 'agency' in its transformative sense as action that effects social change, the architect becomes not *the* agent of change, but one among many agents.[3]

But, what then, you might ask, is the role of the architect?

Most think that the architect is someone who has ideas, acts as an author of these ideas, and runs projects to deliver these ideas. As author, the architect has *authority*, which at the same time is a prerequisite for one's credibility as a professional.[4] It is this supposedly unfettered sequence from idea to final product that is relayed through the media, and also perpetuated through the educational system.

We all know that this story, this line of thought, isn't true: that architecture in its widest sense is rarely delivered through an individual; but the mythology of the sole architect as hero-author is still played out through the figures of Rem*s*, Zaha*s*, Norman*s et al*. The use of first names gives a comforting familiarity with genius that disguises the reality of how little of the built environment is associated with any architect-author whatsoever. This includes the developer-driven housing estates, as well as the ubiquitous warehouses, industrial sheds and garages. It also includes all those buildings that are produced with architects who fall below the radar of publication but whose values are still shaped by the mythology, and live in the hope (against hope) that one day they might cross over to the other side of fame. Almost inevitably these buildings simply don't have the looks to make it into the magazines and therefore remain unpublished and unheard of.

The story that follows here, therefore, is that of the architect as an anti-hero, someone who co-authors from the beginning, someone who actively and knowingly gives up authority. Someone who doesn't work in the foreground, but takes a step back. Someone who is part of the process, and sometimes but not always the initiator of the project.

We use the word 'story' to mark an escape from the inward-looking and excluding discourse that has dominated so much recent architectural theorising and the episodes that follow below present a series of related instances that develop and drive the subject.

We are less interested in whether we are living in a critical or post-critical era, because these terms circle round each other. Indeed, it is the fate of all 'post' terms (postmodern, post-critical, post-theoretical) that they never escape the hold of the condition that they would wish to succeed. Just, as Zygmunt Bauman notes, postmodernity is no more than 'modernity without illusions', so post-theorising is theorising without brains.[5] Against *Rem's* remark that architecture *per se* is unable to be critical and that it is impossible to make a creative statement that is based purely on criticism,[6] we argue that architecture as a discipline is inherently political and therefore immanently critical: either by negating or confirming a position. Koolhaas, it would appear, is falling into the trap of understanding critique in its negative sense, and thus one that inhibits his creativity, which is understood as necessarily positive. We, on the other hand, take the word critical in the early Frankfurt School sense, as something that starts out with an unravelling of the social reality of the given condition so as to be able to understand how to transform it into something better.[7] The story thus attempts to make a case for architecture as a socially and politically aware form of agency, situated firmly in the context of the world beyond, and critical of the social and economic formations of that context in order to engage better with them in a transformative and emancipatory manner.

Spatial agency

It is here that a particular understanding of the term 'agency' becomes important. If the word is to have any transformative potential then it needs to exceed the exchange-driven meaning of providing a service to another, where the other is typically a client with a certain set of short-term demands. Anthony Giddens's formulation of agency remains possibly the most relevant counterpoint to this self-serving understanding of agency.[8] He states first and foremost that agency 'presumes the capability of acting otherwise'.[9] This statement, in all its simplicity, is disarmingly radical in an architectural context. To admit to the possibility of doing otherwise is counter-intuitive to the professional, who is brought up on the foundation of certain knowledge leading to certain solutions. The exchange system of professional service is based on exactly this premise of certainty, because merely to offer the potential for the 'otherwise' is to offer up one's fragility, and this is the symptom of the amateur, a symptom that must be avoided at all costs. Thus to accept Giddens's sense of agency is also to accept a new sense of what it may mean to be an architect, one in which the lack of a predetermined future is seen as an opportunity and not a threat.[10]

To challenge the norms of professional behaviour is not to dismiss the role that professional knowledge may play, but it is to argue that the deployment of this knowledge should be set within other ways of acting. To be an agent, for Giddens, is to act with intent and purpose, but that purpose 'cannot be adequately defined [...] as dependent on the application of learned procedures'.[11] Purpose is also guided by hunch, intuition, negotiation, and other conditioned reflexes, which are based on one's experience in the world, as both professional *and* human. For Giddens this 'mutual knowledge, incorporated in encounters, is not directly accessible to the consciousness of the actors',[12] but is fundamental nonetheless. In contrast to what he calls 'discursive consciousness', in which matters are explicit and explainable, mutual knowledge is 'practical in character'. But - and this is the key point - the discursive and the practical are by no means mutually exclusive: 'the line between discursive and practical consciousness is fluctuating and permeable',[13] he argues, suggesting that each draws on

the other in the act of agency. Again this is a challenge to professional norms, both academic and architectural. If one cannot explicate, then one cannot claim authority; hence the domination of the discursive over the practical, of discourse over doing. Hence too the marginalisation of discourse as it increasingly needs to feed off itself, discourse on discourse, in an ever-spiralling effect of internalisation with its accompanying autonomy. The call for a move beyond discourse does not throw away discursive consciousness (because that would be post-discourse, i.e. stupid discourse) but sees it working with and on behalf of practical transformative action.

There is a central aspect of architectural production that Giddens's theory of agency cannot accommodate. His agents intervene in the world directly, whereas the architect does so indirectly, through buildings. It is an indirect intervention because the effect of a building is so highly contingent on other forces beyond the architect's direct control. The human agency of the architect is thus always mediated by the non-human presence of matter and in this mediation, intent is at best compromised, at worst blown apart. A response to this dilemma is to use John Law and Bruno Latour's formulation of agency, and so to see architectural production as a network of actors, human and non-human, in which both architects and their buildings assume roles as agents (amongst many others agents). The problem with this construct, as Bruno Latour himself later notes, is that it lacks intentionality: it might describe a dynamic state of affairs but it does not institute what we have taken as the defining point of agency, namely its potential to transform the given.[14] It is necessary therefore to assert the basic principle of human purpose in architectural agency, but then to see this played out in a spatial - for which in a very Lefebvrian manner read *social* - setting. The difference between this spatial production and that of the building as agency is that space is necessarily temporal. Whereas the building as matter is often

cast as static - there better refined through taste and technique - social space is dynamic and its production is a continuous process. Far from setting the human (architect) against the non-human (building), spatial agency sees the whole process as a continuity, motivated in the first instance by intent, and then open to adjustment, 'acting otherwise', as it unfolds in time. In treating the human and non-human as separate agents, there is always the possibility that responsibility of one for the other is lost. Once the building is handed over to the client (service completed according to the architect's contract), so by implication is 'responsibility' for it handed over. In contrast, spatial agency, when read as a continuity of action and occupation, means that all agents involved in the production of a building have to face up to their social responsibility because they are always tied into a temporal chain and so must always be alert to events further down the line over which they have some (but not total) influence.

Agency and power

Spatial agency thus inevitably exposes the architect to issues of power - and in particular of how power might be used and how it might be abused by architects acting as spatial agents. Agency, as Giddens reminds us, is intractably tied to power - an early definition of agent in the *Oxford English Dictionary* is: 'one who exerts power or produces an effect'.[15] The words used here are telling: power exerted is the power of one person over another, which is hardly consistent with the notion of responsibility. And then there is the 'or' - as if one can either exert power or produce an effect but not both. A better definition in relation to spatial agency is that the agent is one who effects change through the empowerment of others. Empowerment here stands for allowing others to 'take control' over their environment, for something that is participative without being opportunistic, for something that is pro-active instead of re-active.

Empowerment is thus not about the transfer of

decision-making power from 'influential' sectors to those previously disadvantaged or 'other' sections of society, but about these 'others' taking control and initiating different or 'alternative' spatial processes including, but not restricted to, the making of buildings.

The question, therefore, is what part the architect might and can play in this process of empowerment.

It is here that the word agency can be taken at face value, in terms of the architect acting as an agent with and on behalf of others, not in the sense of simply reacting to the often short-term market-led demands of clients and developers, but in the sense of the longer-term desires and needs of the multitude of others who build, live in, occupy, visit, and perceive architecture, acting. Today, building activity in modern capitalist societies, along with the labour of architects and building workers are either transformed into, or are produced as commodities. That is, they become things that are created primarily to be bought and sold in the market place. This produces a fundamental shift in the functional and social objectives of building production. It is not enough for instance that a house should stand up, keep out the bad weather, etcetera. It must first and foremost make money for the land development company, the construction firm and the banks. In the context of an increasingly privatised built environment of fortified housing estates, retail parks and surveilled city centres, human pleasure, environmental comfort and liberty tend to be defined in terms of monetary value and the defence of property.[16]

Under such circumstances it can prove very difficult to produce built environments that prioritise human need and which consciously explore and expand the realm of the individual and social freedom. In order to effect such a move it is therefore necessary to start with a critique not of mainstream

practice *per se* (because of the danger of ending up with a parody of a group of straw men) but of the operations of present day neoliberal economic policy and capitalist production that frames practice. This in turn suggests a method of production of the built environment that, in the words of Jonathan Charley, 'resists the environmentally damaging and socially destructive aspects of capitalist urban development'[17] and is in opposition to the globalised capitalist system that is in such a state of turmoil right now.

Working in 'alternative' ways on 'alternative' projects in the here and now suggests a move beyond the architect's present day field into something that in itself is able to express something positive, something that is not just an antithesis to something, such as post-capitalism would be to capitalism, but something that develops affirmative agency from within. Up until very recently it has been all too easy to forget that a lot has already been done to challenge capitalist hegemony. Much has already been achieved in opening up the 'imagination to the possibility of a liberated concept of labour and space'.[18] Just at the moment, in early 2009, when the crisis caused by the unfettered market is forcing even the most hardened institutions to rethink their values, practices that have been critical of the hegemony appear not so much as radical alternatives, but as prescient harbingers of new ways of acting.

What follows is one route through some stories of such agency, traced by means of short examples of such alternative spatial agency, each of which has an explicit political or ideological starting point. They are presented as episodes in no particular order because, in the nature of minor narratives, they do not build up in a chronological sequence of cause and effect. Where the major narrative of architectural history presumes a linear progression, these episodes are read as a set of loosely connected actions that cross time and space to suggest but

Fig. 1: muf offices, London (copyright Tatjana Schneider)

not determine a pattern of behaviour. The aim is not just to bring up examples that have previously fallen beneath the architectural radar, but to contextualise them within a critical framework. By doing so, this 'history' breaks away from the recent fashion of post-theorising and still ending up with pure form. It attempts to move beyond discourse for discourse's sake, and posits some examples of spatial production that live up to the promise of that elusive term 'agency'.

Episode 1: muf

Founded in London in 1994, muf officially coins itself as 'a collaborative practice of art and architecture committed to public realm projects'.[19] The practice [fig. 1] was set up defiantly and explicitly as an alternative to what they had seen as mainstream practice. As the clearest defining set of principles in setting up muf, Liza Fior, one of the co-founders of the practice, mentions the 'bringing together of interesting women'.[20] Feminism isn't openly mentioned, yet there is an underlying and often explicit tenet of feminism within their work, which at the same time is consistent with the tenets of spatial agency. In particular the notion of collaborative practice signals a commitment to 'mutual knowledge', and the context of the public realm indicates a social (spatial) ambition beyond the fixity of the building as object.

When pushed on the point of 'feminism' Liza Fior says: 'calling ourselves muf meant this explicit underscoring of the fact that we aren't pretending to be men, we are not turning up with a sort of neat hairstyle, trying to infer that we're bringing order [...]. By being so overt it was just (that) we knew we were women, we knew we were marginalised because of it, and we weren't going to pretend that we didn't know what was going on. And I think that how it plays itself out now in the work is [...] that there are always two stories at least to every piece of work [...]. It can be called "feminine wiles", or called "duplicity" or "guerrilla tactics" or "strategic sell-out".'[21]

muf's work, including their urban designs, buildings and strategic documents, can be read as a literal translation of Giddens's formulation of agency. Giddens's 'capability of acting otherwise' is echoed by muf's 'each situation is inscribed with the possibility of another'.[22] Processes of planning are left open to include the voices of others; they are, in fact, all about the voices of others. Spatial arrangements and material resolutions are treated as the negotiation of interests that come about through consultation between public and private, communal and individual; often, muf suggests frameworks for action rather than determining specific outcomes. Decisions are guided by intuition, aspirations, rows; methodology comes out of doing and then reflecting at the end of doing. The idea of non-imposition informs all their work, with a continuous deliberation and conversation between process and product, and an implicit questioning of given briefs. A traditional brief acts against the spirit of agency in so much that by setting parameters it tends to close things down and limit options. muf, on the other hand, takes the brief not as a given set of instructions but as an opportunity to open up possibilities.

Episode 2: Obedinenie sovremennykh arkhitektorov (OSA)

The next episode in spatial agency concerns OSA, the 'Union of Contemporary Architects', founded in 1925 in Moscow by Moisei Ginzburg, Leonid, Victor and Aleksandr Vesnin. From the outset OSA attempted to change the modus operandi of the architect by arguing that architectural skills were central to the definition and construction of social questions and new ways of life and living. Through the use of architectural knowledge and expertise the members of OSA advanced the concept of the application of theoretical work to real problems and the notion of the architect as an 'organiser of building'.[23] Their endeavour for new social building typologies, the social condensers, pervades the group's theoretical as well as practical work.

Fig. 2: Narkomfin Housing Project in 1997: Communal eating hall, nursery and launderette in the wing on the left (copyright Florian Kossak)

In 1926, OSA founded the journal *Sovremennaya arkhitektura* [Contemporary Architecture], which was used as a vehicle to promote their views on methods of design, theoretical and operational questions, and the social, economic and national conditions of the Soviet situation. In the first issue of *Sovremennaya arkhitektura*, Ginzburg set out how the development of ideas worked in the 'Functional Method', in which processes 'would be open to scrutiny' both in terms of 'data and decision making, and thus publicly accountable'.[24] Ginzburg saw the aim of contemporary architecture as one where the 'consumer' had a specific contribution to make, where construction was a collective act, it was participatory, and both the public and the specialists would contribute their specific components. Most clearly, and in tune with the idea of agency, he saw the architect's role as to synthesise the different positions without overwhelming them.[25] Speaking about the Narkomfin housing project on Nijinsky Boulevard [fig. 2], Moscow (Ginzburg and Milinis, 1928-1930), Ginzburg stated:

We can no longer compel the occupants of a particular building to live collectively, as we have attempted to do in the past, generally with negative results. We must provide for the possibility of a gradual, natural transition to communal utilisation in a number of different areas. That is why we have tried to keep each unit isolated from the next, that is why we found it necessary to design the kitchen alcove as a standard element: of minimum size that could be removed bodily from the apartment to permit the introduction of canteen catering at any given moment. We considered it absolutely necessary to incorporate certain features that would stimulate the transition to a socially superior mode of life, stimulate but not dictate.[26]

Architecture is here understood as something that works for and with the residents. Especially seen in the context of the time where design, typically, was dictated by either an architect or developer, this approach was something previously unheard of. Ginzburg presents architecture as a discipline that is socially aware, acts with intent but nevertheless acknowledges production as a continuous process.

Episode 3: Santiago Cirugeda
The Spanish architect Santiago Cirugeda and his practice *Recetas Urbanas* [Urban Prescriptions] challenge what it might mean to be and practice as an architect, by questioning and subverting regulations, laws and conventions. In this, his work is about the possibility for action, for appropriation, occupation and use, powered by the imagination of the respective initiator. At the same time, Cirugeda questions the notion that the architect is the author, and thereby the solely recognised designer. On the introduction page to his website, Cirugeda states that all the 'urban prescriptions' displayed on the site are in the public domain and that 'they may be used in all their strategic and juridical proceedings by the citizens' who may want to try them out.[27] He aims to provide people with tools to act in their own city in order to cause a reaction against current institutional regulations, and to demonstrate that institutions cannot limit the complex human realm.

A substantial part of the studio's work so far has tackled those sites in cities that have been left over by demolition, that have been lying empty or have been walled in - unusable for reasons of active neglect, lack of care, or abandonment. The suggested action consists of specific advice as to how to apply to the local council for a permit to install something temporarily; in some cases he provides a detailed manual [fig. 3]. This 'something' is, however, never to be taken literally. In Cirugeda's project 'Public Domain Occupation with Skips', the skip is not meant to be a skip but is meant to be a vehicle for citizens to occupy the urban realm through 'taking the street'. Why would one do this? Because 'this personal and intimate action takes place outside everything politicians and professionals may plan, it follows ways that are labelled by difference, by independence,
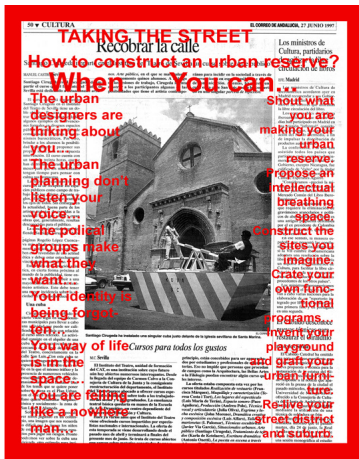
Fig. 3: Santiago Cirugeda's Strategies for Subversive Urban Occupation (from left to right and top to bottom): Skips - Taking the street; Scaffolding - Building yourself an urban reserve; Insect House - The tick's stratagem; Puzzle House - The closet stratagem; Housing: Pepe's house - Civil Disobedience (copyright Santiago Cirugeda/Recetas Urbanas)

and it makes obvious that the citizen plays a very important role in the development and construction of the environment he lives in'.[28]

In this, his approach is a good example of how spatial agency is embedded in a temporal continuity, in which the architect acts as catalyst of change for an unspecified period of time. Cirugeda's proposals consist of perpetually redefining global systems (urban planning and legislation), looking for possible loopholes and uncertainties that might empower the various user groups.

Episode 4: The New Architecture Movement

If, as we have argued, spatial agency implicitly critiques the normative foundations of architectural practice, then we might expect to find it manifested most clearly in the groups that have taken an explicitly oppositional stance to the conditions that frame that practice. Exemplary of such opposition are the Architects Revolutionary Council (ARC), the New Architecture Movement (NAM) - which arose out of the more tightly knit ARC - and SLATE, the newsletter of the NAM, which was published between 1977 and 1980 [fig. 4].

ARC, initially funded by the Rowntree Trust, was founded in 1970 and led by Brian Anson who was then a lecturer at the Architectural Association. It remained a small group who were described as 'the *enfant terrible* of the radical architecture groups - variously feared, indulged, despised, and every now and then mocked'.[29] They believed that 'creative architecture should be available to all people in society, regardless of their economic circumstances'.[30] To enact their ideas, ARC members gave advice as 'community architects' on projects in Ealing, Colne Valley, and Bridgetown. At the same time, ARC campaigned for 'revolutionary changes within the architectural establishment and specifically to the replacement of the RIBA by a new architectural system'.[31] Together with NAM they set out to criticise the conventional notions

of professionalism and the internalised structure of the profession, and in particular the system of patronage where the designer of a building has little contact with its user.

Much of this discussion was presented in SLATE, which ran articles on local authority housing, education, women in construction, the Schools of Architecture Council, and features on 'What It Means to Architecture'. SLATE argued that architecture could not be separated from its political implications and social obligations, and that architecture as promulgated by the RIBA, had become an apologia for architects and that it was not accountable to the people who have to live in and with the architects' work.

SLATE ceased publication in 1980, and the ARC and NAM moved into different existences. 'Women in Construction', one of the working groups within NAM, was the starting point for Matrix, one of the first explicitly feminist architecture practices in the UK. However, by the mid 1980s most of the initial energy of these groups had been dissipated, overwhelmed, one suspects, by the ascendant values of the Thatcherite era. That these latter values have now been found to be so bankrupt, so bankrupting, only serves to remind us that the spirit they vanquished is as important as ever. In the case of NAM and the others mentioned here, the unapologetic critique of professional norms and the political structures that shape those norms is as relevant now as it was then.

Towards spatial agency

You might be wondering by now if these examples from the margins can really have any relevance to the way that we might develop a theory of spatial agency.

OSA, fine, but was it not merely a short-lived episode? And NAM? They also only existed for a few years and was it not their overtly oppositional
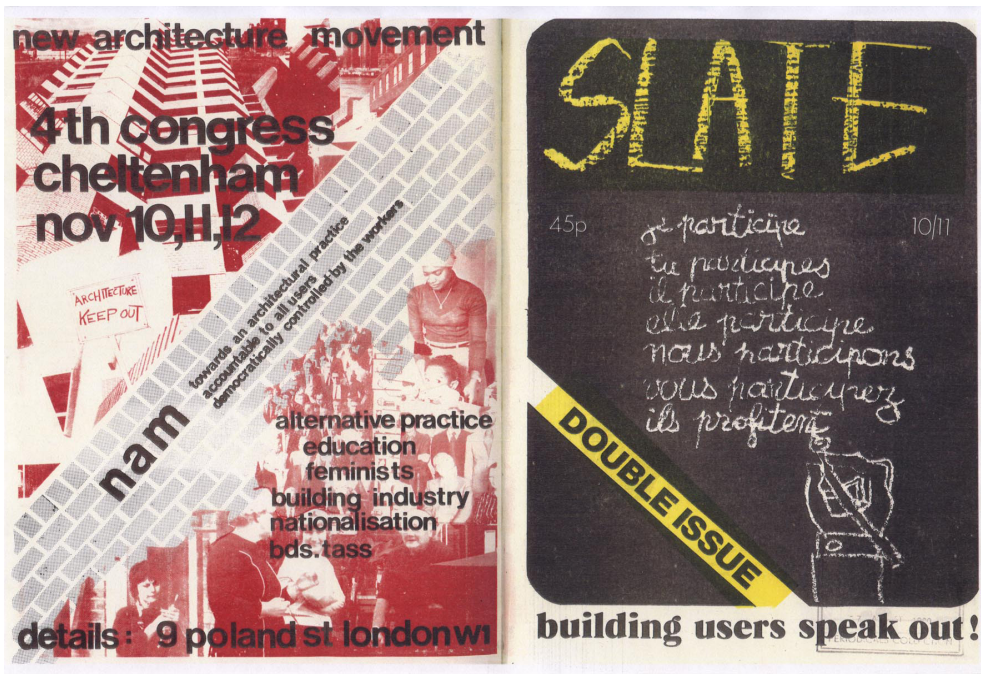
Fig. 4: Back cover of issue 9 and front cover of issue 10/11 of SLATE, the newsletter of the New Architecture Movement (copyright SLATE)

stance destined to end up in a dialectical wrangle, grappling with but never overturning the conditions they addressed? And muf? They even aver from using the 'f' word because it would confine them to a singular mode of operation. And Cirugeda? A one-off maverick and surely not relevant for any serious discourse on the future of architecture.

Well, yes and no. There is a danger that the discursive overwhelms the practical and there is a danger of making things more significant than they are. Yet, these episodes show instances where architects are not reduced to expeditors of the processes of construction, and where their skills are not simply instrumentalised. Instead they provide instances where an architect's knowledge and skills are used transformatively. OSA, NAM, Cirugeda and muf show us how architects can transform themselves into something other than being the deliverers of buildings on the back of so-called expert knowledge. In all these cases, the architects exceed the reductive sense of agency as mere exchange of service, and enter into a more open-ended and expansive sense of the word. That so much architectural production is predicated on the understanding that the only thing that architects do is design and deliver buildings, is a limit that these practices challenge. It is a limit that lies in the fixity, and subsequent commodification, of the building as object, against which spatial agency opens up a much more dynamic continuity, in which architectural know-how can be deployed in multiple ways and on multiple contexts that exceed, but of course do not exclude, the design of buildings.

These practices also challenge any notion that they are marginal. If the centre is found wanting, it no longer has the right or power to define (and thereby suppress) the margins. If, as bell hooks asserts, there is latent strength in the margins which are spaces of 'radical openness',[32] then now is the time for that strength to be released, not so much to confront the centre (why attack the already vanquished?) but to empower those people and

spaces that have been so let down by the centre.

The question therefore remains as to how to operate transformatively in a context still dominated by the capitalist production of space. The answer may lie in the deployment of spatial agency as outlined above. Set as it is within a long-term social context, spatial agency exceeds the short-term limits of economic imperatives and their accompanying spatial control. Acting for and on behalf of others, spatial agency necessarily provides a planning process that is equal and open to anyone. But to achieve this we need a twofold shift, not just on the side of the architectural profession but also in those who commission architecture: on the one hand an explicit call for architects to face up to their political and ethical responsibility, on the other hand a call for all those involved in the production of the built environment to engage with the precepts of spatial agency. If agency 'presumes the capability of acting otherwise', then the state and communities have to think beyond the bureaucratised rules that control so much public life, and instead act as responsible clients and desiring users, responsible that is to all stages of the production of the built environment, and thus intolerant to (among other things) the exploitation of building labour and to restrictions on access to public space.

Critique is clearly important: one has to be critical in order to understand the structures in order to be able to understand how to transform them. But critique alone is not enough, as the circling arguments of US architectural theorists all too clearly show.[33] Critique has to be combined with action, in an acknowledgement that it actually is possible to make a difference within the wider intellectual and political context. This is where spatial agency's transformative combination of the discursive and the practical comes to the fore. We should refuse the portrayal of architects as powerless victims of the process of building production and other global forces, and instead become our own AGENTS of

progressive politics.

All this might read as hopeful, maybe even hopeless, rhetoric but for one crushing imperative - the need to address the environmental crisis the world faces, especially in the form exacerbated by the neoliberal policies of the recent Bush presidency. Here spatial agency as an active force has a central role. Against the market-led regimes that promise (but can never deliver) technocratic fixes to problems created by technocratic behaviour, agency addresses the social and political constitution of the environmentally degraded condition we find ourselves in. Here is one area in which architects can claim a useful role as agents of change, not through the opportunist deployment of technical gadgetry but through a critique and subsequent transformation of the conditions - social, spatial, political - that have led us into the plight we are in. All this appears more urgent to us as a task for architectural theory and practice to address, than skirmishes and discourses around 'post' this or that.

Katherine Heron said more than thirty years ago that 'architects have to work from a political base, and if there isn't one, you have to start it'.[34] We'd better get on with it.

Notes

1. Magali Sarfatti Larson, *Behind the Postmodern Facade: Architectural Change in Late Twentieth Century America* (Berkeley, Cal.: University of California Press, 1993), p. 5.
2. Gloria Steinem quoted in Marilyn Barrett, *The 10 Biggest Legal Mistakes Women Can Avoid: How to Protect Yourself, Your Children, and Your Assets* (VA: Capital Books, 2000), p. 221.
3. Sociologists tend towards one of two versions of agency. In the first, agency describes the capability of someone to act independently of the constraining structures of society. In the second, transformative sense, agency refers to action that makes a difference. Thus

Anthony Giddens writes: '[Agency] means being able to intervene in the world, or to refrain from such intervention, with the effect of influencing a specific process or state of affairs. This presumes that to be an agent is to be able to deploy a range of causal powers, including that of influencing those deployed by others. Action depends on the capability of the individual to "make a difference" to a pre-existing state of affairs of course of events. An agent ceases to be such if he or she loses the capability to "make a difference", that is to exercise some sort of power.' Anthony Giddens, *The Constitution of Society: Outline of the Theory of Structuration* (Berkeley, Cal.: University of California Press, 1984), p. 14. It is this second sense of agency that we use throughout this essay.
4. Michel Foucault points out that one cannot become an author by writing any old thing - a letter, for example. 'The Author' is a cultural construction. Equally, as Roland Barthes argues, the author is seen to be a special kind of person: the apparently settled, whole, rational self which post-structuralism has sought to undermine. 'Author', significantly, is etymologically linked to authority, authorise, authoritarian, etcetera.
5. Zygmunt Bauman, *Postmodern Ethics* (Oxford: Blackwell, 1993), p. 32.
6. Comment made by Rem Koolhaas during a discussion forum, and published in Cynthia Davidson, *Anyplace* (New York: Anyone Corporation / Cambridge, Mass. & London: MIT Press, 1995), p. 234. The full quote is: 'One of the underlying aspects of this conversation, which for me is an inheritance of the climate of the late 1960s and early 1970s, is the basic assumption that regardless of our respective positions, the only respectable position is a critical position. That distorts the whole discussion because no matter how critical we are about society or our profession, it is impossible to make a creative statement that is based purely on criticism. There has to be a component of adhesion or reinforcement or complete identification. I find it ambiguous, if not hypocritical, that we all pretend to discuss something that we want to maintain a certain neat and moralistic distance from. In fact, some of our most interesting engagements are uncritical, empathetic,

and very risky. My problem with this reigning discourse of architecture and architectural criticism is its inability to recognise that in the deepest motivation of architecture there is something that cannot be critical. In other words, to deal with the sometimes insane difficulty of an architectural project, to deal with the incredible accumulation of economic, cultural, political, and logistical issues, requires an engagement for which we use a conventional word - complicity - but for which I am honest enough to substitute the word engagement or adhesion.'

7. As is well documented, the Frankfurt School has neither a single message nor stable trajectory, but it may be seen that there is a shift from the early 'emancipatory' thrust: 'to liberate human beings from the circumstances that enslave them' (Max Horkheimer, *Critical Theory* (New York: Continuum, 1982), p. 244.) to a more determinedly oppositional turn, the latter typified by Adorno's 'Negative Dialectic' (Theodor W. Adorno, *Negative Dialectic* (London: Routledge, 1973)).

8. First introduced in 1976, Giddens's definition of agency was a central plank of his theory of structuration: 'The basic shortcoming of most discussions of agency and structure [...] is to suppose that either the individual has a primacy over society (modes of production/ social formation) or the reverse [...]. We should resist this dualism and instead understand it as a duality - the "duality of structure".' Anthony Giddens, *Social Theory and Modern Sociology* (Cambridge: Polity, 1987), p. 220. See also: Giddens, *The Constitution of Society*, especially chapter one.

9. Giddens, *Social Theory and Modern Sociology*, p. 216.

10. 'The world as constituted by a stream of events-in-process independent of the agent does not hold out a predetermined future'. Anthony Giddens, *New Rules of Sociological Method* (London: Hutchinson, 1976), p. 75.

11. Ibid., p. 76.

12. Giddens, *The Constitution of Society*, p. 4.

13. Ibid., p. 4.

14. 'There are four things that do not work with actor-network theory; the word actor, the word network, the word theory and the hyphen!' Bruno Latour, 'On recalling ANT', in *Actor Network Theory and After*, ed. by John Law and John Hassard (Oxford: Blackwell, 1999), p. 15.

15. Giddens, *The Constitution of Society*, p. 9. See also the section 'Agency and Power', pp. 14ff.

16. There is a long list of social geographers who have analysed the intersection of neoliberal forces and the production of the built environment. See in particular Neil Smith, *Uneven Development* (Oxford: Blackwell, 1991) and *Spaces of Neoliberalism*, ed. by Neil Brenner and Nik Theodore (Oxford: Blackwell, 2002). It is telling how few of these arguments have been transferred over more directly into the architectural arena, but Mike Davis's work stands out here.

17. Jonathan Charley, 'The Glimmer of Other Worlds: questions on alternative practice', *Architectural Research Quarterly*, 12, 2 (2008), pp. 159-71 (p. 160).

18. Ibid., p. 165.

19. http://www.muf.co.uk/index.htm [accessed 9 December 2008]. For the story of muf see: Katherine Shonfield and Muf, *This Is What We Do: A Muf Manual* (London: Ellipsis, 2001).

20. Interview with Liza Fior, founding partner of muf, conducted by Tatjana Schneider and Jeremy Till, 27 February 2006, muf offices, London.

21. Ibid.

22. Ibid.

23. The term 'organiser of building' was used by Nikolai Ladovskii who was part of the group ASNOVA. Catherine Cooke explicates how Ginzburg and the Vesnin brothers formed OSA to address outdated and passive professionalism and this new understanding of architecture as expressed by Ladovskii: Catherine Cooke, 'Form Is a Function X: The Development of the Constructivist Architect's Design Method', in *Russian Avant-Garde: Art and Architecture* (London: Academy Editions and Architectural Design, 1983), pp. 34-49 (p. 40).

24. Ibid., p. 41.

25. Ibid., p. 41.

26. Selim O. Chan-Magomedow, *Pioniere Der Sowjetischen Architektur: Der Weg zur neuen sowjetischen Architek-*

tur in den zwanziger und zu Beginn der dreißiger Jahre (Dresden: VEB Verlag der Kunst, 1983), pp. 344ff.

27. http://www.recetasurbanas.net/index_eng.php [accessed 23 January 2008].

28. http://www.recetasurbanas.net/ref_a/a1/a1_eng.php [accessed 23 January 2008].

29. Anne Karpf, 'The Pressure Groups', *Architects' Journal*, 42 (1977), pp. 728-34 (p. 730).

30. Ibid., p. 731.

31. Ibid., p. 731. RIBA stands for Royal Institute of British Architects.

32. bell hooks, 'Choosing the Margin as a Space of Radical Openness', in *Women, Knowledge and Reality*, ed. by Ann Garry and Marilyn Pearsall (London: Routledge, 1996), pp. 48-56.

33. For an excellent summary of the US-centric nature of architectural discourse see George Baird, '"Criticality" and Its Discontents', *Harvard Design Review*, 21 (Fall 2004/Winter 2005), pp. 1-6.

34. Katherine Heron, 'The Mudshute', *Architects' Journal*, 166 (1977), pp. 742-43 (p. 743).

Biography

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Review article
Before and After AGENCY
'The Agency' research group[1]

Before

The conference 'AGENCY', whose critical review constitutes the subject of this article, started with a research group called 'The Agency', initiated in 2007 in the School of Architecture at the University of Sheffield. It arose through the alliance of staff and researchers working in and around the subject of architectural practice and education, taking a critical view of normative values and standard procedures in this area, in order to propose alternatives. The focus from the beginning was how architectural practice and education might evolve.

We offered to host the fifth AHRA International Conference, giving it the theme of 'agency', hoping that the submissions would energise the relationships between the humanities, the architectural profession, and society.[2] While agency might first be understood as the power and freedom to act for oneself, for the architectural profession and research community it also involves the power to act on behalf of others, bringing with it the question of responsibility. Architecture and architects have always tended to become embedded in existing power structures, usually at the service of those in control: this is manifest at various scales, from the body to the building, then on to the city, the continent, and even the globe. To remain in this position opens them to Antonio Gramsci's accusation that they support and maintain the prevalent ideologies of the status quo.[3] The role of architects and academics cannot be neutral: if played out uncritically it reverts to the interests of those in power.

We wanted to explore ways of understanding current architectural needs, possibilities, and capacities for action. Humanities research has a tendency to be too inward looking: 'The Agency' group's ambition was to redirect such work towards greater engagement. We hoped to shift the focus away from the objects and processes of architectural production towards an investigation of their wider context and possibilities. We wanted to learn from the conference contributions what is meant by 'action' in the different contexts of research and practice. We wanted to know what kinds of activities and conditions are relevant, what prevents the reflective exercise of agency in this fuller sense, and what the necessary tactics for action might be. We hoped also to address the big social and political questions in this period of rapid global environmental change.

The conference call invited responses to these two issues: the possibilities for architectural 'practice' as agency, and the current and future agencies of 'survival' of society and the environment.[4] Although this resulted in a large submission of papers, it was immediately evident that the topic of practice had been much more popular than that of survival, which in itself raised questions around the reasons why humanities research continues to neglect such an important topic, and why we resist thinking, writing and acting on this urgent issue.

The conference structure was itself considered and developed as an exercise of agency; it was

not only an academic event but also a social (and spatial) event. The social, spatial and cognitive production intrinsic to the conference was continuous, overlapping, and considered without hierarchy. Spaces outside the conference location, the School of Architecture, were used and transformed in such a way that other users could interact with, and benefit from, the event. The conference was considered at the same time within a research and a pedagogical framework, and was integrated into the teaching curricula of the M.Arch professionally validated course, through dedicated seminars, workshops and assignments. Students had access to information on, and knowledge from, all aspects of the conference and were also involved in the organisation of activities. AGENCY also attracted the engagement of students from year groups and departments other than the particular Masters groups that were taking part in the conference as part of their curriculum.

Content of the discourse: notions of agency

In launching a conference with the question 'What is the social and political responsibility of the architect?' we expected to have a good number of activists as well as practitioners and academics attending. Reports of diverse activities from these fields of architecture emerged in many papers spread across several sessions. They offered new insights into the notion of agency and proposed original approaches to issues of 'practice' and 'survival'.[5] These can be summed up under four headings: urban agencies; pedagogical agencies; social and technological agencies; sustainability, ecology, ethical and aesthetic agencies.

1. Urban agencies

Papers addressing forms of agency within the urban mostly followed a Lefebvrian line, arguing for the social production of space and the inherent continuity between social, political and spatial agencies. Drawing on case studies and personal experiences, some papers provided interesting responses to

questions from our call for papers, such as 'Where are the ethics of practice located?', 'What are alternative forms of practice?' and 'Should architecture remain a protected profession?'. They concluded that to be both 'public' and 'democratic', space itself cannot be conceived as neutral, but must instead be understood as a product of ongoing negotiation. This is reflected in Chantal Mouffe's theory of 'agonistic politics', which sees public space as a 'battleground where different hegemonic projects are confronted, without any possibility of final reconciliation'.[6] For us, the notion of agency is essential to this definition of 'agonistic public space'. Such a space is defined by a multiplicity of agencies in continual confrontation and negotiation, in a process that may involve architects, artists, urban planners, policy makers and citizens.

2. Pedagogical agencies

A number of papers approached the question of critical pedagogy in relation to both practice and education. Still important in this context are Paulo Freire's influential writings such as *Pedagogy of the Oppressed*. This book, originally published in 1972, challenged educational practices which, almost forty years on, are still in operation not only in schools of architecture but also in educational institutions more generally. Presentations emphasised how critical pedagogy can be understood as a negotiation, both challenging institutions and at the same time giving a voice to contradictory and conflicting interests. This reinforced our belief that agency in pedagogy presents an opportunity to see the studio as a place for communication as well as a locus of collective knowledge production.

3. Social and technological agencies

Against a background of increasingly pervasive technologies, issues of negotiation and communication were also an important theme in papers that addressed social and technological agencies. Considering the impact of information and micro technologies on the individual, these illustrated the

Fig. 1: Snapshots from some of the fringe events, including the 'Community Design Centres in the USA' exhibition, book launches, seminars and workshops, 'How Yellow is Manchester?' presentation and exhibition, informal discussions, meals, and music. Used with permission of the photographers, Florian Kossak and Ben Oram.

links between identity and agency. By accepting the body as a site rather than an object and repositioning its importance within the technology debate, we can understand Elizabeth Grosz's assertion that such understanding can empower: 'Our agency comes from how we accept that designated position, and the degree to which we refuse it, the way we live it out.'[7] We must heed Grosz's warning; 'The Agency' group takes the view that agency is exercised most fully when we can strike a knowing balance between acceptance and refusal of the forces that contribute to our identity.

4. Sustainability, ecology, ethical and aesthetic agencies
Responses to sustainability in the humanities have had to deal with the entrenched views that so-called ethical architecture is somehow in opposition to architectural aesthetics, or that it makes its own aesthetic category, or needs its own totalising theory. While many papers were highly theoretical, they suggest nevertheless renewed focus on the possible transformation of issues of human practice and human survival.

The AGENCY conference has made the need for a collaborative approach to issues such as sustainability even more apparent. Only through such a comprehensive approach that rejects the traditional separation of our discipline - and in effect our problematic distance to related or neighbouring disciplines - can we hope to achieve some kind of meaningful discourse on sustainability and to generate agency within this field. We acknowledge the need for developing the discourse around ecology and sustainability, but believe that agency can only be achieved through and within practice and its transformative action. 'The Agency' group prefers to think of agency as about the need and desire to act here and now, to inhabit our environment differently, to practice relating to alterity, and to do this in the ordinary, everyday and multivalent encounters in the world.

Beyond the discourse: examples of agency
Complementing what we found through these emerging insights and approaches, the most striking responses to the questions we had set out came in the keynotes, given by architect Teddy Cruz, architectural theorist, feminist and political activist Leslie Kanes Weisman, and artist John Jordan. All three speakers had been approached because of their own work, and together they demonstrated a commonality of issues relating to the exercise of agency in architectural, academic and artistic practice: Teddy Cruz questioned the role of the architect in activating agencies of subversion across political, social and economic borders - considering the border itself as agency, as a space traversed by flows and informal transgressive actions. As an architect and planner, he proposed a logic of subversion and penetration of the border by urban and architectural actions and policies. Leslie Kanes Weisman explored challenges for architects and citizens to exercise agency in the years to come and argued that 'universal design' is crucial to the establishment of an architectural ethos within which the design of all aspects of our environment can encourage agency. In the final keynote lecture, John Jordan reflected on the changing dynamics of activism and authority, and emphasised both the pressing urgency for action and the political potential of activist groups to exercise their own agency through consensually organised, high-profile events demonstrating the power of long- and short-term spatial events to bring about social and political change.

Fringe events: creating a framework for agency
Alongside the presentation of academic papers, a fringe programme was developed to provide a forum for discussion and for broadening potential interactions. The fringe events included a number of exhibitions, book launches, a series of seminars and workshops led by keynote speakers and delegates, exhibitors or curators, as well as informal discussions and meals [fig. 1].

Fig. 2: Exhibition and book launch of *Urban Act*. Photocollage by Ben Oram. Used with permission of the photographer.

While these were initially labelled 'Fringe Events', with connotations of the marginal or extreme, it can be argued that these events were actually crucial in forming a framework for AGENCY that was different from most academic conferences. The events allowed for an engagement beyond the temporally limited, and often passive mode of a paper presentation, allowing the conference topic of agency to be more tangible. Exhibitions have additional means to engage audience and presenter alike that go beyond representation of the topic in the form of exhibits. The temporal aspect of an exhibition offers a longer and repeated engagement, potentially allowing for a deeper and more multilayered reflection on the presentation material. This can include the very production of the exhibition itself.

In the context of AGENCY the shift to the collective production of the exhibitions was an approach most explicitly exercised through the production of the *Community Design Centres in the USA* exhibition by An Architektur and Mathias Heyden. An Architektur and Heyden used the student seminar (also a designated Fringe Event) to produce and install the exhibition in collaboration with architecture students. The theoretical discourse of the seminar and the practical work on the exhibition were thus brought together in order to combine practice with theory, arguably a crucial prerequisite for the exertion of agency. An Architektur and Heyden tested here a mode of producing the exhibition through the active participation of its intended visitors - the students - making the visitors agents and producers, rather than mere recipients of the exhibition. This is in line with a 'creative process of participation, both individually and collaboratively, [and which] is suggestive of the way that participation leads to an expanded field of architectural practice' discussed by Peter Blundell-Jones, Doina Petrescu and Jeremy Till.[8] This mode of participation goes beyond forms of performative display, or more generic forms of visitor interaction with exhibitions that are often confused with participative exhibitions

but ultimately leave the recipient in a passive role. A truly participative exhibition gives the recipient some (or all) command of crucial aspects within the exhibition, including the formulation of the curatorial concept, the production of exhibits, the selection and arrangements of exhibits, or the re-interpretation and re-arrangement of single exhibits or of the exhibition as a whole.

Among other exhibition events of the fringe programme was the exhibition and book launch of *Urban Act*, which presented a European research project on alternative urban activism of which the School of Architecture and members of 'The Agency' had been partners.[9] This exhibition and book launch took place in one of the architectural studios of the school, allowing the creation of a discourse between academic research, alternative practice and architectural education, ultimately aiming at broadening the students' understanding of these topics [fig 2].[10] The exhibition *Interdependence Day* presented the Interdependence Day (ID) project, set up to test new ways of framing global environmental change and sustainability issues. The ID project and the exhibition aimed at prompting ideas about how the world could not simply be described differently, but also spotlight ways in which the intensifying interconnections allow for new forms of agency.[11]

After
The call for papers for the fourth issue of *Footprint* echoed our own interest in the notion of agency.[12] We wanted to see what was 'out there', wanted to go beyond the typically internalised academic discourse where the context was also the object.

Yet what we learnt was that a topic such as 'agency' was not immune to the hijacking of academic opportunism. Whilst this was not surprising, it made us 'agents' realise that affiliation with the AHRA defined much of the context for participation in the topic and discourse around it. We felt as if our ambitions for the topic and creativity around the

Fig. 3: More traditional format of academic panel sessions and keynote addresses. Used with permission of the photographers, Florian Kossak and Ben Oram.

notion of a conference were hampered by expectations of setup and timing: parallel sessions followed by panel discussions followed by keynotes. We made efforts to escape the more corporate institutionalised spaces and did so successfully with the fringe events. However, the lecture and meeting rooms made available by the University and used for sessions and keynote presentations were our fallback position when other settings proved too difficult to organise or were simply not available. Spatial arrangements affect discussions; in particular they can affect ways in which one can interact or feel included [fig. 3]. We have been left therefore with some regret of not having extended our 'spatial agency' more outside of the University and of not having engaged more with the city and its inhabitants. This has remained an important aspect of our agenda for future action.

It was therefore inevitably the spaces in between the more controlled events and the externally motivated and deliberate interstices that allowed the possibility for encounter, and that formed moments of difference and otherness where dialogue and discourse was both practiced and challenged. It was there that agency at the conference unfolded. And it was there that agency was at its most powerful. We, the organisers of the conference, had set up ourselves as 'agents', a group bringing together other individuals or groups of people with similar interests - thereby enacting agency. Whilst some of the participants were invited following the call for papers, those that participated in the fringe events were invited directly and it was there that we could inform and direct debate. We deliberately attempted to counter the static nature of the institutional setup with the dynamics of encounter, by acting as initiators and enablers. Formal sessions were broken up by informal presentations, by lunches and dinners that were open to everyone. We, as 'agents', determined the framework of discussion by asking how we should inhabit our environment, and how and where we should practice. In short, we have not

only *spoken* about agency during the conference but also *performed* agency.

Because the conference was also part of the educational curriculum of the School of Architecture, the invited speakers and specialised public also met and engaged with a large group of students. These encounters not only helped to bring theoretical discussions back to practical ones, but also questioned the relevance of theory and how theory could and would potentially inform practice and education, addressing the big social and political questions of our age concerning survival and the environment. Agency starts with and in education and it is our understanding that it is the power of theory to generate change. What is not so clear, however, is what this actually entails. It might mean a radical reconsideration of the architectural curriculum, architecture and the profession. For too long, architects have been too detached from the world, from the everyday. They need to develop a willingness to understand with responsibility how things work or do not work in the 'real' world rather than just quickly capturing the essence.

The conference has provided some clues as to how contemporary practice can be informed by theory and vice versa. It is this symbiotic relationship of giving and taking between theory and practice, between education and the profession, which the notion of agency supports. *Agency* is not about the theorising of architectural production, but about the critical evaluation of architectural processes, concepts, and techniques that operate in the contemporary world.

The tensions and contradictions between the multiplicity of political and economic forces, environmental change and degradation, social justice and disenfranchisement, requires a reconfiguration of our potential agency as architecture practitioners and researchers. This kind of agency, in recognising that it is an issue of relations and responsibilities in

a fragile multivalent world, distinguishes itself from defining master strategies, consumer-driven imperatives or a commentary on the doom and gloom of impending disaster. Instead it seeks alternatives and allows for imaginative and transformative interventions in our technologically- and globally-mediated world. This is potentially, in different ways and in different spheres of activity, the work of 'The Agency, Transformative Research into Architectural Practice and Education'.[13]

Notes

1. Members of 'The Agency' research group, based at the School of Architecture, University of Sheffield, who have contributed to this article are Peter Blundell Jones, Florian Kossak, Doina Petrescu, Tatjana Schneider, Renata Tyszczuk, and Stephen Walker.

2. The AHRA (Architectural Humanities Research Association) was founded in 2003 in an attempt to foster humanities research in architecture in the UK and overseas. It aims to promote, support, develop and disseminate high-quality research in the areas of architectural history, theory, culture, design, and urbanism. (See http://www.ahra-architecture.org/) [accessed 15 March 2009]

3. Gramsci named two types of intellectuals, traditional and organic; he observed the role both played within existing power structures, but argued for the potential to transform these roles for different socio-political ends. See: Antonio Gramsci, *Selections from the Prison Notebooks* (London: Lawrence and Wishart, 1971), for example p.10 and 43.

4. See conference website: http://agency.group.shef.ac.uk/ [accessed 15 March 2009].

5. Speakers included: Adam Sharr (Cardiff), Amy Gilley (Blacksburg), Ana Paula Baltazar and Silke Kapp (Belo Horizonte), Andrea Wheeler (Nottingham), Andrew Powell (London), Charles Walker (Auckland), Cristian Suau, Katarina Mrkonjic and Fernando Ayala (Cardiff), Dana Vais (Cluj-Napoca), Daniele Vadalà (Messina), Darren R. Deane (Nottingham,) Flora Samuel +

students from Bath (Bath), Georgeen Theodore (Newark), Gerry Adler (Canterbury), Gordana Fontana-Giusti (Canterbury), Graham Livesey (Calgary), Helen Mallinson (London), Ines Weizman (London), Jianfei Zhu (Melbourne), Jon Goodbun (London), Karin Jaschke (Brighton), Lisbet Harboe (Oslo), Maria Theodorou (Athens), Mark Dorrian (Edinburgh), Mason White and Lola Sheppard (Toronto), Megan Evans (Melbourne), Meike Schalk and Apolonija Sustersic (Stockholm), Adam Cowley-Evans and Melina Giannakis (Plymouth), Mick O'Kelly (Dublin), Paul Emmons (Blacksburg), Phoebe Crisman (Charlottesville), Priscilla Nogueira (Belo Horizonte), Richard Coyne (Edinburgh), Richard Lister and Thomas Nemeskeri (Toronto), Richard W. Hayes (New York), Sam Vardy (Sheffield), Soumyen Bandyopadhyay (Nottingham), Stefan White (Manchester), Stephen Cairns (Edinburgh), Steven Thompson (Blacksburg), Supitcha Tovivich (London), Susanne Schnorbusch (Berlin), Tahl Kaminer (Delft), Victoria Watson (London), Wanda Dye (Arlington), Wiwik D. Pratiwi and Dhian Damajani (Bandung).

6. Chantal Mouffe, 'Some Reflections on an Agonistic Approach to the Public', in *Making Things Public: Atmospheres of Democracy*, ed. by Bruno Latour and Peter Weibel (Cambridge, Mass.: MIT Press, 2005), p. 805.

7. Elizabeth Grosz, *Architecture from the Outside: Essays on Virtual and Real Space* (Cambridge, Mass.: MIT Press (Writing Architecture Series), 2001), p. 22.

8. Jeremy Till, Doina Petrescu, and Peter Blundell Jones (eds.), *Architecture and Participation* (London: Spon Press, 2005).

9. Other exhibitions included 'How Yellow is Manchester?' by Dougall Sheridan; 'If I could redesign London I would...' by Sarah Wigglesworth Architects; and 'Design with Research in Mind' by the BDR-Bureau of Design+Research.

10. See the related book *Urban Act: A handbook for alternative practice*, ed. by aaa-PEPRAV (Paris: aaa-peprav, 2007). This can also be found on: http://www.peprav.net/tool/spip.php?rubrique30 [accessed 15 March 2009].

11. The Interdependence Day project emerged at the intersection of an extended programme of action research on media, publics and environmental change by Joe Smith and the interdisciplinary architectural design teaching, research, and art practice of Renata Tyszczuk. The project has developed into a partnership between members of the Open University's Geography Department, the University of Sheffield's Architecture Department and nef (new economics foundation). See: www.interdependenceday.co.uk [accessed 15 March 2009].

12. The AGENCY conference has helped to define a further agenda for 'The Agency' as a group. The current research structure at the Sheffield School of Architecture, similar to many other schools, has divided research activity into four distinct areas - humanities, building sciences, design, and process. 'The Agency' group has been a deliberate attempt to bridge this divide and to incorporate members of all four research groups. Since the organisation of AGENCY, members of 'The Agency' group are continuing to explore ways of collaborative working, theorising and writing. Following the *Footprint* call for papers, this article was co-authored by members of 'The Agency' as an exploratory process that provided for further discussion and consideration of the issues, an extension to the exercise of agency begun with the collaborative processes of conference organisation. The production of articles such as this one, further publications and the development of inter- and transdisciplinary projects and networks have resulted in the establishment of a Research Centre called 'Agency', within the School of Architecture as a forum for further discussions, projects and events.

13. For example, after PEPRAV (European Platform for Alternative Research and Practice in the City, see www.peprav.net [accessed 15 March 2009]) we will participate as partners to RHYZOM, a European network that will investigate local conditions and related forms of practice and cultural production.

Biography

'The Agency' is a research group based at the School of Architecture, University of Sheffield. Its name refers to the group's research that is active, engaged, and outward looking. The strapline 'Transformative Research into Architectural Practice and Education' expands this idea, by stressing the word 'transformative' to suggest a research activity that both creates and responds to shifting conditions. The group functions as an agent within and between the fields of research, practice, education, and civic life. Founding members include: Peter Blundell Jones, Prue Chiles, Florian Kossak, Doina Petrescu, Tatjana Schneider, Jeremy Till, Renata Tyszczuk, Stephen Walker, Sarah Wigglesworth. Cristina Cerulli and Rosie Parnell have joined the group in 2008.

Review article
Whatever Happened to Projective Architecture?
Rethinking the Expertise of the Architect
Lara Schrijver

Over the past decade, there has been an increasing reflection on material conditions and constraints in architectural practice. Purely analytic models of the impact of architecture do not seem to suffice, and yet there is a desire for a structured theorisation of the architectural object. A return, as it were, to the material reality of architecture without losing the insights of the sustained critical reflection of the past fifty years.

In many ways, this seems to have been the original intention of the 2002 article 'The Doppler Effect: The Many Moods of Modernism' by Robert Somol and Sarah Whiting.[1] Their ideas seemed to indicate a potential shift in the architecture debate that resonated with various architectural developments in Europe. These developments were not related purely to the theoretical discourse, but were rather raised by issues confronted in practice. At the same time, these were not purely questions of pragmatic scope, but were related to the very underpinnings of architectural discourse. The increasing institutionalisation of theory from the 1960s onward had culminated in a pivotal role for critical theory in architecture. The ideas put forward in the 'projective' debate seemed potentially to reintegrate architectural practice and theory. In 2006, Stylos, a student organisation of the TU Delft Faculty of Architecture, contributed to this debate by gathering a number of the diverse voices for the conference 'The Projective Landscape', the particular aim of which was to bring together those who had originally put forward these ideas on the notion of the 'projective', and

those who seemed already to be implementing it.

In the end, the questions on the relation between practice and theory have remained on the table. Perhaps Willem-Jan Neutelings characterised the problem best when, during the round-table discussion, he noted that architects are currently in need of theory and reflection to help them in their work. In his view, rather than helping to explore and understand the many questions facing architects today, theorists were holding academic discussions on topics that had little bearing on practice or public culture at large. The 'projective' debate, insofar as it was one, was begun out of interesting intentions but stranded in, again, a return to a hermetic exchange between a few intellectuals, with very little connection to public debates on architecture. In fact, the issues put forth by various architects and academics from the European mainland seem much more engaged with contemporary questions of how architecture 'works' than their American counterparts.[2]

One of the primary problems arising from the traditional position of critical theory is the perceived opposition between architecture as a 'public service', demanding a critical social engagement (in the tradition of the modernists), and architecture as an autonomous art form (appealing to either the beaux arts or the avant-garde, depending on the tradition it is embedded in). This opposition has remained standing, yet at the same time one might consider that a current generation of architects does not feel constrained by the perceived incompatibility

between the political and the aesthetic.[3] This under-scores the continuing relevance of the 'projective' discussion. The divide between theory and practice often places architects in a position of complicity when they serve their clients too well, while theorists appear to see few possibilities to inform those in practice of pressing matters. Both sides too easily dismiss the power of architecture 'at work', and do not adequately address its potential effects. In retrospect, rather than dismissing the 'projective' debate altogether, we can ask why the idea of the projective was so provocative at the time. Surely this points to some crucial questions that transcend the dividing lines between theory and practice. It does not involve an appeal for a new autonomy, but rather a recalibration of the relation between architecture and societal issues. They are, in the end, different domains and need to be treated as such, any tradition of spatial determinism notwithstanding.

Although the 'projective' as proposed by Somol and Whiting was a specific response to problems that had arisen in the discipline's relation with critical theory - in particular as it was expressed in the work of Eisenman - it also contained a question about the oppositions forced upon architecture. Somol and Whiting's idea of the projective encompassed specific traits in contemporary architecture, such as a kind of 'low-definition' in the spirit of McLuhan, allowing for individual differentiation, and a 'diagrammatic' architecture that gave preference to the pragmatic approach of Rem Koolhaas over the intellectual designs of Peter Eisenman. The suggestions of pragmatism were embedded within the article, as well as references to the sensuality of architecture, removing it from the more intellectual realm of critical theory.[4]

The very term 'projective' seemed a clever coinage in response to 'critical'. Precisely by not employing the 'post' addition of the 'post-critical' debate, but by turning to a word that seemed to incorporate already the idea of the architectural project, Somol

and Whiting proposed architecture to turn to the specificity of its own discipline. In proposing a new project, the architect by necessity becomes implicated, but this was not seen as an expression of powerlessness as put forth in the critical discourse.[5] Instead, it offered a line of demarcation, opening up the possibility to discuss the potential of architecture rather than its impotence. It also distanced itself from the apparent dismissal of critical agency that is embedded in the notion of 'post-critical', as not only *after* but also *beyond* the critical.

In architecture, the notion of the projective involves more of a recalibration of the critical than its mere dismissal.[6] Critical theory presumes an outside and disinterested view, as argued by Bruno Latour in 2004.[7] To Whiting, this requires a utilisation of architectural expertise:

Architects must engage, lead, catalyse - act, rather than react. […] Unlike other disciplines in the liberal arts, architecture's relationship to critical theory is not entirely concentric. Rather than bemoan this fact or conclude that theory has no bearing on architecture - two options that guarantee architecture's intellectual suicide - architects interested in the progressive project have no choice but to take advantage of our ability to slip in and out of critical theory's rule.[8]

In following Marxism and the Frankfurt School, the 'critical' of critical theory has come to be identified with resistance and negation, while the recent debate suggests less focus on resistance and more on critique 'from within'. Whiting's emphasis on architectural expertise reins theory back into a relationship with the actual production of architecture. Her willingness to accept that something must be *defined* or made specific to have an impact allows for a more active engagement with the world than a permanent position of resistance. If, for example, public space has become too entangled with corporate interests, it is more useful to design a public

space that transcends these interests than it is *not* to design anything at all, or merely to point out that something is complicit. Architecture, when built, is by its very nature entangled with commercial interests, or the interests of the client (which are not always the interests of the general public). After all, what good is a building that 'critically' discourages people from even entering, to a client? However, if it is to remain valuable, architecture must have something more to offer than mere compliance: be it a 'comfortable' environment or a 'critical' one.

Although the specific suggestions differ, the search for a new vocabulary is shared, seeking a new approach to and evaluation of architecture. This indicates the shortcomings of critical theory for addressing the problems of this time, particularly when applied too directly to architecture. The different approaches under the general umbrella of 'projective' share Latour's sense of the shortcomings of critical theory, which in the contemporary world seems not to do justice to the full complexity of reality. But these approaches also specifically point to the problematic role of architecture when conflated with critical theory. The projective attempts to recast architecture in a position that is less strictly deconstructive and analytic, and does more to incorporate the process of making, which inevitably reveals unforeseen complications and new approaches. Despite this focus on making (and, for example, aesthetics and compositional strategies), contemporary architects are not prepared to rescind the insights that have been gained over the past forty years through the sustained attention for critique. In this sense, the projective revolves not around resistance but is rather aimed at incorporating critique and embedding it within the cultural fabric precisely through a sophisticated use of aesthetic qualities.

By focusing primarily on critical theory, architecture has been required to justify its interventions through a critical discourse that was tailored to an analytic approach, not to the experimental and prescriptive one that is by necessity part of architectural practice. The disciplinary tradition of architecture is constrained by a spectrum of external regulations, ideals that need to be given concrete form, a public presence, and its dependence on a client's finances, as well as its typically longstanding lifetime (depending of course, on use, materials and other contingencies). And yet it is a powerful practice: following Koolhaas, architecture is in that sense both 'omnipotent and impotent'. Architects contribute only to a small fraction of the built environment, and are dependent on their patrons to do so. And yet they have an impact on their surroundings simply by virtue of the unavoidable presence of the built environment, which has the potential to evoke a response from the broadest possible public: one need not seek it out nor acquire special skills to approach it. Architecture is simply there, to be experienced by all. It is deeply embedded in our cultural history, shot through with cultural conventions that seem all but invisible, yet have the strong powers of evoking ideals and fictions based on a long cultural history. The architect needs to understand the societal conditions surrounding his work, and yet a specific expertise is necessary.

While the article by Somol and Whiting began a trajectory that returned to the specific conditions of architecture, gently steering the debate away from external societal conditions, as well as the questionable role of 'critique', it is in *The Craftsman*, a recent publication by Richard Sennett, that the role of 'making' as contributing to reflection takes a central position.[9] Sennett explores a broad scope of activities that require physical mastery of technique and not solely intellectual reflection. These extend from the work of traditional goldsmiths and sculptors to lab technicians and computer programmers. In the second part of the book he focuses more precisely on what this 'mastery of the hand' means when it reaches a level of subconscious activity, incorporated in reflective explorations. Through the three

fields of music, cooking and glassblowing, Sennett specifies his argument on craft as an activity that goes beyond mere replication of traditional (artistic and cultural) standards. These activities stand as examples of crafts, or perhaps disciplines, that cannot abide by talent and thinking alone: they all require doing. And not only do they all require doing, but they also require reflection on the results, as well as a critical eye, palate or ear. This list of disciplines that combine reflection and making could easily be extended: indeed, architecture returns throughout the book in examples of the mutual influence of thinking and making.

What makes this focus on 'making' particularly interesting here is how it might help us redirect the 'critical/projective' debate. It no longer speaks of intellectual models but of concrete problems, which bridge the divide between social-political conditions and the work of design and execution. In Sennett's argument, quality does become a determining factor, which is not only recognisable by a small group of experts but rather extends outward to the general public. Simply put: any layperson can to some degree distinguish between a beginning piano player and a talented, advanced one. The further the musical education, the more specifically the distinction can be made: why someone is better, based on which techniques and qualities, or how improvements might be made. This is in direct contradiction to the debates of recent years that suggest that discrimination is solely based on social preconceptions or acquired tastes.

In the line of Sennett's argument, the opposition between social impact and architectural quality is no longer inevitable. Critique has not disappeared in favour of a pure formalism, but is rather embedded within the very object of architecture. This requires not less, but more architectural definition. Or as Whiting notes: 'Our expertise lies in defining forms, spaces, and materialities; we should not be afraid of the results and subjectivities (read: *biases*)

that such definition implies.'[10] Whether framed in terms of a 'pragmatic idealism' or a focus on 'affective' qualities in architecture, critics and theorists are still struggling to find a vocabulary to suit the architectural production that appears to cross over boundaries of either political engagement or aesthetic perfection. While these critics seem unable to escape the critical framework they have confined themselves to, architects continue to build, exploring their ideas within the material forms of their discipline. Some have simply given up on the kind of 'theory' that redirects all discussion of the building to the networks of power that underlie it. Some continue to cloak themselves in provocative statements that direct attention away from the architectural aspects of the design.

How can we possibly turn this position toward a more productive discussion? Perhaps we first need to acknowledge the responsibility architecture has. Architecture cannot be seen outside of its societal role, yet we do need to acknowledge its limits. The various utopian projects of the twentieth century placed so much emphasis on the transformative power of architecture that they almost inevitably led to the cynicism of current theorists. Acknowledging the limits of architecture's agency does not however imply the complete denial of its relation to the social and cultural fabric. Precisely by redirecting our attention to the expertise within the discipline, we may create space for a new form of agency, one in which architects may read the newspaper and engage with their socio-cultural framework, but do so first and foremost as architects, not as sociologists, economists, or philosophers.

If architecture thus has an agency it can appeal to, a sphere of influence that extends beyond the mere fulfilment of spatial requirements, it will not be found in the framework of 'post-critical' architecture, and perhaps not even in 'projective' architecture, as long as it remains primarily defined within an intellectual debate. It will be found in the embedding

of speculations on fundamental societal questions (sustainability, allowing space for a community to feel 'at home', grounding the spatial experience of those who are overwhelmed by the speed of contemporary society) in the material forms of architecture that allow a multiple reading, independent of societal hierarchies and preconceptions. This is the expertise that we may expect from the architect: having incorporated the basic functions of design and spatial composition, to address himself to the task of creating buildings that 'work' in the broadest cultural sense.

Notes

1. Robert Somol and Sarah Whiting, 'Notes around the Doppler Effect and Other Moods of Modernism', *Perspecta*, 33 (2002), pp. 72-77.

2. One might also say that it was fortuitous to hold this discussion in Delft, since Dutch architecture in particular over the course of the 1990s had gained extensive credibility in being both pragmatic (and attractive to clients) and challenging to the status quo. From the innovative work of OMA, and the flag that was passed down from them to KCAP, MVRDV, Neutelings Riedijk and many others of the so-called 'Nine + One' generation (the title of a 1997 exhibition on young Dutch architects and the catalogue edited by Michael Speaks), Dutch architecture became the site for an embedded form of questioning architectural preconceptions.

3. For example, the relatively young magazines *Frame*, *Mark* and *A10* seem to balance comfortably between a critical assessment of projects and extensive documentation of the everyday reality of practice.

4. See for example *Arch+* 178 on the theme 'Die Produktion von Präsenz' (June 2006); Manuel Gausa and Susanna Cros, *OpOp: Operative Optimism in Architecture* (Barcelona: ACTAR, 2004); the upcoming Bauhaus colloquium 2009, 'Architecture in the Age of Empire', which includes workshops on 'projective vs. critical practice', and 'affect, ornament and sensuality'.

5. See in particular Iain Borden and Jane Rendell, 'From chamber to transformer: epistemological challenges and tendencies in the intersection of architectural histories and critical theories', in *InterSections: Architectural Histories and Critical Theories*, ed. by Iain Borden and Jane Rendell (London: Routledge, 2000), pp. 3-23.

6. George Baird, '"Criticality" and its Discontents', *Harvard Design Magazine*, 21 (Fall 2004/Winter 2005). Available at http://www.gsd.harvard.edu/research/publications/hdm/back/21_baird.pdf [accessed 20 March 2009].

7. Latour, 'Why has Critique Run out of Steam? From Matters of Fact to Matters of Concern', *Critical Inquiry*, 30, 2 (Winter 2004), pp. 225-48. As Latour explains, the position of the critic in traditional critical theory disallows any true agency. If the actor turns to an object to find meaning, the critic attacks him for projecting his own ideas on the object. If the actor then takes his newfound freedom to act and project, the critic reprimands him for not acknowledging the deep-seated societal structures that subconsciously guide him. In both cases, the critic remains outside of this process, placing himself outside of the sphere of influence of societal conditions.

8. Sarah Whiting, 'Going Public', *Hunch, The Berlage Institute Report*, 6/7 (Summer 2003), pp. 497-502 (p. 502). She implies here that critical theory is both useful and limited, and that architectural production itself allows for a freedom from (destructive) critique.

9. Richard Sennett, *The Craftsman* (London: Yale University Press, 2008).

10. Whiting, 'Going Public', p. 502.

Biography

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Review article
Framing Colomina
Tahl Kaminer

Traditionally, the primary object of study for the architectural historian has been either the building or the architect's life and oeuvre. Reading *Vers une architecture*, for example, was a means of studying not the book itself but Le Corbusier and his designs. Sometime in the 1990s several architectural historians shifted their attention from buildings to publications, exhibitions, films and photographs produced by architects. Previously deemed to be mere instruments enabling access to the buildings themselves, these 'side products' of the discipline have themselves become the objects of scrutiny. Among architectural historians who began researching these media products are Beatriz Colomina, Christine Boyer, and Catherine de Smets,[1] scholars of diverse generations employing disparate approaches and methodologies in their research. To a certain extent, even Adrian Forty's Barthian-structuralist argument for the significance of architectural vocabulary in the opening pages of *Words and Buildings* participated in this shift.[2] More than any other work, however, it is Beatriz Colomina's *Privacy and Publicity* that has come to represent this growing interest of architectural historians.[3]

It is reasonable to attribute this shift to the late twentieth-century expansion in media available to and used by architects; however, it can also be seen as an implicit rejection of the idea of architecture as agency and therefore related to the architectural retreat from social concerns into the realm of culture, beginning with the dissipation of modernism

three decades ago. Whereas the focus on the building as a physical object locates architecture firmly in the realm of material production - as part of what Marxists call the structural base - culture has generally been associated with the superstructure, thus at a certain distance from material reality. In the 1970s, Charles Jencks redefined architecture as a mode of communication, rejecting any idea of architectural efficacy in the social sphere; Colin Rowe located the essence of architecture in ideal geometric types, distanced from everyday life and society; Robert Venturi, despite using reality as a point of departure, proposed a new symbolic language for the discipline; Peter Eisenman studied the formal language of architecture.[4]

The growing interest of architectural historians in media is intimately related to these changes within the discipline in the last decades - the growing interest in linguistics, representation, and formalism, and the waning desire to affect society. These changes, in turn, relate to the rise of post-industrial society and its response not to the social critique of society - the demand for higher wages, equality and job stability - but to the artistic critique of society - the demand for freedom, creativity and difference. 'Culture' was the realm in which this critique could be best addressed. Neo-Marxist scholars, following Gramsci and Althusser's recognition of the role of the superstructure - however limited - in shaping society, turned to the study of culture. Neoconservatives, in contrast, understood 'culture' as a sphere totally independent from the material

base. Satisfying individual desires via culture was for the neoconservatives the means of escaping the impasse of the period - the economic downturn, political stagnation and social disintegration - and directly related to the restructuring of society and economy which followed, namely, the passage from Keynesian to neoliberal economy. Thus, the architectural retreat from social concern was part and parcel of a much broader transformation taking place.[5]

Within the context of such broad transformations, the participation of architectural historians in these changes has, perhaps, relatively minor significance for society. However, when assessed within the narrow framework of the relation of the discipline of architecture to society, the role and relevance of the work in question is clear: identifying legitimate fields of operation for the discipline by offering interpretations and understandings of architecture that implicitly express society's specific worldview or 'logic'. *Privacy and Publicity* is reviewed here as a means of taking a closer look at the specific interests and methodologies of one of the best known examples of this recent trend among architecture historians. As this review article directs to Colomina some of the questions she poses to Loos and Le Corbusier, it ends up being, no less than *Privacy and Publicity*, an 'excursion in the superstructure' and a journey into fiction. The 'journey' suggests that understanding architecture as a form of cultural representation leads to a closed circuit - perhaps reflective or even reflexive, but with little consequence for understanding the material world. The retreat from social concern offers no exit route, no efficacy, and no agency. The following review article employs Colomina's own methodology in order to demonstrate that as long as the architectural discipline continues to understand its production merely in terms of cultural representation, it will remain 'locked' in a hall of mirrors.

Privacy and Publicity studies mass media, the

public and the private, feminism, and the work of the modernist masters Adolf Loos and Le Corbusier. The book's narrative, a rich tapestry of interwoven storylines, leads the reader on a surprising, even bewildering journey, ultimately reshaping the reader's understanding of early modernism. Colomina launches this journey by contrasting Loos's instructions to destroy his Vienna archive with Le Corbusier's obsessive collecting and archiving. Through the ensuing chapters, 'Archive', 'City', 'Photography', 'Publicity', 'Museum', 'Interior' and 'Window', the author describes the introduction of mass media into modernist architecture, emphasising the publicness involved in publishing photographs, books or making films of interiors. The uncanny, Freud's *unheimlich*, lurks in the margins of the narrative, in the passage from interiority to exposure, from the human to the mechanical eye, in the feeling of concealment which underlies the story.

The narrative fluctuates between several protagonists and the intersections of their stories. The structure emulates a complex novel, with the intersections serving as the nodes in which one protagonist takes over the lead role from another. The protagonists - mass media, Le Corbusier and Loos, the public-private, the interior-exterior, the inside-outside, femininity, and the camera - relate to each other. Mass media, for example, serves to study Le Corbusier and Loos - and vice versa, the two architects become a means of studying architectural mass media. Alternatively, the study of the interiors of Loos and Le Corbusier leads to the exposing of the role of femininity in early modernism and mass media. Colomina's positions are not transparent. The flowing narrative masks her methodology of work and the ideology it expresses, ignoring Barthes's warning that 'the capital sin in criticism is not ideology but the silence by which it is masked'.[6]

Colomina's analysis of the work of Loos and Le

Corbusier suggests 'thinking of architecture as media'.[7] Consequently, one of her aims is to overturn the assumption that modernist architecture was part of a pure, 'untainted' high art: '[T]he concept of the "machine age" has served the critical purpose of sustaining the myth of the "modern movement" as an autonomous artistic practice.'[8] She adds that:

The conventional view portrays modern architecture as a high artistic practice established in opposition to mass culture and everyday life [...] it has neglected the overwhelming historical evidence of modern architecture's continuous involvement with mass culture.[9]

Colomina prefers to see Le Corbusier's liaison with mass media as 'the insertion of architecture into the contemporary conditions of production',[10] to which it is necessary to compare Walter Benjamin's dictum in 'The Author as Producer': 'Before I ask: what is a work's position *vis-à-vis* the production relations of its time, I should like to ask: what is its position *within* them?'.[11] In contrast to Benjamin, Colomina rids the term 'production' of its Marxist overtones and its relation to the structural base; instead, 'production' in *Privacy and Publicity* relates architecture to mass media and mass culture. The prefix 'mass' suggests that mass media and mass culture are an expression of industrial production - as in the mass production of newspapers, for example. However, 'culture' is within the realm of the superstructure, and much of the new media of the twentieth century blurs the differences in mode of production between 'mass' and its reverse; 'mass' ends up referring to the scale of circulation and popularity rather than the mode of production. Mass culture belongs to the superstructure no less than high culture, and Colomina's use of 'production' takes part in the retreat from 'society' into the safety of 'culture'. The architect is here reduced to a producer of culture.

An important issue in *Privacy and Publicity* is what seems to be at first merely a subtext: questioning the architects' treatment of women. Throughout the book the author refers to femininity with allusions that are left undeveloped, as though they were a separate, less important story than the one being told. When discussing the photographs of the Villa Savoye, for example, such remarks are left hanging in the air, unresolved:

[A]nd now, where did the gentleman go? Because of course, as you would have noticed already, the personal objects are all male objects (never a handbag, a lipstick, or some piece of women's clothing). But before that. We are following somebody.[12]

It is Colomina's remark on femininity in the closing paragraph of the book that leaves little doubt regarding its central role, tying together some of the narrative's 'loose ends':

Given that the media are so frequently identified with the feminine, it is not surprising to find that this slippage is not neutral in gender terms. Male fashion is uncomfortable but provides the bearer with 'the gaze', 'the dominant sign'. Woman's fashion is practical and modern but turns her into the object of another's gaze [...]. If for Le Corbusier the woman is the very figure of modernity, the status of that figure remains troubling.[13]

Examining the covert while ignoring the overt is a strategy used repeatedly throughout the book. Colomina plays the role of a detective, searching for her evidence with a magnifying glass. She exclaims, for example, that '[t]he look into these photographs is a forbidden look. The look of a detective'.[14] Like Chandler's Philip Marlowe, she reveals gaps and inconsistencies in the search for evidence: 'yet another passage remarkably omitted in the first English version of his [Loos's] text "Architektur" (1910)', she notes in one instance.[15]

The critic or interpreter's search for evidence -

whether in a text, photograph or any other document - is common practice. Gombrich had called such activity 'historical detective work'.[16] Nevertheless, it seems that Colomina goes much further than others, rigorously examining every hidden detail. Robin Evans has written of this type of work that:

The trouble with most criticism, and particularly that brand of interpretive criticism associated with iconology, is that meaning is assumed to exist behind, beneath or within the subjects of criticism. The task of the critic is to delve into, uncover, disclose, reveal, divulge, discover, unfold and show to the reader what lies hidden or unseen [...] we might well ask what lies beside, above and in front of the subject of criticism too.[17]

Privacy and Publicity manifests the belief that truth is always obscured and concealed, that truth cannot exist at face value. Thus the detective strategy creates the danger of overemphasising the insignificant and overlooking the substantial. This issue can be expanded by questioning the legitimacy of photographic evidence. The book offers a clear argument to buttress Colomina's reliance on photographs:

The building should be understood in the same terms as drawings, photographs, writing, films, and advertisements; not only because these are the media in which more often we encounter it, but because the building is a mechanism of representation in its own right.[18]

This argument illustrates the idealism at the centre of Colomina's methodology, an idealism which dematerialises the realised building itself, reducing the material object to 'a mechanism of representation'. It is possible to identify another motivation for the author's reliance on photographs, suggested in Barthes's description of the panorama as a view that 'permits us to transcend sensation and to see things *in their structure*'.[19] Colomina's

use of photography is similar: photographs create a distance between the viewer and what is being observed, a distance that enables the viewer to discern the structure of things. The photograph removes the distorting, limiting effect of experience, permitting an intellectualised mode of viewing. In this sense, the role of the photograph in *Privacy and Publicity* echoes the role of the panoramic view as described by Barthes or that of the 'disinterested' aesthetic reception of art.

Tafuri has already drawn the correlation between the panorama and a mechanical vision device in Le Corbusier's Beistegui apartment: 'The distance interposed between the penthouse and the Parisian panorama is secured by a technological device, the periscope.'[20] Colomina substitutes a camera for the periscope and inverts the model, looking at, rather than from, Le Corbusier's work, or, in fact, at photographs of the work. Barthes goes on to say: 'This activity of the mind, conveyed by the tourist's modest glance, has a name: decipherment.'[21] The distance at work in Colomina's gaze reflects the remoteness of her objects of analysis from the world of material production.

The doubt regarding the act of decipherment, raised above in the quotation from Evans, can be expanded to questioning the validity of photographs as evidence. The understanding of the photographic image as neutral, objective and truthful - expressing the perception of the photograph as a trace of reality - was fundamental for establishing the role of the press photograph as well as for the use of images as court evidence. Such an understanding was prominent also in the art world among photographers such as Paul Strand and Edward Steichen. The critique of this view has its own history, dating back to the Surrealist onslaught on objectivity and reason.

Michelangelo Antonioni's film *Blow Up* (1966) examines certain aspects of the photograph that

can cast serious doubts over Colomina's use of it as evidence. The film's protagonist, Thomas, is both a fashion and art photographer. Inspired by the excellent light conditions, he photographs a couple in a park. The photographed woman raises his suspicion by pursuing him and demanding the film roll, and consequently Thomas develops the negative and prints the images. After examining the prints with a magnifying glass, he blows up sections of the images. Thomas believes he can detect in the blow-ups evidence of a murder. He returns to the park, discovers a body in the bushes. Later his prints and negative, as well as the body, disappear, leaving Thomas to question his experience. The methodology employed by Thomas - the inspection of a photograph with a magnifying glass and the enlargement of the image - parallels Colomina's careful study of architectural photographs and segments of the photographs in order to identify the necessary evidence 'concealed' within the images. Antonioni has said of this process that 'it was precisely by photographing and enlarging the surface of the things around me that I sought to discover what was behind those things'.[22] However, as the image is blown up it also becomes more diffuse, blurry and, consequently, more difficult to decipher.

Early in the film, a friend of Thomas, a painter, provides an explanation of the methodology employed by Thomas - and Colomina, by extension - when speaking of his own paintings: 'They don't mean a thing when I do them, I find something to hang on to … it adds up. It's like finding a clue in a detective story.' Many of the meanings Colomina identifies in Le Corbusier's photographs were, in the first place, 'inserted' by her; the evidence is not planted, but is misconstrued, subordinated to a preconceived idea, 'adding up'.

While *Blow Up* raises doubts about the relation of photographs to reality, and about the act of magnification as a means of discovering clues,

Peter Greenaway's film *The Draughtsman's Contract* (1982) goes further, demonstrating that representations are open to multiple interpretations, and in doing so, shaking the foundations of *Privacy and Publicity* by undermining the validity of images as evidence. Here a master draughtsman is commissioned to create twelve drawings of a mansion. Mr. Neville, the arrogant draughtsman, understands his work as objective: 'I try hard never to distort or dissemble', he announces. His use of a viewing apparatus in order to create an 'exact' duplication of reality strengthens the similarities between the drawing and the representation's claim of a direct link to reality. Evidence of a murder is found in Mr. Neville's drawings, and is used to frame him, leading to his lynching in the final scene. Mrs. Talmann, the daughter of the owner of the mansion, is the first to point out this evidence, describing the suspicious items of clothing that have invaded Mr. Neville's drawings, before continuing: 'Do you think that before long you might find the body that inhabited all those clothes?'; Mr. Neville: 'You rush ahead, Mrs. Talmann. The items are innocent!'; Mrs. Talmann: 'Taken one by one they would so be construed, taken together could be regarded as witness to misadventure.'

It is tempting to see Mr. Neville as Le Corbusier, believing in the innocence and objectivity of both his designs and their representation, and Mrs. Talmann as Colomina, interpreting the representations and uncovering evidence that will 'frame' Le Corbusier for a crime [fig. 1]. However, the film suggests other interpretations of the drawings, thus casting doubt over the validity of Mrs. Talmann / Colomina's reading. Mr. Noise, one of the courtiers, tries to sell the drawings to Mr. Talmann by claiming they include allegorical evidence of his wife's infidelity. Mrs. Talmann retorts to her husband's accusations by saying that the courtiers 'see, then, what they have long been searching for' - an accusation which could also be directed to Mrs. Talmann / Colomina.

The multitude of interpretations in *The Draughtsman's Contract* is enabled by a limiting of vision,[23] which is also one of the themes of *Privacy and Publicity*. Colomina describes a photograph of Charlotte Perriand, a collaborator of Le Corbusier, in which Perriand 'is almost an attachment to the wall. She sees nothing'.[24] Another instance is Le Corbusier's framing of the landscape in the Beistegui apartment: 'the views from the inside and outside spaces of the apartment are also technologically controlled'.[25] Yet it is Colomina who limits her readers' vision by excluding alternative interpretations. This control already begins with the description of the images; in the following example she describes a woman appearing in the film *L'Architecture d'aujourd'hui*: 'She is wearing "inside" (informal) clothes and high heels and she holds to the handrail as she goes up [...] She appears vulnerable. Her body is fragmented.'[26] The description is neither objective nor innocent - it is already an interpretation. It is Colomina's description of the still which turns it into 'evidence'. Thus, Colomina, like Mrs. Talmann, relies on the presumed link of representations to reality while, in effect, manipulating their interpretation, and consequently shaping the reader's understanding of architectural history.

It is apparent by now that Colomina is questioning the place of femininity in Le Corbusier's work. She judges Loos in a similar manner earlier in the book; he is an easy target:

And when this 'degeneration' becomes clearly identified as homosexuality, Loos's raid against ornament is not only gender-loaded but openly homophobic. The main target of Loos's attack becomes the effeminate architect, 'the decorator'.[27]

Suggesting that men born long before women had voting rights were patriarchal is a redundant argument; it is self-evident. The justification for such a pursuit would be that Le Corbusier and Loos figure as a means of exposing a social code that exists and persists even today, namely, that architecture is tainted by patriarchality. Consequently, it can be claimed that Le Corbusier does not appear in *Privacy and Publicity* as an individual, but rather as the figurehead of the modernist movement, as a public figure. Colomina, therefore, like her protagonists, projects the private into the public sphere, from interior to exterior. The traces of structuralism throughout the book suggest that it is Le Corbusier the public figure and the social code which are 'framed' in the book. However, such a critique of ideology remains within the superstructure, addressing ideals, ideas, and worldview while ignoring the structural base.

Earlier it has been suggested that *Privacy and Publicity* can be seen as a novel; more precisely, it can be described as a detective novel. However, the nature of the evidence Colomina has collected implies another possibility. Mrs. Talmann's observations regarding the draughtsman's drawings - 'taken one by one they would so be construed, taken together could be regarded as witness to misadventure' - could be directed also to the photographic evidence Colomina collects. A series of photographs does not only create a complete picture; it also forms a film sequence.

Colomina attributes to Le Corbusier the sensibilities of a film director and associates moving image with his work: 'The house is no more than a series of views choreographed by the visitor, the way a filmmaker effects the montage of a film.'[28] And also: 'The repetition of units with windows at slightly different angles, different framings, [...] suggests again the idea of a movie strip, each apartment's window a still.'[29] If *Privacy and Publicity* and its narrative can be understood as a film, then the position Colomina occupies is that of the director. The detective in this *film noir* is the camera, Colomina's alter ego. Both the camera and the alter ego are extensions of the subject - the former as an artificial limb, the latter as the double of the subject.[30] The camera is often in
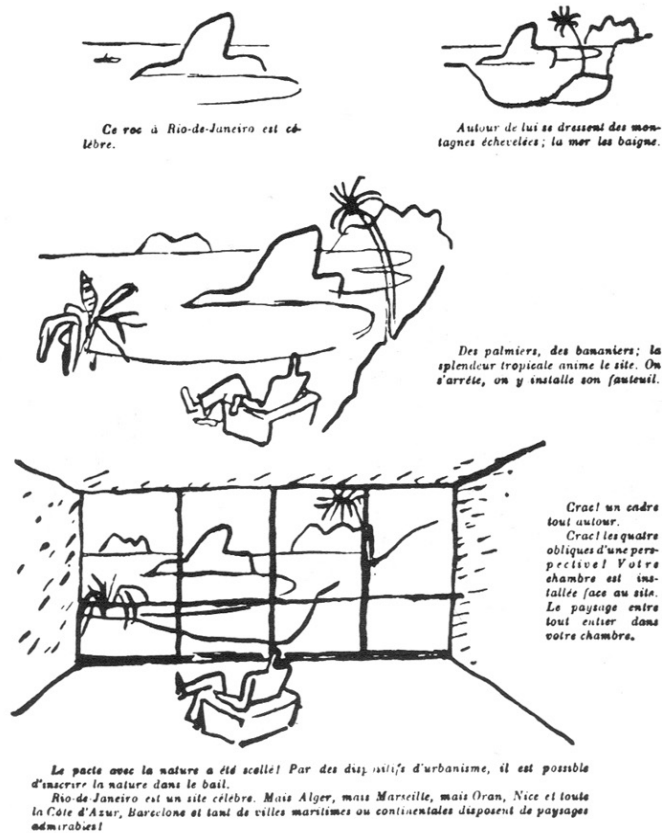
Fig. 1: Le Corbusier frames the view - the landscape - and imposes on it a controlling geometry with the window frame and subdivisions. He ends up 'framing' himself (published by permission of Pictoright). Greenaway's draughtsman imposes his own rigid geometry on the landscape, but is later 'framed' for murder by his own device (courtesy of BFI Stills).

the background, but in the last chapter, 'Windows', it moves to the fore, assuming the leading role. As the plot develops, the camera transforms. From being a passive mechanical device used by a photographer to collect the evidence, it proceeds to become an independent witness. The photographer - the subject - disappears and the camera becomes an 'objective' surveillance camera:

In the corner of the room a camera is set on a tripod. It is the reflection on the mirror of the camera taking the photograph. As viewers of this photograph we are in the position of the photographer, that is, in the position of the camera, because the photographer, like the visitor, has already abandoned the room.[31]

Yet the camera is also associated with the window of the house: 'With Le Corbusier the erected man behind Perret's *porte-fenêtre* has been replaced by a photographic camera.'[32] The camera ends up becoming the house itself, an objectified subject rather than a purely mechanical device, the interface between inside-outside, interior-exterior: 'But that which is transparent, like the glass in our window, also reflects (as becomes evident at night) the interior and superimposes it onto our vision of the exterior. The glass functions as a mirror when the camera obscura is lit.';[33] '[i]f the window is a lens, the house itself is a camera pointed at nature. [. . .] Just as the camera can be taken from Paris to the desert, the house can be taken from Poissy to Biarritz to Argentina.'[34] This transformation is reminiscent of a rule in screenwriting: the protagonist should transform in tandem with the development of the film's plot. The character 'goes through an arch'.[35] Thomas, the photographer in *Blow-Up*, is the epitome of such a transformation. Colomina's camera does the same. *Privacy and Publicity* can be described, therefore, as a compelling script and an excellent 'film'. The house becomes a communication machine, the materiality of the building completely dissolved. The architect ends up a producer of cultural objects, the building merely a

means of communication.

This review article has confronted Colomina with some of the same questions she directed at Loos and Le Corbusier. It has demonstrated not the unquestionable sophistication and ingenuity of her method, but the 'closed circuit' which is its consequence. Mass media, while embedded in contemporary everyday life, is a form of mediation and representation which is only indirectly related to lived experience or material reality. 'Architecture as a means of communication' is precisely the remedy prescribed by Charles Jencks to the discipline's ailments in the 1970s. Lost in the study of the media, the meaning, and the communicativeness of architecture is the ambition to reconstitute architecture as a social and material agency, and a discipline actively engaged with society. The demolition of postwar architecture in the West in recent decades is, arguably, the manifestation of a profound desire to obliterate the traces and memory of social democracy; similarly, the modernist belief in the power of architecture to transform society has not only been discredited, but rendered irrelevant by architects and critics. The work of architecture historians such as Beatriz Colomina is an expression of this troubling retreat from social concern, an expression which inevitably takes part in the 'cultural trajectory'.

Notes

1. See, for example, Felicity D. Scott, 'Acid Visions', *Grey Room*, 23, 2006, pp. 22-39; Catherine de Smets, *Le Corbusier, Architect of Books* (Baden: Lars Muller Publishers, 2006); Christine Boyer has closely studied 'the big books of architecture' - the publications of firms such as OMA and MVRDV; see also the recent exhibition curated by Beatriz Colomina, and now a book, 'Clip, Stamp, Fold: The Radical Architecture of Little Magazines of 196X-197X'.

2. Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames and Hudson, 2000), pp. 11-15.

3. Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994).

4. Charles Jencks, *The Language of Post-Modern Architecture* (London: Academy Editions, 1977); Colin Rowe and Fred Koetter, *Collage City* (Cambridge, Mass.: MIT Press, 1983); Colin Rowe, *The Mathematics of the Ideal Villa and Other Essays* (Cambridge, Mass.; London: MIT Press, 1987); Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art, 1977); Peter Eisenman, *Houses of Cards* (New York: Oxford University Press, 1987); Peter Eisenman, 'Notes on Conceptual Architecture: Towards a Definition', *Casabella*, 359-360, 1971, pp. 49-56; Peter Eisenman, 'Post-Functionalism', in *Architecture Theory since 1968*, ed. by K. Michael Hays (Cambridge, Mass.; London: MIT Press, 2000) pp. 236-39.

5. Cary Nelson & Lawrence Grossberg (eds.), *Marxism and the Interpretation of Culture* (Chicago: University of Illinois Press, 1988); Daniel Bell, *The Cultural Contradictions of Capitalism* (London: Heinemann, 1976); Jürgen Habermas, 'Modernity - an Incomplete Project', in *The Anti-Aesthetic: Essays on Postmodern Culture*, ed. by Hal Foster (New York: New Press, 1998), pp. 1-15; Jürgen Habermas, 'Modern and Postmodern Architecture', in *Rethinking Architecture: A Reader in Cultural Theory*, ed. by Neil Leach (London; New York: Routledge, 2002), pp. 227-35; Luc Boltanski and Ève Chiapello, *The New Spirit of Capitalism* (London; New York: Verso, 2005).

6. Roland Barthes, 'What Is Criticism?' (1963), in *Critical Essays* (Evaston: Northwestern University Press, 1972), p. 257.

7. Colomina, *Privacy and Publicity*, p. 15.

8. Ibid., p. 159.

9. Ibid., p. 14.

10. Ibid., p. 159.

11. Walter Benjamin, 'The Author as Producer', in *Thinking Photography*, ed. by Victor Burgin (London: Macmillan Press, 1982), p. 17.

12. Colomina, *Privacy and Publicity*, p. 289.

13. Ibid., p. 335.

14. Ibid., p. 289.

15. Ibid., p. 42.

16. E. H. Gombrich, *Symbolic Images: Studies in the Art of the Renaissance* (London: Phaidon, 1972), p. 6.

17. Robin Evans, 'In Front Lines That Leave Nothing Behind', in *Architecture Theory Since 1968*, ed. by K. Michael Hays (Cambridge, Mass.: MIT Press, 1998), p. 482.

18. Colomina, *Privacy and Publicity*, pp. 13-14.

19. Roland Barthes, 'The Eiffel Tower', in *Rethinking Architecture: A Reader in Cultural Theory*, ed. by Neil Leach (London; New York: Routledge, 2002), p. 175.

20. Manfredo Tafuri, in Beatriz Colomina, *Privacy and Publicity*, p. 303.

21. Barthes, 'The Eiffel Tower', p. 176.

22. Seymour Chatman, *Antonioni: or, the Surface of the World* (LA: University of California Press, 1985), p. 3.

23. [The draughtsman's mechanical] 'grid is the most ubiquitous emblem of the film's concern with restricted vision', Amy Lawrence, *The Films of Peter Greenaway* (Cambridge: Cambridge University Press, 1997), p. 51.

24. Colomina, *Privacy and Publicity*, p. 296.

25. Ibid., pp. 301-03.

26. Ibid., p. 293.

27. Ibid., p. 38.

28. Ibid., p. 312.

29. Ibid., p. 323.

30. 'Surrealist photography was to become the photography of the camera-as-prosthetic-device.' Rosalind E.

Krauss, 'Photography's Exquisite Corpse', in *In The Mind's Eye: Dada and Surrealism*, ed. by T.A.R. Neff (Chicago: Museum of Contemporary Art, 1985), p. 44; 'Alter ego: 1. A second self. 2. A very close and intimate friend (Latin: other self).' *Collins English Dictionary* (London: William Collins Sons & Co., 1982).

31. Colomina, *Privacy and Publicity*, p. 327.
32. Ibid., p. 311.
33. Ibid., p. 80.
34. Ibid., p. 312.
35. See, for example, Robert McKee, *Story: Substance, Structure, Style and the Principles of Screenwriting* (New York: Regan Books/HarperCollins, 1997).

Acknowledgement

Biography

Tahl Kaminer received a PhD at the Technical University of Delft for his research tying architecture to the social via the 1970s disciplinary crisis, and, previously, an MSc. in Architecture History and Theory at the Bartlett, UCL (2003). He is a founding member of 66 East, Centre for Urban Culture, an Amsterdam-based foundation involved in the study of the urban environment, and a practicing architect. He has recently co-edited the NAi publication *Houses in Transformation*.