



## building material

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## Editorial

ORLA MURPHY

In his essay *On Creativity* physicist David Bohm wrote that ‘a child learns to walk, to talk, and to know his way around the world just by trying something out and seeing what happens, then modifying what he does (or thinks) in accordance with what has actually happened.’<sup>i</sup>

This creative process comprises two parts; the first we can see in the innate ability of a child to act without fear of consequence; the second comprises the critical assessment of the outcome of that action in order to influence further action. This two stage process can be termed critical practice and forms the theme of this issue.

Bohm goes on to argue that the period of childhood learning is both creative and importantly original, in that it embodies an ability to learn something new ‘even if this means that the ideas and notions that are comfortable or dear to him may be overturned.’<sup>ii</sup>

In operating outside of the bounds within which we are comfortable we may risk failure. While to a child these risks are too necessary to avoid, in adulthood it seems that the consequences of such risks often become paralysing and close down possibilities for continued and creative learning.

Creative practice is often connected to a system of exchange and encounter.

Connections can be cross disciplinary in nature, as is the case in the increasing interest in architecture seen in contemporary art practice, or in the work of architects in related disciplines. The acquired knowledge of one discipline will leave a mark on work done in another. Critical practice can be cumulative through a method of react or respond, or collaborative in the coming together of practitioners with shared interests. We have tried to highlight some of these forms of exchange and encounter in the articles which follow.

Crucially, the support of others engaged in these ‘cross-overs’ provides not only space for joyous failure, but potential for genuine creativity.

i. David Bohm, *On Creativity*, New York: Routledge, 2004, P.4.

ii. *Ibid*

## Architectural Research: Three Myths and One Model

JEREMY TILL



There is still, amazingly, debate as to what constitutes research in architecture. In the UK at least there should not be much confusion about the issue. The RIBA sets the ground very clearly in its founding charter, which states that the role of the Institute is: “The advancement of architecture and the promotion of the acquirement of the knowledge of the various arts and sciences connected therewith.”

Significantly, the charter thus implies that the advancement of architecture is inextricably linked to the acquirement of knowledge. When one places this against the definition of research given for the UK Research Assessment Exercise (RAE), “research is to be understood as original investigation undertaken in order to gain knowledge and understanding”, one could argue that research should be at the core of RIBA’s, or any representative body for architects, activities. This article takes as a starting point the essential tenet

that architecture is a form of knowledge that can and should be developed through research, and that good research can be identified by applying the triple test of originality, significance and rigour.

To hold to this tenet, it is first necessary to abandon three myths that have evolved around architectural research, and which have held back the development of research in our field.

### **Myth One: Architecture is just architecture:**

The first myth is that architecture is so different as a discipline and form of knowledge, that normal research definitions or processes cannot be applied to it.<sup>i</sup> “We are so unlike you,” the argument goes, “that you cannot understand how we work.” This myth has for too long been used as an excuse for the avoidance of research and the concomitant reliance on unspecified but supposedly powerful forces of creativity and professional authority. On the one hand this myth looks to the muse of



genius for succour, with the impulsive gestures of the individual architect seen to exceed the dry channels of research as the catalyst for architectural production. The problem is that these impulses are, almost by definition, beyond explanation and so the production of architecture is left mythologised rather than subjected to clear analysis. Architecture is limited to a form of ouija, with the architect, as heroic genius, acting as the lightning rod for the storm of forces that goes into the making of buildings. On the other hand, architecture is treated as an autonomous discipline, beyond the reaches or control of outside influences, including those of normative research methodologies. This leads to the separation of architecture from other disciplines and their criteria for rigour. Self-referential arguments, be they theories of type, aesthetics or technique, are allowed to evolve beyond the remit or influence of accepted standards, and research into these arguments is conducted on architecture's own terms.

The myth that architecture is just architecture, founded on the twin notions of genius and autonomy, leads eventually to the marginalisation of architecture. A knowledge base is developed only fitfully and so architecture becomes increasingly irrelevant and, ultimately, irresponsible.

**Myth Two: Architecture is not architecture:**

The second myth works in opposition to the first and argues that in order to establish itself as a credible and 'strong' epistemology, architecture must turn to other disciplines for authority. Architecture is stretched along a line from the arts to the sciences and then sliced into discrete chunks, each of which is subjected to the methods and values of another intellectual area. For example, the 1960s Oxford Conference looked to scientific research as the means of establishing architecture within the academy and more recently architectural theory has immersed itself in the further reaches of post-structuralism in an effort to legitimise itself on the

back of other discourses. In both these cases, and others that rely on other intellectual paradigms, architecture's particularity is placed within a methodological straightjacket. In turning to others, architecture forgets what it might be in itself. The second myth, that architecture is not architecture, in editing the complexity of architecture thus describes it as something that it may not be. It is a myth fuelled by the funding mechanisms for research, with the various research councils defining acceptable areas through particular research paradigms, which simply do not fit the breadth of architecture.

Interestingly Myth One and Myth Two can and do operate in parallel, often within the same institution. Thus it is common to find the design core of a School of Architecture physically and intellectually separate from the 'research' core, with mutual antipathy between the two.

**Myth Three: Building a building is research:**

The third myth is that designing a building is a form of research in its own right. It is a myth that allows architects and architectural academics to eschew the norms of research (and also to complain when those norms are used to critique buildings as research proposals). The argument to support this myth goes something like this:

1. Architectural knowledge ultimately resides in the built object
2. Every building is by definition unique and thus original
3. The production of buildings can thus be defined as the production of original knowledge
4. This is a definition of research

It is compelling enough an argument to allow generations of architects (as well as designers and artists) to feel confident in saying that the very act of making is sufficient in terms of research, and then to argue that the evidence is in front of all our eyes if we would just choose to look. However it is also an argument that leads to denial of the real benefits of research, and so it is worth unpicking.

**1.**

Architectural knowledge may lie to some extent in the building, but it also lies elsewhere: in the processes that lead to the building, in the representation of the building, in its use, in the theories beyond the building, in the multiple interpretations of the building and so on. Architecture exceeds the building as object, just as art exceeds the painting as object. Architectural research must therefore address this expanded field.

**2.**

A 'good' building is not necessarily good research, and good research may lead to 'bad' buildings. Architecture is often described as 'good' because it fits into known and tested canons of taste, type or tectonics. But this 'goodness' does not necessarily constitute good research, in so much as it is not particularly original or significant. A 'good' building, far from pushing towards new forms of knowledge, merely establishes or incrementally shifts the status quo. Equally, buildings that are normatively described as 'bad' may be the outcomes of good research; for example the technologies and construction procedures of food distribution centres are pioneering in many ways and based on systematic research into various options, but the resulting buildings clearly do not fit normative descriptions of what constitutes good aesthetics or tectonics. Of course 'good' buildings dominate architectural culture, which means that the research lessons from the 'bad' buildings are hardly ever transferred across.

**3.**

If we take Bruce Archer's definition of research (that it is "systematic inquiry whose goal is communicable knowledge"), then the building as *building* fails the test. Architects clearly have to be thorough, but they are not necessarily systematic. Choices and decisions are made but not normally through systematic evaluation. More crucially, whilst architects may believe that knowledge is there in the building to be appropriated by critics, users or other architects, they very rarely explicitly communicate the knowledge. It thus lies tacit, thereby failing Archer's second test of communicability.

Designing a building is thus *not necessarily* research. The building as building reduces architecture to mute objects. These in themselves are not sufficient as the stuff of research inquiry. In order to move things on, to add to the store of knowledge, we need to understand the processes that led to the object and to interrogate the life of the object after its completion.

### **Making Architecture Speak**

Against these myths, one has to understand that architecture has its own particular knowledge base and procedures. This particularity does not mean that one should avoid the normal expectations of research, but in fact demands us to define clearly the context, scope and modes of research *appropriate* to architecture, whilst at the same time employing the generic definitions of originality, significance and rigour.

The normal stretching of the field of architecture along the arts to science line (with the social sciences somewhere in the middle) results in each place along the line being researched according to a particular paradigm and methodology from the research spectrum. This ignores design, which is clearly an essential feature of architectural production; design cannot be so easily categorised as a qualitative or quantitative activity, but should be seen as one that synthesizes a range of intellectual approaches. Architectural research is better described by Christopher Frayling's oft-cited triad of research 'into', 'for' and 'through'<sup>iii</sup>. Frayling developed this approach for design research in order to address the specific relationship between design and research. In this model, research 'into' takes architecture as its subject matter, for instance in historical research, or explanatory studies of building performance. Research 'for' refers to specifically aimed at future applications, including the development of new materials, typologies and technologies; it is often driven by the perceived needs of the sector. Research 'through' uses architectural design and production as a part of the research methodology itself.

Architectural research may be seen to have two main contexts for its production, the academy and practice. Research 'in' is traditionally the domain

of the academy and research 'through' that of practice, with research 'for' somewhere in the middle. Research 'in' has the most clearly defined methodologies and research outcomes, but at the same time is probably the most hermetic. Research 'through' is probably the least defined and often the most tacit but at the time a key defining aspect of architectural research. It is this area that needs developing most of all.

It is vital that neither academic nor practice-based is privileged over the other as a superior form of research, and equally vital that neither is dismissed by the other for being irrelevant. ("You are all out of touch with reality", says the practitioner. "You are muddled by the market and philistinism", says the academic). There is an unnecessary antipathy of one camp to the other, which means that in the end the worth of research in developing a sustainable knowledge base is devalued.

The key to overcoming this problem lies in communication. Both the academy and practice often do not meet this central test for research: the academy because of its inward looking processes, practice because of its lack of rigorous dissemination. Whilst academic research is subjected to stringent peer review and assessment procedures, it has been argued that this has led to inward-looking results produced more for the self-sustaining benefit of the academic community and less for the wider public and professional good. If we take UK architectural practice as an example it could be argued that there exists an exemplary practice-led research system, with internationally leading work being carried out. Much of the most innovative research in design and, particularly, technology is founded in practice. However, much of this research remains tacit; it is either, for commercial reasons, not shared with the rest of the community or else in its dissemination through the press is not communicated with the rigour it deserves. For the leading practices intellectual property is what defines them and sustains them, and they understandably are loath to give it away. Research goes on, but silently. The development of architectural knowledge happens but fitfully, and so the long-term sustainability of the profession is threatened. To avoid this, we need to make architecture speak.

This means finding a way to improve the communication of the research carried out in practice, but in a way that does not compromise the value of the individual practice's intellectual property. This can be achieved in two ways. First there is a new role for academia to link up with practice in order to carry out an *archaeology* of the processes of architectural production, in a non-threatening but critical manner, critical here not being a negative term but one of reflection and comparison. By excavating the present one informs the future. Practice has the raw data on which architectural knowledge is founded; academia can release this potential through research. The focus here is not on the products of architecture, buildings, but on the processes, and by shifting the attention from the individual object to a comparative archaeology, one removes the pressure of the precious intellectual property. Secondly, funding for research has to shift from sliced areas of knowledge controlled by various sectors of academia, to a more coherent strategy shared by both academics and practitioners. As a recent CABE report convincingly argues, much more work needs to be done at a strategic and governmental level to encourage funding across departments and across research councils in order to reflect the real needs for research into the built environment.<sup>iii</sup> Thirdly, money needs to be made available directly to practices in order to enable and (importantly) communicate primary research. The funding by the UK Department for Education and Science's of the Exemplary Schools research project is one isolated example of money being productively released into practice in order release the potential of design research.

### **A New Model for Architectural Research**

As we have seen, the stretching of architecture across separate areas of knowledge does not address the particular need for architectural knowledge and practice to be integrative across epistemological boundaries. Buildings as physical products function in a number of independent but interactive ways – they are structural entities, they act as environmental modifiers, they function socially, culturally and economically. Each of these types of function can be analysed separately but the built form itself unifies and brings them

together in such a way that they interact. Research into architecture thus has to be conscious of these interactions across traditionally separate intellectual fields.

In order to give some clarity to the scope of architectural research, these interactions can be divided into three stages:<sup>iv</sup>

1. *Architectural processes*
2. *Architectural products*
3. *Architectural performance*

The first stage, process, refers to research into processes involved in the design and construction of buildings, and thus might include for example issues of representation, theories of design, modelling of the environment, and so on. The second, product, refers to research into buildings as projected or completed objects and systems and might include for example issues of aesthetics, materials, constructional techniques and so on. The third stage, performance, refers to research into buildings once completed and might for example include issues of social occupation, environmental performance, cultural assimilation, and so on. The advantage of this model is that it avoids the science/art and qualitative/quantitative splits, and allows interdisciplinary research into any of three stages. The model thus breaks the hold of research *method* and allows instead thematic approaches to emerge. It is possible for scientist *and* historian, academic and practitioner, to contribute to the research into each of the three stages.

Most importantly the model also describes architecture temporally (as opposed to a set of static fragments), with one stage leading to another and, crucially, creating an iterative loop in which one stage is informed by another. For research to be most effective, and thus for architectural knowledge to develop, it has to feed this loop. For example:

- Research into performance in use informing the processes of design
- Research into the products of design looking backwards to knowledge about the processes of design

# 1

- Research into the performance of buildings being critically informed by knowledge of the processes of architecture

A dynamic system thus emerges from this tripartite model, but it will only operate if academia and practice collaborate in order that the loop is continually fed with both data and analysis. But this will only happen once we have cleared the three myths out of the way, and accept that architecture can, and should, be a research discipline in its own right, which both accords to the accepted criteria of research, but at the same time applies them in a manner appropriate to the issues at hand. There is some urgency in this, because as long as architecture fiddles around at the margins of the

research debate, it will be confined to the margins of the development of knowledge. The present state of architecture, increasingly used to provide a velvet glove of aesthetics for the iron fist of the instrumental production of the capitalist built environment, is perhaps indicative that the state of marginality has been reached. The establishment of a discipline founded on research-led knowledge in the manner outlined above may be one small way of claiming a bit more of the centre ground.

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**Jeremy Till** is Professor of Architecture at the University of Sheffield and a Director of Sarah Wigglesworth Architects.

A version of this paper was first written as a position paper for the RIBA Research Committee, and subsequently published on the RIBA Research Wiki. This is the reason that it starts with the RIBA Charter.

i. In an exhaustive research project carried by Edinburgh College of Art in 2004, a significant minority of responders still clung to this belief. See Jenkins, P, L.Forsyth and H. Smith., "Research in UK Architecture Schools – an institutional perspective, *Architectural Research Quarterly*, Vol. 9, Issue 1, March 2005, pp33-43 ii. Frajling, C., *Research in art and design*, (London: Royal College of Art: Research Paper, 1993) iii. Warwick, E and Gonzalez, S, *The real budget for research: an analysis of current levels of public funding for built environment research* (London, Commission for Architecture and the Built Environment 2004) iv. These definitions have been developed by Professor Bryan Lawson at the University of Sheffield as a means of research analysis.

# 2

## The 3rd Level

QUB, WIT, UCC AND UCD



To reflect the rapidly changing landscape of architectural education in Ireland, building material invited the Heads of School in the seven centres of architectural education to contribute their thoughts on the nature of critical practice and the culture of architectural education. Each school was asked to outline their philosophical standpoints and how they contributed to knowledge in the field of architecture. Queens University Belfast (QUB), University College Cork (UCC), University College Dublin (UCD) and Waterford Institute of Technology (WIT) responded.

### Queen's University Belfast

Queen's University has offered degrees in architecture since 1965 when the Department of Architecture was founded within the Faculty of Applied Science and Technology. Since then our way of educating in architecture has changed to reflect the transformation of professional practice, which for many architects, has become focused on the specification, regulation, and procurement of buildings and the business of being an architect. Architectural education in the QUB School of Planning, Architecture and Civil Engineering has a longstanding tradition in advancing and teaching interdisciplinary design with emphasis on technology and culture. The Architecture curriculum recognises and addresses the increasing complexity of architectural education and practice given the needs of an ever-changing society. Our courses have always fostered strong links between architecture and construction; conceiving and constructing; thinking and making. Our students know how to produce imaginative designs but, crucially, they also know how to realise their designs because they understand how buildings work. The idea of making provides an intellectually rich terrain for exploring a plurality of philosophical approaches to designing and constructing buildings in contemporary Ireland and elsewhere.

Design is the hub and the essence of being an architect – and we structure our undergraduate course to instil a personal self-reliance that is informed but not dictated by precedents. Our graduates leave the University with an ability to dissect design, to understand and learn from the cultural, functional and theoretical basis of existing architecture and cities – without a reversion to style and imitation. Primary skills in the exploration and communication of design enforce an independent personality – how can one successfully innovate without the ability to draw, model, speak and write about design?

The structure of our final year of the RIBA Part 1 course won a teaching award – for how a dynamic between leading critical practitioners from Germany, The Netherlands, Ireland and England, students and staff can inform all participating. Practitioners, students and staff contribute and benefit from this design process - and give our graduates the confidence to innovate and communicate design. Our pedagogy draws on the energy of its setting, and in return our studio programmes often involve local communities. The Connections programme placing architecture students in primary schools is one highly successful example.

There is a commitment to high standards of design and professionalism, demonstrated by three consecutive unconditional RIBA validations of the three accredited programmes. It is also evident in the demand for our graduates who are eagerly recruited both locally and by prestigious practices nationally and internationally.

Academia should contribute to knowledge through research focussed on the needs of society and the

environment. This is why research in Architecture at QUB is driving and informing our teaching, and links between teaching and research in architecture have been present for many years. In fact, the practice of architecture is continuously informed by research in design methodology, innovative building technologies, and sustainable development.

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Karim Hadjri, Queen's University Belfast

### **Waterford Institute of Technology**

Architectural education at Waterford Institute of Technology seeks firstly to identify and cultivate a 'design mind' and to empower graduates with the knowledge, skills and power of thoughts necessary to bring together in a creative way the challenges facing the construction world, the environment and the needs of society in the future.

The new programme in WIT adopts the new educational paradigm by being more accessible, flexible and student focused. Its modular and semesterised approach facilitates part time and full time modes of study. Its system of electives encourage diverse avenues of interest and interdisciplinary activities as well as addressing some of the specialist areas required by the changing role of the architect.

The new department of architecture in Waterford acts as a catalyst for debate and discussion for the architectural community of the South East. Many of the design projects focus on regional problems and use the city and county as a laboratory for studies.

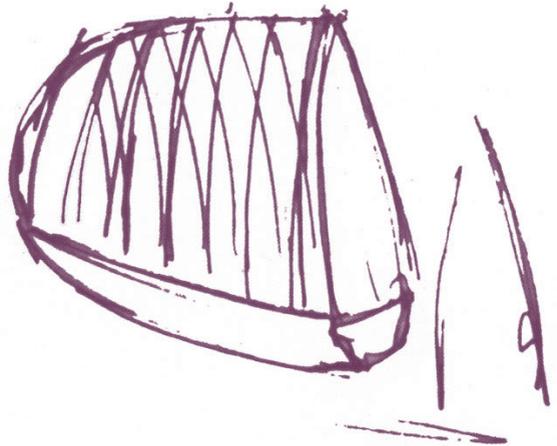
The international dimension is equally important. Students are offered European languages to facilitate exchange programmes. The international staff have serious work experience in France, Germany, UK, Finland, Canada, and Ireland. This profile along with the links that have been created with leading academic institutes and practices ensure that the students are exposed to many different design approaches and trends in contemporary architectural design.

The philosophical approach, is to provide 'a learning through doing' environment for the education of architects where the studio becomes the workshop. Ideas are tested in model and drawing form exploring various hypotheses.

This 'workshop' ethos is based on the working environment of Renzo Piano offices where design is more a circular process than a linear experience.

As Piano says '*design methodology is not unlike many other disciplines. In scientific research you have to deal with equations and variables. In nature, these variables are virtually infinite. So an architect fixes some on the basis of intuition from experience and attempts to solve the equation. An hypothesis is tested, another one formulated and so on.*'

In developing a design methodology we encourage students to explore the Six 'C's. Concept, Context, Culture, Climate, Craft, Construction.



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Máire Henry Head of Department of Architecture Waterford Institute of Technology.

'CALCULATED INCOMPLETENESS'  
NOTES + STRATEGIES FOR DESIGN RESEARCH  
GART & BOYD CORK CENTRE FOR ARCHITECTURAL EDUCATION

CALCULATED INCOMPLETENESS

(Cedric Price)

PRICE'S strategy for developing design projects applies equally to a school of architecture. It is a framework that must embrace a process of becoming rather than being, simultaneously interpreting while encouraging its own interpretation.

IT'S NOT GENIUSES WE NEED RIGHT NOW.  
(J.S. Coderch)

ARCHITECTURE must build on history. Simultaneously modest + ambitious, it can never be about pure invention or self-expression. It is about broad-based and inclusive collaboration.

DO YOU REALLY NEED A BUILDING?  
(Reyner Banham paraphrasing Cedric Price)

DESIGN thinking in architecture must display the openness and willingness to pursue + offer other solutions to spatial opportunities.

GET CLOSER TO THE SHIFTING CENTRE OF HUMAN REALITY AND BUILD ITS COUNTER-FORM  
(Aldo Van Eyck)

ARCHITECTURE is about human beings, their attitudes their well-being, the complexities of society, the ergonomics of everyday life.

WHAT IS DESIGN?

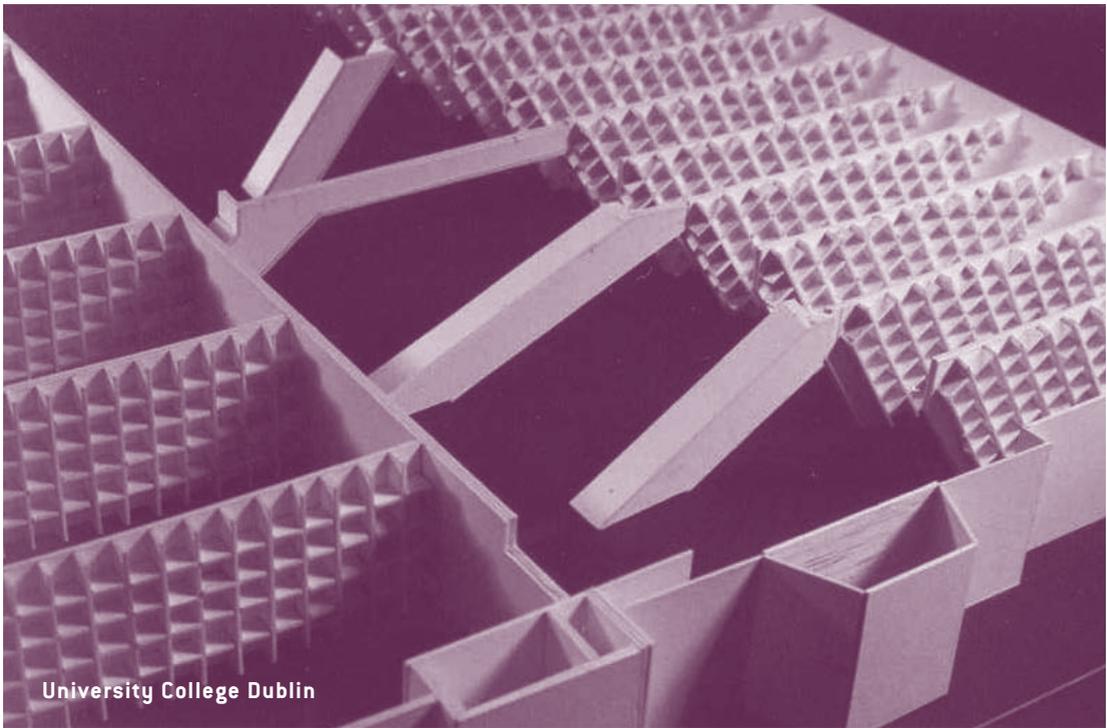
DESIGN IS A METHOD OF ACTION  
(Charles and Ray Eames)

DESIGN is a means of engagement with the environment which seeks to change it. Inherently innovative, vital and active, it energizes its constituent parts: history, theory and technology making them active and vital also. This relationship must be made explicit in a school of architecture.

WHERE IS THE POSSIBILITY OF ESCAPING FROM THE MEAGRE BASE SYSTEMS OF ECONOMIC DETERMINISM THAT DRIVE CONTEMPORARY BUILDING?  
(Glenn Murcutt)

In a school of architecture. Here is the potential for a laboratory that will support practitioners, shelter their ideas and give them the time and resources to reflect critically and pursue research collaboratively.

THE CORK CENTRE OF ARCHITECTURAL EDUCATION (UCC/CIT) IS A NEW SCHOOL OF ARCHITECTURE IN THE REPUBLIC OF IRELAND.



UCD Architecture has a research tradition extending over 30 years, in history and theory of architecture, energy applications in buildings and in conservation. We encounter challenges similar to those experienced by many schools of architecture worldwide – namely that our design-based ethos does not translate easily into the kind of research-intensive academic structures that are demanded as universities try to maximise their contributions to the “knowledge economy”.

Some epistemological issues arise for research in architecture and in the search for appropriate paradigms. They relate to the nature of architectural knowledge and, most particularly, how knowledge embodied in design and practice can be validated as research in a way that parallels the rigour of scholarship in more established areas of enquiry. The issue of critical practice or reflective practice lies in the middle of that debate. The approach we have taken is to recruit architects who demonstrate their engagement – accepting that we are at a pre-paradigmatic stage at present, and remaining open to the possibilities of development. We look to the skill sets being developed in the undergraduate programme from the perspective of how they prepare students for higher levels of study, as well as for practice.

Within UCD, the challenge is to ensure that our approach and research performance is fully recognised so that we can develop a staff structure that supports the spectrum of research in the discipline. We point to the emergence of internationally validated measures of excellence - the UK document “*rae2008* Research Assessment Exercise” (2004) is useful in this regard – in making the case. Architecture lies within a multi-disciplinary school, so that tensions and possibilities are increased.

In the submission prepared by the School of Architecture, Landscape and Civil Engineering UCD, the outstanding achievement for research last year was the Glucksman Gallery in UCC, designed by O'Donnell and Tuomey - ranked above books and international journal papers. The ranking reflects a strategy of developing the creative application of research criteria. Similarly, the Homework project, curated by John Tuomey, internationalises the issue of research through design through projects on the theme of “house: garden: structure”. Twelve developmental projects, three each from four members of staff, are being circulated to schools in the US and Canada to invite critical response through projects by staff from each institution. It is hoped that the result, when it returns to Dublin, will constitute an imaginative and scholarly reflection on the topic through the medium of designed/built projects.

All disciplines face the challenge of developing their scholarship while aligning themselves with available funding sources. This is a most serious challenge for academia and particularly for the arts – architecture is hardly on that radar as yet. Irish schools of architecture are small by European standards – developing the critical mass needed for success in research means we have to collaborate with one another to both further the discussion and to generate funding support.

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Loughlin Kealy is Professor of Architecture at University College Dublin.

# 3

## Desk-crit with Murcutt

DANIEL RYAN

Day 10 in Sydney of the Murcutt Masterclass 2007, sketches everywhere; my group of six was slightly at sea. Our proposition to reorganise the approach to the Arthur Boyd Centre by flooding the nearby valley and bridging it with a gallery was causing a few headaches. Glenn Murcutt wandered by, recommending that we collect our thoughts and be ready to work through the issues when he came back.

The Masterclass is a two-week full-time course with 32 students from around the world. Organiser-in-chief is Dungannon man, Lindsay Johnston<sup>1</sup> who seemed pleased that five of the participants had Irish connections – Lorna Browne, Tom Finnegan, Woytek Przywecki, Daniel Ryan and Marcus Simpson. The course reflects an ideal of teaching based on experiential learning. Every evening there was a different lecture by Glenn Murcutt, Richard Lepplastrier, Brit Andresen or Peter Stutchbury. “You have to give it away to keep it” as Aboriginal elder Max Harrison eloquently put it.

Living next to the site for the first week, you experienced it by walking it, watching it and documenting it. Bush walks with Max - a highlight for many - showed the deep traditional understanding of place.

Staying in Riversdale at the Arthur Boyd Centre, woken by sunlight, showering while looking over the Shoalhaven River, weaving between the *in* and the *out* furthered an understanding of Murcutt’s approach to

architecture and the Australian landscape. Every few days there were pin-ups, which were less ‘critiques’ than ‘appraisals’ that emphasised the potential of each project. Visits to some key houses around coastal New South Wales showed the skill of those teaching in reading a site, creating prospect, refuge and an emotional response to place. Finally, living and working with others from various parts of the globe offered an insight into different cultural approaches to the environment. This diversity of people has created a masterclass network around the world, ensuring that this approach to architecture does not remain only in Australia.

A group with “a lot of firepower” according to Ric Lepplastrier, we comprised a mixture of practitioners and graduate students, from Aberdeen and Beijing, Copenhagen and Colorado, Dublin and Dhaka. There was no strong sense of hierarchy; design emerged through discussion whilst walking the valley, making investigative models and a series of drawings describing the interaction between the elements of climate and the land. Although deadlines forced decisions, debate also brought forth doubt.

We had left the site on Friday full of intentions. Our brief was to design a gallery for research and temporary exhibitions about the Australian landscape artist, Arthur Boyd. Riversdale was the location that had inspired him, and where he had been at ease. Wandering the whole valley, we

had decided against attempting a picturesque solution. The issue with the site was one of access. What was required was a transformation of the approach to Murcutt’s Arthur Boyd Centre. A gallery meant that all storage of art works had to be above the 15m, 100 year flood line. But this level also marked the tree line around the valley. The land had been cultivated close to the river but further back in the valley there still remained pristine turpentine forests. Any penetration with parking & service pipes would likely cause damage.

Our solution involved bridging the valley, in the most delicate manner possible, to connect the forest approach road with the Riversdale complex on the other side. This bridge could house the art works and its orientation was perfect to catch cooling breezes and pick up on southern light for gallery spaces yet offer northern light for café’s and for open circulation. It would be out of the fire zone too. We wanted to keep it as narrow as possible – 6m width was agreed, with 220m in length.

We started by considering the building as a dam, which would flood the valley, emphasise the presence of water in the area and allow the development of wetlands with their associated wildlife. What level to set the dam at was a source of much debate. Through a series of drawings, it soon became clear also that a 15m high dam would be too obtrusive. Try 10m – no, this would flood the creeks





running through the valley. 7.5m was settled on – enough to attenuate water, and only a 2m high causeway was necessary. This causeway would rarely be flooded and therefore could allow some cars to cross it.

Now we had two projects – two lines floating above each other. A width of only 4.5m could affect a whole valley. The building boundary was not the site boundary. This was an important lesson.

We were struggling to tie our intentions together. We felt that a strong simple line would work best, but as the project headed off in different directions, maintaining simplicity was a complex task. Car parking was causing headaches, so too was squeezing a gallery and circulation into a narrow section. How could we relieve the monotony of the corridor? Trouble with circulation, what side, should it shift, how open?

Glenn came back again, as doubt was setting in. He worked through our proposals for damming the valley – assuring us it could act as a wetland, explaining devices that could divert water from the

existing creeks to the plain. If we built up the banks of the streams, the trees would remain by the creeks. He felt it was feasible, liked the idea.

What about the bridge? He spoke about Japanese bridges and drew two rectangles that touched and overlapped at their ends, noting how this change space was a point of encounter with the elements; how this transition point launched you into your surroundings; how seats would be placed at these points to create a meeting point for passers-by. This could only occur at one place on our bridge – where the bridge ran over the creek. At this location it would be possible to comprehend the source of the stream and then turn to watch the water flow into the Shoalhaven river. The essence and emotion of crossing would be intensified.

Talking as he was drawing, he noted how at this change space we could descend and make contact with the river and be greeted by a fountain at the lower level as Barragan would do. Maybe the underside of the bridge should be a massive structure, with holes punched

out for views of the river. Further reference was made to the Ponte Vecchio in Florence. Could the gallery contain a series of different rooms that would allow views back to Boyd's hill at some points or the Shoalhaven at others? Next he spoke about Aalto and how he would introduce some irregularities but allow continuity by keeping the same material treatment. We could offer different types of light for these rooms. So many possibilities had now opened up. Even the roof was reconsidered. With a twinkle in his eye, he added, why not consider the roof as a bridge for animals, so that they could escape across the valley at times of flood.

“Was that a help?” said Glenn in his modest way as he left to prepare for a lecture that evening.

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For more information on the Glenn Murcutt International Masterclass see [www.ozetecture.org](http://www.ozetecture.org)

See also Building Material 15 & 16

# 4

## In Here and Out There: Consciousness and Architecture

HUGH CAMPBELL

*All architecture is what you do to it when you look upon it;  
(Did you think it was in the white or gray stone? or the lines of the arches and  
cornices?)*

*All music is what awakes from you when you are reminded by the instruments;  
It is not the violins and the cornets—it is not the oboe nor the beating drums, nor  
the score of the baritone singer singing his sweet romanza—nor that of the men's  
chorus, nor that of the women's chorus,*

*It is nearer and farther than they.*

Walt Whitman, from *Carol of Occupations*, in *Leaves of Grass*, 1900

### The Nature of Consciousness

From its earliest moments to its dying seconds, each of our lives constitutes a continuous and ongoing encounter with the world. It is by means of this encounter, by means of our endless meetings with and reactions to other objects and organisms that we establish, define and explain ourselves. Very early in our existence, we begin to understand ourselves as having boundaries, which in turn generate an exterior and an interior (possibly in that order). Physically, this demarcation seems straightforward to the point of banality: our bodies are discrete entities of (relatively) fixed dimensions which occupy measurable quantities of space. Psychologically, however, the boundaries and their rationale become more complex. Just because the brain is housed within the skull, should it follow that the self is completely housed there too? The moment such a question is asked, difficulties of description begin to arise. We understand the brain as a physical thing, but what do we mean by the self? In what way, if any, can that be said to be housed? Even the most basic schema of an internal self and an external world already involves what Gilbert Ryle calls a 'category mistake' – ascribing to consciousness quasi-physical properties which it quite patently does not have.

In *The Concept of Mind*, Ryle rejects the separation of mind and body which he saw as having been central to Western philosophy. Dualism, as it is usually termed, sees consciousness, or the mind, as something with an existence independent of the brain. René Descartes proposed that the mind was situated in the pineal gland, a kind of cockpit of the brain from where a *homunculus* – a little man - directed operations. For Ryle, however, this homunculus was the 'ghost in the machine', a mere phantom invented to account for all the higher order brain functions which, hard as it was to believe, were actually no more than the cumulative result of the brain's normal neuronal activity. It was the body that produced the mind.

More recent adherents to this 'materialist' view of consciousness have been greatly assisted by new scanning and visualising technologies which have allowed at least the beginnings of an understanding of the detailed mechanics of mental activities like perception, cognition and memory. At the same time, for proponents of Artificial Intelligence, huge advances in computing have brought closer the possibility of simulating conscious behaviour in machines. Even the most dedicated materialist, however, acknowledges that there is something deeply counter-intuitive and difficult to grasp about the idea that there is nothing more to our conscious experience than the

sum total of millions of neurons firing. When Francis Crick proposed as much, he had the perspicacity to label it 'The Astonishing Hypothesis'.

In his book *Consciousness Explained*, Daniel Dennett chips away methodically and relentlessly at the intuitions and 'folk psychology' which make the astonishing hypothesis so hard to accept. The real difficulty is that we consider consciousness not just as the sum total of the activities of thinking, acting, sensing and remembering and so on, but as our ongoing awareness of this activity. Our sense of self and our conscious experience seem to be fundamentally premised on this capacity always to be aware of our own being, to appreciate automatically what the neurologist Antonio Damasio calls 'the feeling of what happens'.<sup>i</sup> For Dennett, this is why Descartes' homunculus remains an attractive explanation. In the traditional view of consciousness, as he characterises it, there must be some 'Central Meander', overseeing and directing mental activity. Sensations and thoughts, although evidently the result of brain activity, must get played out in the 'Cartesian Theatre' before they can properly become part of consciousness. In place of this 'Cartesian dualism', Dennett elaborates what he calls the Multiple Drafts theory in which, as he writes,

There is no single, definitive 'stream of consciousness' because there is no central headquarters, no Cartesian theatre where 'it all comes together' for the perusal of a 'Central Meander'. Instead of such a single stream (however wide) there are multiple channels in which specialist circuits try, in parallel pandemoniums, to do their various things, creating Multiple Drafts as they go. Most of these fragmentary drafts of 'narrative' play short-lived roles in the modulation of current activity but some get promoted to further functional roles, in swift succession, by the activity of a virtual machine in the brain. The seriality of this machine is not a 'hard-wired' design feature, but rather the upshot of a succession of coalitions of these specialists.<sup>ii</sup>

Unity of consciousness is an illusion, albeit a powerful one. Consciousness, for Dennett, is 'gappy and discontinuous', given stability only by an evolving 'Centre of Narrative Gravity', which allows our mental activity to coalesce around certain patterns and thus produce a coherent and continuous sense of self. Rather than having any originary status, the self is something continuously enacted through perception and experience. Dennett quotes David Hume:

For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other of heat and cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe anything but the perception.<sup>iii</sup>

But while for Hume, writing in 1739, this incapacity to separate self from perception might have been a frustration, for Dennett it is simply an accurate reflection of the self's inchoate, endlessly evolving nature. The sensation of consciousness – the 'what it is like' to be a sentient human – is a kind of by-product of the processes of perception, a fiction we construct to lend coherence and continuity to our life experience. Consciousness is the result of mental activity rather than the originator of it.<sup>iv</sup>

# 4

## Inside and Outside

But what is shared by almost all accounts of consciousness – those as poetic as Hume’s and those as rigorous, radical and scientifically grounded as Dennett’s – is the use of terms of interiority and exteriority in order to make explanations understood. Whether or not the idea of the self as being something ‘in here’, receiving signals from ‘out there’ is another intuited illusion waiting to be debunked by Dennett, it seems to be so engrained in our own language and our means of understanding that it is impossible to operate outside it. Descriptions of self seem inevitably to require a language of spatial definition. Ciaran Bensons’ recent book *The Cultural Psychology of Self* suggest that a process of spatial orientation and differentiation is in fact central to the very creation of the self. We begin to know who we are through our understanding of where we are. But as Benson acknowledges, it is difficult to infer a simple causality in what is more like a reciprocal process, or feedback loop. The self may not initially be spatial, but once we use spatial terms to understand it, those become the terms by which we chart its development. Metaphor enters in from the outset, and governs all subsequent understanding. As Georg Lakoff and Mark Johnson explain:

In all aspects of life... we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments and execute plans all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor.<sup>vi</sup>

The metaphors of inside and outside and all their correlates are so deeply embedded as to be both inescapable and endlessly useful to our understanding of conscious experience – our own, and others. Here, for instance, is Helen Mirren explaining recently how she prepared to play Queen Elizabeth II:

As she was speaking about the role, she suddenly stopped and held her hands up in front of her face. “I went like this before I did a take,” she said, pulling her palms slowly toward the back of her head, then suddenly swiveling her wrists and thrusting her hands forward, like beams of light, beside her eyes. “She’s way back inside herself,” she explained. “Her personality, her intelligence, everything is way back. Then she’s steadily looking out, as if through a porthole, with this incredibly nonjudgmental, confident gaze.”<sup>vii</sup>

And the moment we begin to interact with our surroundings, further complexities become overlaid upon our sense of the self’s location. Imagine driving in a car, one’s attention effortlessly divided between the familiar route ahead seen through the windscreen, the rear-view mirror, the radio, a conversation with a companion, between memories of the day before and plans for the day to come. In this everyday situation, how might the location and limits of the self – as experienced – be defined? Through interaction with the car, the self seems to be amplified - extended in space and time – but also fragmented. It seems difficult completely to disentangle the characteristics of the moving car from the qualities of the conscious experience it engenders. Self and surroundings are closely bound together. But even at those moments when, by contrast, we feel a sharp division between our own internal state and everything external to us, we tend nonetheless to rely on concepts of inside and outside to define our position.

## Qualia

It is at this meeting point between internal and external worlds that the English psychologist Nicholas Humphrey, has positioned his most recent exploration of consciousness. In his brief, eloquent book *Seeing Red*, Humphrey's main focus is on the problem of 'qualia'.<sup>viii</sup> 'Qualia' may be described as the properties of sensory experiences. In efforts to isolate the particularities of conscious experience, researchers of consciousness often focus on how particular sensations – the feeling of pain, the perception of the colour red – occur in the brain. Unsurprisingly, there is a wide divergence of views on the nature of qualia, with some, including Dennett, questioning whether they can be said to have any independent existence at all.<sup>ix</sup>

In his discussion of qualia Humphrey draws a fundamental distinction between perception and sensation. The two are almost independent, and can sometimes operate without each other. But usually, sensation can be seen as the registration of perception – the means by which we become aware of having perceived (of the physical process of light striking the optical nerve, for instance.) For Humphrey, sensation is essentially the evolved version of a feedback loop. It is what creates the self by generating an awareness of experience alongside the immediacy of experience itself.

Humphrey expands the argument in evolutionary terms, explaining that, as the processing of perception begins to happen at a remove from the site of its generation (ie as central brains begin to evolve in organisms), there is a concomitant development away from immediate, responsive action towards reflexive perception. A gap opens between action and reaction. It is in this gap that sensation, and hence self-awareness, emerges. Where once there was only the bare capacity to react to external stimuli, there is now an added ability to be aware of and control that action. Sensation, in other words, is reaction reacted to. But even as emerging consciousness – in the form of sensory activity - internalises and privatises reactions, its essential characteristic as something active and responsive remains. Humphrey sees sensation as always active rather than passive. He 'puts sensation within the sphere of agency, on the production side of the mind rather than the reception side.'<sup>x</sup>

In evolutionary terms, the capacity of humans to receive a continuously updated report on our own condition confers clear advantages. Consciousness may be an illusion – a by-product of the perceptual process – but for Humphrey it is a 'deliberate trick' rather than 'an honest error', a trick which, because it allows us to survive and flourish, becomes increasingly part of our genetic make-up.<sup>xi</sup>

Central to Humphrey's explanation is the idea that consciousness evolves from the outside in rather than, as might more usually be thought, from the inside outwards. As reactions to external stimuli evolve into internal states of reflection, consciousness perpetuates the feeling of there being a slight distance between the organism and what happens to it. Thus, even when we are examining our own actions and mental activity, we replicate the manner in which we examine the world beyond.<sup>xii</sup> In support of this argument, Humphrey details recent research by V.S Ramachandran and others on the prevalence of so-called 'mirror neurons' in the brain. These are '*neurons that link the observation of someone else having a sensation to the execution of a similar sensation oneself*'.<sup>xiii</sup> For Humphrey, these mirror neurons are evidence of the outward-directed nature of consciousness. If the human brain has produced consciousness as a kind of hyper-evolved version of our reactions to other organisms and environments,

it is hardly surprising that it should retain a pronounced capacity for what Humphrey chooses to define as 'empathy'. He quotes Nietzsche on the subject:

To understand another person, that is to imitate his feelings in ourselves, we [...] produce the feeling in ourselves by imitating with our own body the expression of his eyes, his voice, his walk, his bearing. Then a similar feeling arises in us in consequence of an ancient association between movement and sensation. We have brought our skill in understanding the feelings of others to a high state of perfection and in the presence of another person we are always almost involuntarily practicing this skill.<sup>xiv</sup>

### Empathy

Discussions of empathy - in German *Einfühlung* – were in fact prevalent in the German intellectual culture of the late nineteenth century in which Nietzsche was writing. But the term was primarily used not to examine consciousness itself, or the relations between people, but rather to understand the aesthetic experience of works of art and architecture. As Mitchell Schwarzer explains: 'In empathy theory, the source of pleasure resides neither in the object nor in the subject, but in the relationship of the consolidating perception between object and subject.'<sup>xv</sup> Following on from Immanuel Kant's philosophical treatment of form and space, writers like Theodor Lipps, August Schmarzow and Heinrich Wölfflin sought to concentrate their discussions of works of art on the detailed analysis of how they were perceived by the human subject. Partly, this was in an effort to counter explanations of aesthetics based on their inherent content and narrative, and partly it was in response to the emerging field of psychology, pioneered by figures such as Johann Friedrich Herbart. Building on Kant's separation of perception and cognition, Herbart 'argued that the human mind is a simple and unchanging entity at birth which, when stimulated by the world, responds with ideas [which] compose the statics and dynamics of mental life.'<sup>xvi</sup> In empathy theory, the ideas constantly forming and reforming in this active mind are explained as attempts to conceptualise the perceived world in the human image. As Heinrich Wölfflin saw it:

Forms become meaningful to us only because we recognize in them the expression of a sentient soul. Instinctively we animate each object... We read our own image into all phenomena. We expect everything to possess what we know to be the conditions of our own well-being. Not that we expect to find the appearance of a human being in the forms of inorganic nature: we interpret the physical world through the categories that we share with it. We also define the expressive capability of these other forms accordingly. *They can communicate to us only what we ourselves use their qualities to express.*<sup>xvii</sup>

As the pre-eminent art historian of his era, Wölfflin's theories were highly influential. Similar ideas were specifically related to architecture in Geoffrey Scott's *The Architecture of Humanism* on 1914, in which he proposed that 'the true basis of critical appreciation' is the simple idea that 'we have looked at the building and identified ourselves with its apparent state. We have transcribed ourselves into terms of architecture.' and that, equally, 'the whole of architecture is, in fact, unconsciously invested by us with human movement and human moods... *We transcribe architecture into terms of ourselves.*'<sup>xviii</sup>

In recent years, the work of Scott and his nineteenth-century forebears, along with the phenomenological writings of Maurice Merleau-Ponty and Edmund Husserl, have been invoked by numerous architects and theorists in the name of rescuing architecture's previously neglected sensorial dimension. But while this work is undoubtedly timely and valuable, there has been nothing like the same interest in probing the precise psychological dimensions of our encounters with architecture. Nowadays, buildings are much more often seen as bodies than as minds, our interaction with them more sensual than psychological. And yet, this is obviously not a separation that either empathy theory, with its foundation in psychology, nor phenomenology, with its close attention to mental states, would have envisaged. Nor is it a separation that has any basis in the mind itself, in which sensory information, intuitive feelings and intellection remain tightly bound together in what Nicholas Humphrey calls the 'thick moment' of consciousness.<sup>xix</sup>

### **The Encounter**

In this 'thick moment', the seamless continuity between perception and sensation extends also to include the external phenomena – objects, people, settings – which stimulated them. All are incorporated in what Humphrey terms 'the extended present'.<sup>xx</sup> This kind of complex continuity between internal self and external environment has perhaps been most fully and repeatedly explored in literature, with its unique capacity to describe both psychological states and physical settings. In the nineteenth century, novels by authors as diverse as Charles Dickens and Henry James could suggest richly reciprocal relationships between their protagonists' consciousness and the spaces they inhabited. At the beginning of Charlotte Brontë's *Jane Eyre*, for instance, we find Jane 'shrined in double retirement' in the breakfast room's window-seat. Physically, she is sequestered at the very edges of the house. She gazes out at the 'forlorn regions of dreary space', but in her mind, she is even further removed, absorbed in the 'death-white realms' conjured up in the book she is reading.<sup>xxi</sup>

This single, simple setting is enough to establish Jane's character and predicament: her capacity for self-absorption and imaginative projection; her preferred role as silent observer; her fear of discovery; her desire for escape. But the passage also reveals the capacity of as ubiquitous an architectural component as the window to engender complex conscious experience. Despite this, it remains rare to find in modern writing on architecture equivalently concentrated attention being paid to the encounter of people with their built surroundings.<sup>xxii</sup> Among the honourable, and perhaps surprising, exceptions is Colin Rowe's famous review of Le Corbusier's La Tourette monastery, written for the *Architectural Review* in 1961.<sup>xxiii</sup>

In contrast to the formal analysis and historicism of much of his work, Rowe begins this essay with a lengthy description of the initial approach of the visitor to the monastery. In these passages the intense focus on the building's psychological and physical effects is accompanied by an insistent ascription of human characteristics and motives to the building itself:

But if... the building first insists on rapid approach, as he climbs the hill or moves along the alley within the trees, the visitor is likely to discover that, somehow, this gesture of invitation has vanished and that, the closer he approaches it, the more unsympathetic the building seems to come toward his possible arrival.<sup>xiv</sup>

Patiently, Rowe elucidates the manner in which Le Corbusier takes the seemingly straightforward business of seeing a building, waking up to it, and going in, and remakes it as a disconcerting drama.:

But the visitor is so placed that he is without the means of making coherent his own experience. He is made the subject of diametric excitations; his consciousness is divided; and, being both deprived of and also offered an architectural support, in order to resolve his predicament, he is anxious, indeed obliged – and without choice – to enter the building.<sup>xvi</sup>

In this passage, the build up of qualifying clauses, all bespeaking uncertainty and doubt, and the manner in which they are undercut by the simple final phrase seems intended to echo the formal strategies of the building itself, its numerous geometric refinements (a sloping wall, a slightly slanted roofline) having, in the end, a clear, visceral outcome. Rowe's method, in other words, is always in sympathy with the building and with its author's creative process. Le Corbusier, he writes, 'is one of the few architects who have [sic] suppressed the demands of neither sensation nor thought. Between thought and sensation he has always maintained a balance; and therefore – and almost with him alone – while the intellect civilizes the sensible, the sensible actualizes civility.'<sup>xvii</sup>

It is an insight which can be confirmed by a visit to almost any work by Le Corbusier – from the Villa Savoye to the cabanon - where ideas are embodied with disconcerting, and at times primitive, simplicity. Just as Jane Eyre's sojourn in the window-seat could encompass her whole world-view, so too can a rich conceptual framework about the life of the mind and spirit be absorbed from the rough walls and crudely framed openings of La Tourette's cells. The architecture connects simultaneously to understanding and feeling. The balance between sensation and thought discerned by Rowe exists because those two are seen not as following one from the other, but as coterminous.

### **Consciousness and Architecture**

Towards the end of *Seeing Red*, Nicholas Humphrey, quotes a paper by Thomas Clark in which he describes how 'the sorts of higher level cognitive processes which are found to correlate with consciousness inevitably generate a self/world model containing the strong intuition that the self and its experience cannot simply be the body, cannot just be a bit of the world suitably organized.'<sup>xxvii</sup> This is what is often described as 'the hard problem' of consciousness: the feeling that, no matter how much one can explain the material processes of brain function, there is something about the quality of conscious experience which just cannot be explained in purely material terms.<sup>xxviii</sup> While there seems to be little common ground between materialists like Dennett and Humphrey, who see consciousness as the evolved, emergent result of mental activity, and the so-called dualists or 'mysterians' like David Chalmers, who - harking back to Descartes - see consciousness as something fundamentally separate from the body, what they do share is an understanding that consciousness certainly goes above and beyond mere functionalism.

When the theorists of empathy look at works of art and architecture, when Colin Rowe looks at La Tourette, they too are convinced that what they are examining 'cannot just be a bit of the world suitably organized'. They too are trying to determine what qualities

these artifacts have that lift them above the mundane. And what they end up doing is ascribing to art and architecture the qualities which make us human – the proportions of our bodies, our capacity for movement, and above all, our ability to sense, think and understand: our selves.

Given these parallels, is it possible that architecture, rather than being merely the product of human consciousness, could be in some way its equivalent? Certainly, one can argue that architecture has the capacity to go beyond functionalism, imbuing the bits of the world it organises with conceptual, sensory and symbolic order. Architecture brings to built fabric an added, palpable coherence, something akin to the 'Centre of Narrative Gravity' which consciousness weaves from sensory data. At a very fundamental level, our built surroundings are testament to what Wölfflin termed 'the profoundly human experience of giving form to the unformed', an experience that is the very essence of consciousness itself.<sup>xxix</sup> And if architecture may be explained in terms of consciousness, so too can consciousness be seen in terms of architecture. As has already been seen, discussions of the mind make constant use of constructional and spatial metaphors, the same metaphors which suffuse our own daily descriptions of our internal experiences and feelings. But the comparison amounts to more than mere analogy: it attests to a more thoroughgoing mingling of self and surroundings. There is always something of *where* we are in *who* and *how* we are. The relationship is often vague and inchoate, but architecture, at its most potent, can bring it momentarily into sharp focus. At such moments, consciousness finds in architecture its own distinct echo.

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i. Antonio Damasio, *The Feeling of What Happens, body, emotion and the making of consciousness*, London: Vintage, 2000 'Consciousness begins when brains acquire the power, the simple power I must add, of telling a story without words, the story that there is a life ticking away in an organism, and that the states of the living organism, within body bounds, are continuously being altered by encounters with objects or events in its environment, or, for that matter, by thoughts and by internal adjustments of the life process.' p.30 ii. Daniel Dennett, *Consciousness Explained*, London: Penguin, 1993, p.253-4 Dennett continues: 'The basic specialists are part of our animal heritage. They were not developed to perform peculiarly human actions, such as reading and writing, but ducking, predator-avoiding, face-recognizing, grasping, throwing, berry-picking, and other essential tasks. They are often opportunistically enlisted in new roles, for which their native talents more or less suit them. The result is not bedlam only because the trends that are imposed on all this activity are themselves the product of design. Some of this design is innate, and is shared with other animals. But it is augmented, and sometimes even overwhelmed in importance, by micro-habits of thought that are developed in the individual, partly idiosyncratic results of self-exploration and partly pre-designed gifts of culture. Thousands of memes, mostly borne by language, but also by wordless 'images' and other data structures, take up residence in an individual brain, shaping its tendencies and thereby turning it into a mind.' iii. David Hume, *Treatise on Human Nature*, 1739, quoted in Dennett, op.cit, p412 iv. Although Dennett only mentions them fleetingly and disparagingly, there are intriguing parallels between his description of consciousness as a resultant rather than a point of origin and many of the central ideas of post-structuralist thought. Dennett's dismantling of the 'Central Meander' is akin to Barthes' 'Death of the Author', and his notion of the self as an evolving, unstable construct echoes Derrida's deconstructions of the supposed stability of textual meaning. v. Ciaran Benson, *The Cultural Psychology of Self: Place, Morality and Art in Human Worlds*, London: Routledge, 2001 vi. Georg Lakoff and Mark Johnson, *Metaphors We Live By*, Chicago: University of Chicago Press, 2003, [first published 1980] p.158 vii. John Lahr, *Command Performance, the reign of Helen Mirren*, New Yorker, October 2nd, 2006 [http://www.newyorker.com/fact/content/articles/061002fa\\_fact1](http://www.newyorker.com/fact/content/articles/061002fa_fact1) viii. Nicholas Humphrey, *Seeing Red, a study in consciousness*, Cambridge Mass: The Belknap Press of Harvard University Press, 2006 ix. See for instance the lengthy entry on qualia at <http://en.wikipedia.org/wiki/Qualia> x. Humphrey, *ibid.* p.101 xi. *ibid.* p.127 xii. This is particularly noticeable in young children of 4 and 5, who, although speaking in the first person, often report on their own feelings and desires in a surprisingly objective, distanced manner. Some would argue that it is precisely the use of language that produces this 'distancing' effect – that remakes the child as the 'first person singular'. xiii. p.106 xiv. Frederich Nietzsche, *Daybreak*, in *The Nietzsche Reader*, ed and trans R. J. Hollingdale 1881, Harmondsworth: Penguin, 1977, p156, quoted in Humphrey p104 xv. Mitchell Schwarzer, *The Emergence of Architectural Space: August Schmarzow's Theory of Raumgestaltung [spatial forming]*, *Assemblage* 15, August 1991 xvi. Introduction, Harry Francis Mallgrave and Eleftherios Ikononou eds, *Empathy, Form and Space, Problems in German Aesthetics, 1873-1983*, Santa Monica: Getty Center Publications, 1994, p11 xvii. Heinrich Wölfflin, *Prolegomena to a Psychology of Architecture*, translated and published in Harry Francis Mallgrave and Eleftherios Ikononou eds, op.cit., pp149-192, p152 [italics in the original] Geoffrey Scott, *The Architecture of Humanism – a study in the history of taste*, London: Methuen, 1961, [first published 1914] Chapter viii, *Humanist Values*, p.81. [italics are in the original.] xviii. Arguing for the importance of bodily feeling and proprioception to mental processes – as authors like Antonio Damasio have done in recent years – is not to diminish the importance of conscious 'abstract' thought. See for instance, Antonio Damasio, *Descartes' Error: Emotion, Reason and the Human Brain*, London: Papermac, 1996 or Georg Lakoff and Mark Johnson, *Philosophy in the Flesh: the embodied mind and its challenge to western thought*, New York: Basic Books, 1999 xx. This is a notion not unlike Henri Bergson's concept of *durée*, or 'duration'. xxi. Charlotte Bronte, *Jane Eyre*, London, Penguin 1985, first published 1847, pp.39-40 xxii. In fact the window is one of the few elements of architecture to have been the subject of detailed scrutiny in this vein. See the essays in *Daidalos* No. 13 by Bruno Reichlin and Kyra Stromberg among others. xxiv. Colin Rowe, *La Tourette*, published in Colin Rowe, *The Mathematics of the Ideal Villa and other essays*, Cambridge Mass.: MIT Press, 1982, pp.185-204 xxv. *ibid.* p.188 xxvi. *ibid.* p.188 xxvii. *ibid.* p.196. Rowe continues: 'and thus, with Le Corbusier, the conceptual argument never really provides a sufficient pretext but has always to be reinterpreted in terms of perceptual compulsions.' xxviii Thomas W. Clark, 'Function and Phenomenology: Closing the Explanatory Gap', *Journal of Consciousness Studies* 2, 1995, pp. 241-254, 254 quoted in Humphrey, op.cit., p.12 xxiv Many of the leading figures in the debate contribute to Jonathan Shear ed., *Explaining Consciousness – The 'Hard Problem'*, Cambridge: MIT Press, 1997 xxix Wölfflin, op.cit., p161

# 5

## Registration of Perception

LAURA MCGOVERN

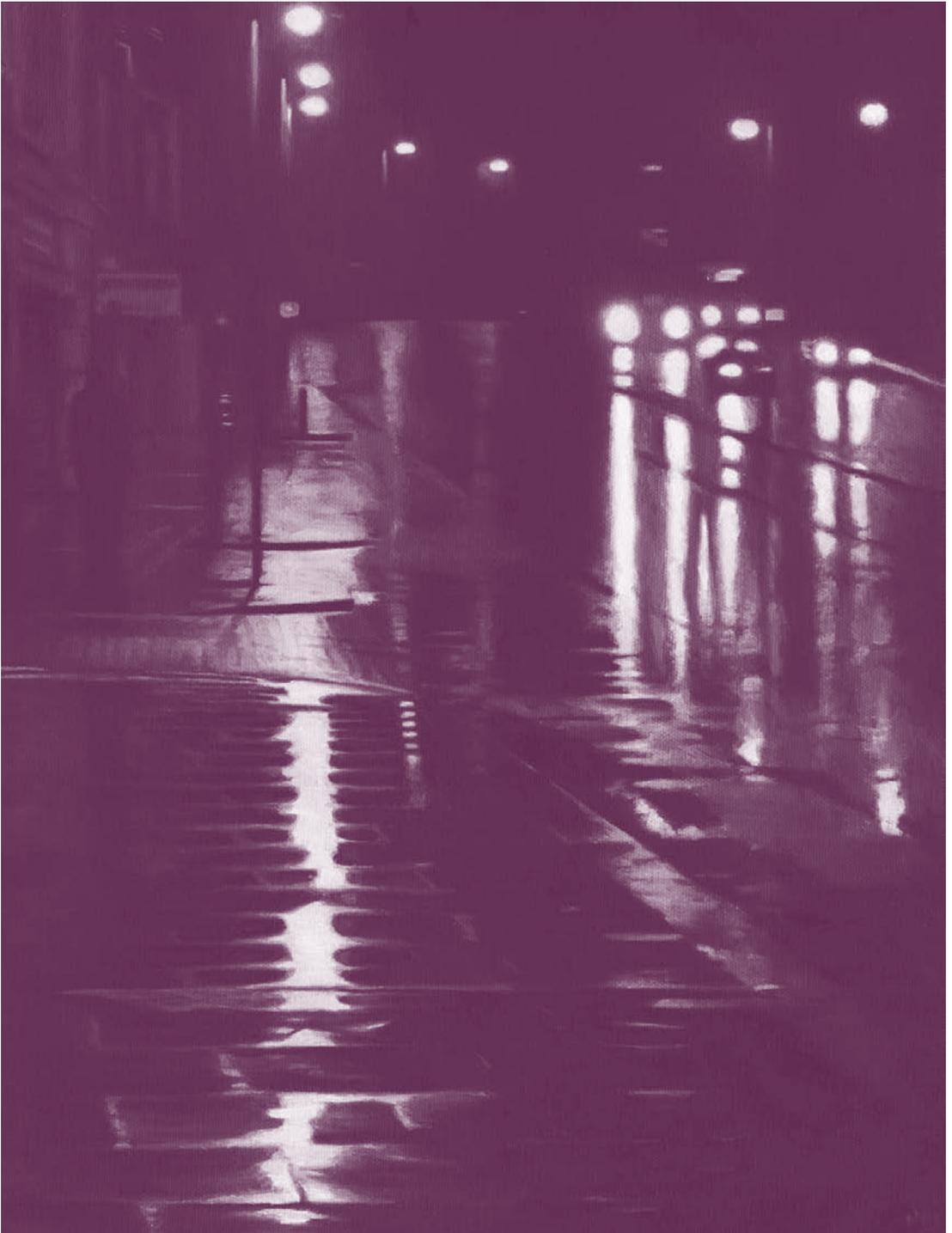


Laura McGovern recently graduated from a BA in Photography in DIT. She has often used literature as a basis for her images and has developed this approach over a number of works. She works freelance in Dublin. The image Registration and Perception was created in response to Hugh Campbell's text *In Here and Out There*.

# 6

## The surface isn't where it should be

FRANCIS MATTHEWS



# 6

A few years ago I visited an exhibition of Vermeer and his contemporaries at the National Gallery of Ireland. Following the course of the exhibition I looked first at Vermeer's contemporaries paintings and tried to appreciate them by examining their attention to detail; there wasn't much else I could focus on. When I reached the collection of Vermeer I nearly laughed out loud, they lacked any of the detail the others had. In fact, they seemed pretty bad when examined in the same way in which I was viewing the others. This made me look at them in a different way. One of the things I noticed on this further examination was that parts of the painting were broken down into gradations of colour, in such a way that if a small section was cropped it would have very few recognisable features and become abstracted from the subject.

When I left the exhibition I started to notice things under certain lights and at certain distances breaking down (colourwise) in a similar way to how

Vermeer had painted. It made me think of painting as a means of sharing a visual experience.

In my own experience of painting in the last few years there are a few things I noticed in terms of perception and space. Things that I think could enter into the field of design. I paint from photographs I take of places that interest me, which usually involves either a light condition which I haven't seen or painted before or, a space/(objects within a space) revealing/(coinciding) to form a composition. When I paint I remove myself from recognising the objects and instead try to paint areas of colour that are blended together to varying degrees. It is a process of continual adjustment; getting closer and closer to the extracted subject(colour). This removal can allow one to think of the canvas as not simply the objects that are painted but rather how they have been perceived through the lens of the camera. The image becomes a representation of the mannerisms of perception.



The image also reveals visual ambiguities which are usually not observed because everything is in motion, so objects align only very briefly and because light is fluxing. An example of this would be the ability of a light source to dissolve or envelope something that has a more solid presence in reality. The halation overpowers and covers the objects in the path from source to lens - so brightness can fleetingly become a solid thing. A similar phenomenon occurs when objects become blurred or out of focus. Every point expands and bleeds, mixing with its adjacent circle of confusion. The brighter the light the more dominant it is in this relationship.

Both these aspects of sources of light or brightness can alter the perception of a place.

When light is lacking and darkness emerges, things become non-visible. But when I paint darkness, I use a pigment, giving a presence to something that in reality has no presence. Blackness/darkness can become a solid thing instead of a place where the unknown resides.

Further, when light recedes (or when a background light is too bright and our pupils contract to lower the amount of light entering into our eyes) objects in fore or middle ground that are of a lower light intensity than the background become silhouetted, this can homogenise (in reality separate) objects. Things silhouette together, unified in black.

When a wet night is flattened into an image it lends to a multiplicity of readings of the space. The newfound reflectance can change texture and can change its interpretation spatially. The surface isn't where it should be. In some cases parts of the surface are readable and other parts have become reflective. It can abstract part of an image. The surface slips from one reading to another.

Again, these things are not very noticeable/powerful in everydayness, but an awareness of perceptual particularities could allow for greater ludic potential in the design process as well as a more observationally based design.

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Francis Matthews is a Dublin based painter who graduated from architecture in UCD in 2005.

## The Realisation of a Modernist maverick

CHANTELLE NIBLOCK

I, like Kiesler, find expressing my thoughts and ideas in design (as in life) not always a rational procedure; it is sometimes difficult for me to find the right words (or tools) for the job. As a graduate architecture student I observed the critical influence different tools for representation had on the design outcome. This was heightened whenever I had difficulty expressing ideas simply because I could not draw them; often these ideas eventually succumbed to the linear/ language associated with Modernist architecture (and ingrained by my design education). Frederick Kiesler's unorthodox approach to architectural design evoked a personal interest; I set out on an unknown journey to revisit his work, optimising the digital design tools available to me at the time.

The journey that I embarked upon specifically questioned the influence of digital design tools such as Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) on designerly thinking during problem solving. I began with an unrealised design by Kiesler from the 1950's entitled 'Endless House'. This design, developed through Correalism,<sup>i</sup> and representing a module for modern living, provided a vehicle for my empirical examination. Similarities existed between Kiesler and myself with regard to the difficulties we both had in describing the biomorphic style he envisaged. Kiesler had been unable to transmit his proposed design to scale due to the limitations of the design tools of his era. My subsequent research emphasised design transmittance during the expression of idea to object, types of representation (proved to influence the conception of the design), and new techniques dealing with complex forms.

Architects take for granted their cognitive abilities through verbal and non-verbal debate during the process of design reasoning; artefacts such as sketches, drawings, models and even textual references represent ideas both to themselves and to others. In today's pervasive computing design studios it is expected that an architect be able to interact within dynamic systems of communication including multi-faceted computing skills. Designers are therefore forced to manage design conversations held in both the digital (computer) and physical (model making) realm. This could

be said to be the act of *plural conversations* where the designer has the ability to experience more than one design dialogue concurrently using different tools of representation. The very nature of design could be termed *ill-structured* problem solving, implying that the design process cannot be prescribed. Instead more strategic methods can be employed to enhance the critical process of design reasoning (designerly cognition).

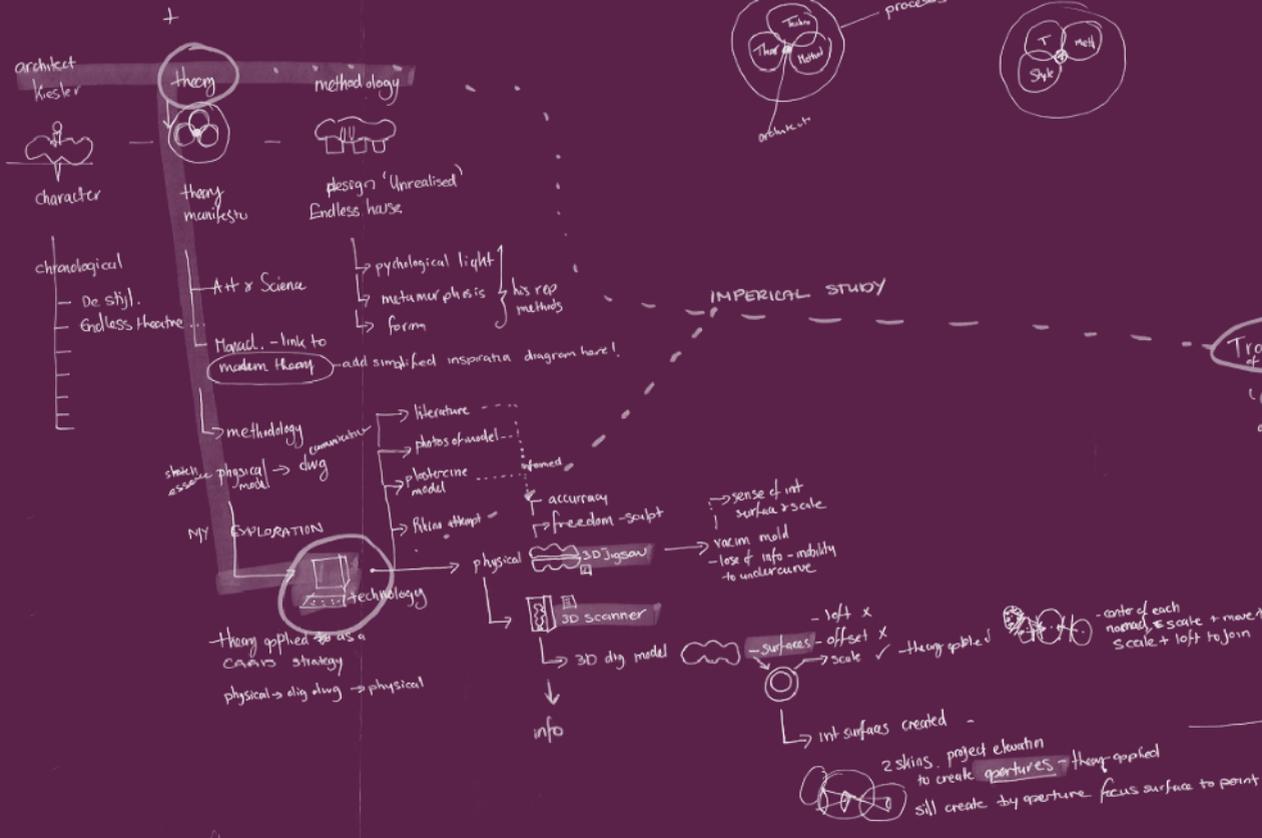
Strategic methods aim to structure design in planning, analysis, evaluation, decision and control. They potentially maximize management of complex designs and plural conversations and may enhance creative thinking. Examining such systems of transmittance from conceived idea to materialised object can reveal attributes of designerly cognition (the process of acquiring and reasoning of design knowledge) and help provide insight into how designers think.

Kiesler's Manifesto of 'Correalism' (written in 1947) can be defined as a single cell within which man is seen as the central instigator of forces managing monads (individual cells or entities) held in a continuous tension by forces linking them. His Manifesto provides us with insight into how Kiesler theorised design and his view on design tools relative to the architect. Within Correalism, Technology is described as a mediator to Environmental and Psychological needs and the architect is instigator of these design variables. Kiesler's multi-disciplinary design approach and unique theories of "Correalism" are instrumental in revealing key data from his original sources of representation.

oh lucky turtle  
 you are the very dream image and reality  
 of independence  
 resting securely in the palm of your shells,  
 just being a summary of split seconds lived  
 continuously,...<sup>ii</sup>

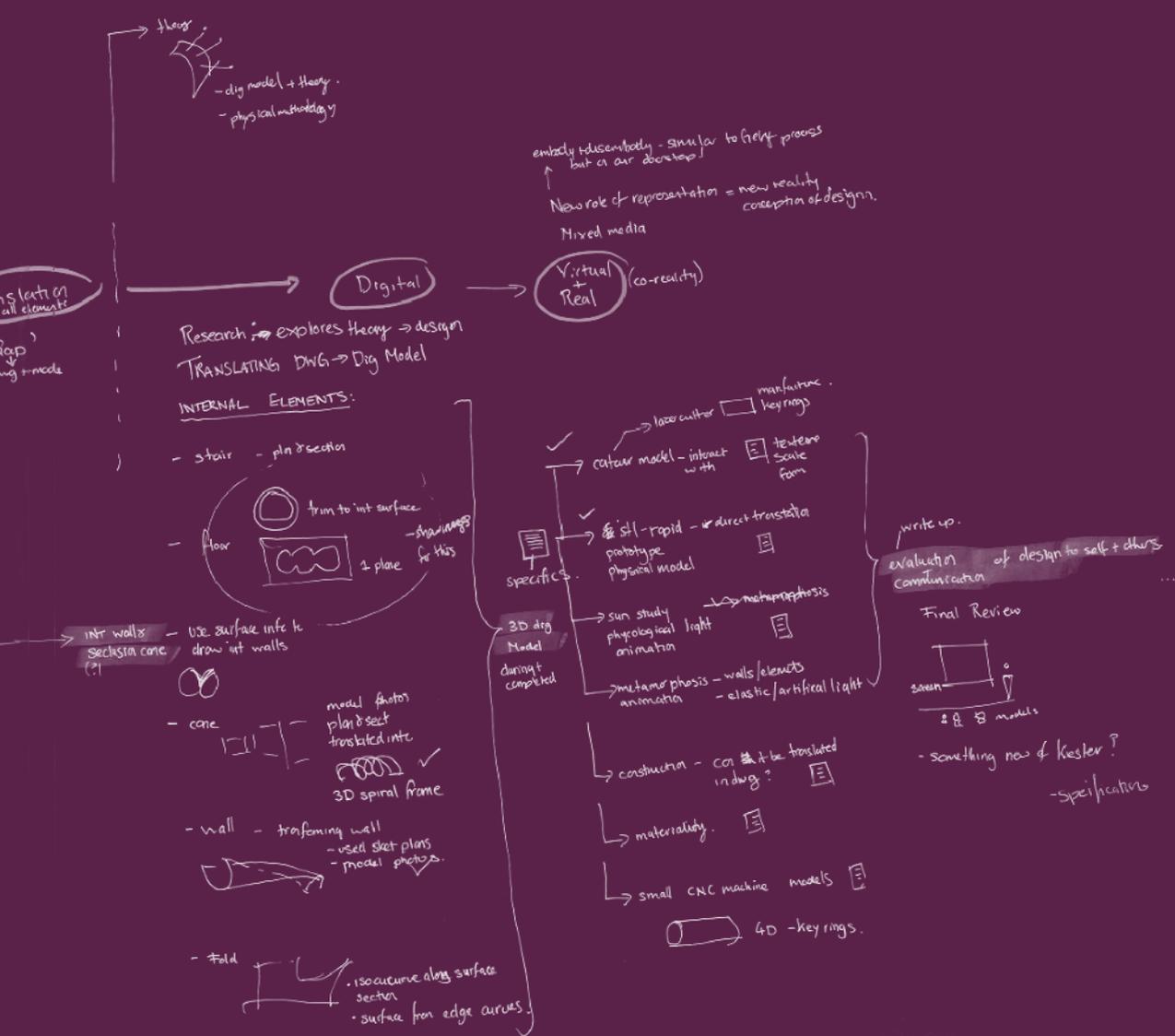
Kiesler explored alternative modes of spatial representation from 1:1 scale modelling to poetry to painting in the Surrealist style. My research attempted to respect Kiesler's unique approach to representation through the use of various media and

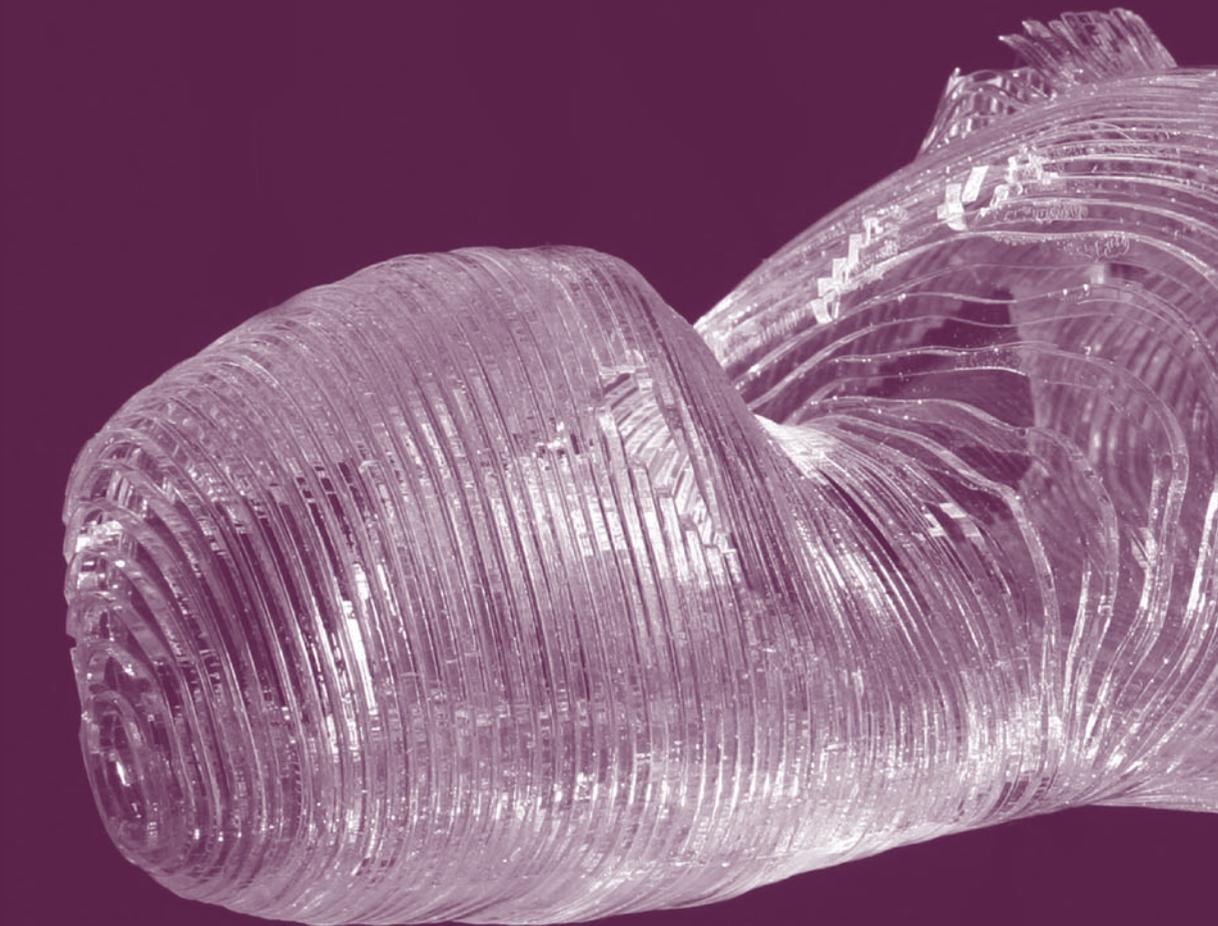
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by developing contemporary techniques through the application of digital design tools such as Rhino software, Rapid Prototyping (a manufacturing method, similar to printing a drawing but in three-dimensions using a plastic material) and Laser Cutting.

The sketch diagram illustrated indicates the sequence of activities during my empirical case study; it begins with an interpretation of Kiesler's original models and drawings and concludes with the production of a prototype physical model. This diagram highlights networks of investigation within a dynamic process; it acts as a visual stimulus and record of different areas of analysis, evaluation and modes of communication.

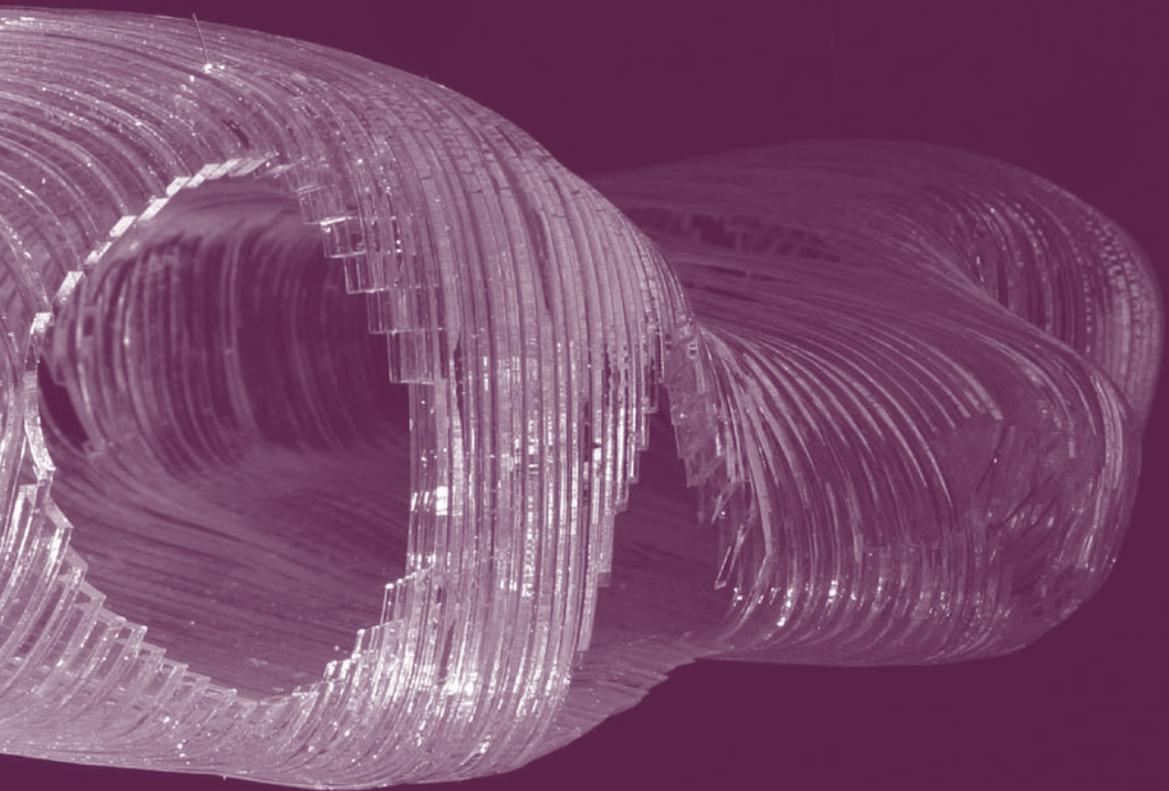
#### **Physical Model to Digital Drawing - reversed process**

My initial line of inquiry developed a method to support transmittance of data from physical to digital three-dimensional [3D] modelling. A 3D-Jigsaw (derived from key information found in

Kiesler's original drawings and model photographs), foam filled and surface articulated, was used to create a physical model. This was then digitally scanned to provide digital data representing the external surface geometry of the Endless House design. The 3D digital scanner, commonly used in Product Design, allows the architect access to sculptural techniques to develop organic forms - which the computer can later interpret as complex geometric data. This method placed value on a three-dimensional conception of form, bodily participation and ease of transmittance into the digital realm. I therefore experienced a kinaesthetic embodiment of design perception where I could bodily participate with the design in a physical and digital realm. This process compliments the role of sketching by integrating three-dimensional aspects at an early stage in the design process.

#### **Plural explorations in CAD**

The digital geometry obtained from the scanned physical model was used to generate further internal surface geometries. In this case Kiesler's theory of Correalism could be seen as



a metaphor for the form of the Endless House. Modelling in Rhino required it to be spatially defined as a cosmos of relating monads (a group of independent cells) correlating to one central point – the fireplace. Using this software, each volume was separately scaled, moved and blended to create a continuous internal surface geometry between cross section curves. This technique developed ideas on Correalism, structure, mathematical theories; it illustrated the importance of applying unique strategic methods to design software within un-prescribable processes. Hence, attempting to understand Kiesler's manifesto helped develop a strategy that could be applied to CAD during the examination.

This further emphasised the fact that automated computing skills alone are insufficient – they require strategic application within a design process. This technique revealed ideas and architectural gestures initially overlooked in original artefacts. It also aided exploration of sun studies, complex geometries, structure, virtual

embodiment and materiality. Plural explorations in CAD provided the opportunity to cross reference design information from different digital studies. For example, modelling in Rhino was used to test complex self-supporting internal walls, the daylight effect (radiosity) onto curved multi-directional surfaces and also to examine the spatial relationship between occupants and enclosure using animation techniques.

In his writings Kiesler envisaged an electric eye where future buildings could read human presence and respond to their psychological needs through the manipulation of physical entities such as walls and lighting. Using Bongo animation I explored a virtual design embodiment to describe the experience of space previously only represented in textual and drawing references. This supported a kinaesthetic perception of space through the simulation of motion, sound and vision – an experiential representational tool.

A computer monitor, used as an interface to design,

allows perception in multiple scales through zoom. Computing allows for both extremes of initial massing studies through to detail construction design. However, the digital realm's scaleless nature can be problematic. I realised that to counteract any potential negative characteristics in certain media it is necessary to shift between representations and critically evaluate their relevance and appropriateness as design tools during the process of transmittance.

### Computer Aided Manufacture (CAM)

Architectural theoretician Colin Rowe stated 'a medium has a way of constraining our choices; and its influence is probably just as marked in the reciprocity between a designer and a drawing in process as it is when the final rendering is given a more public and sober view'.<sup>iii</sup> In this case study multiple representations were explored to aid design cognition - reciprocity between designer and design. Consequently, digital media used to examine the Endless House bridged a gap between drawing and model using Rapid Prototyping technology [3D printing]. Additionally, a Laser Cutter provided another medium to transmit digital data into the physical realm. Here, sections of the digital 1:50 scale Rhino model produced profiles to use as templates that were later cut out of a Perspex sheet and glued into position, against one another.

Three-dimensional modelling in Rhino was instrumental to the direct translation from drawing to physical model; it allowed interaction in the closest form with the end product – its prototype. The translation process was not flawless and relied upon technical support. However with time and experience this process should become more user friendly.

Through an exploration of Kiesler's pre-digital, unrealised design my study specifically examined the influence of digital media and design tools on design conception. The representation of the experience of space – especially space represented by non-linear forms (and also through initially unseen architectural gestures not obvious in the original artefacts) was facilitated.

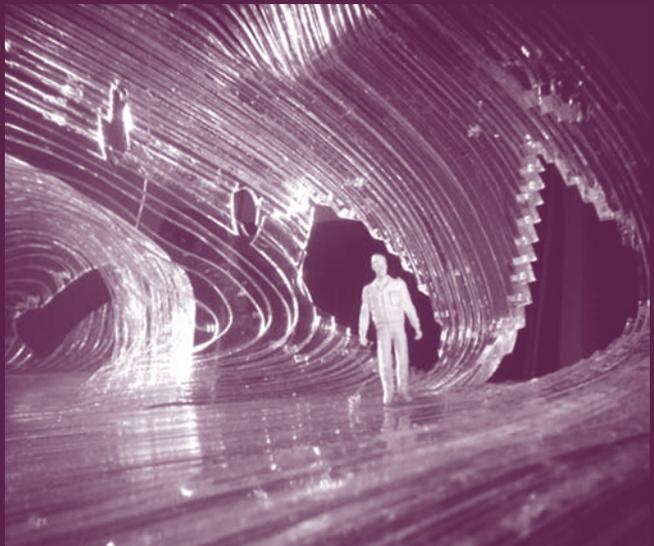
Interestingly a shift has occurred in the perception of design as it embraces plural design conversations held in both the digital and physical realm. Management of such complex processes is therefore crucial in applying a *critical practice*; allowing the designer not only to communicate ideas to themselves and to others but also to help structure transmittance from idea to object. Integration of computing into our architectural learning environments - design studios - will influence the ability of the next generation of architects to access a broader design language. Kiesler's intellectual dispositions were never under question; in fact this study further proved the complexity of his designs - despite his tool limitations. This study suggests that today's young, computer-literate designers have the potential to accelerate their cognitive abilities due to available technologies of design knowledge acquisition and modelling tools.

Will this make them better designers than the architects that precede them?

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Chantelle Niblock is currently researching the relationship between representation and design cognition at the Mackintosh School of Architecture, Glasgow School of Art.

i Frederick Kiesler defined the term *correalism* as expressing the dynamics of continual interaction between man and his natural and technological environments. See <http://www.kiesler.org/cms/index.php?lang=3&idcatside=74> ii The Happy Turtle, Frederick Kiesler. From Henriquez, G., *The Endless Phenomenal Space of Frederick Kiesler*, *The Fifth Column*, Vol 7, No.3, 1989, p.18. iii Rowe, C., *Design Thinking*, MIT Press, 1987, Page 99.



## The Same but Different...

ALYSON CUMMINS

Having come from an architectural background, and now studying stage design, I have so far found the fundamental elements of the two disciplines to be very similar. Both involve designing and dealing with spaces within which people interact, but which are also viewed from without. However, I have found that for every similarity I come across between the two there also lies a difference.

### Scale

Stage design, like architecture involves designing spaces for people. But stage design differs from architecture in the way in which it focuses in on one particular space/room/area, which goes to make up a much larger world where the narrative unfolds. This means dealing with this *cropped* space at a much larger scale. At a working level it feels like you have zoomed in on one small section of a particular world and are dealing more with the scale of a person. Theatre designers work in general on drawings and models at a scale of 1:25. This was a big shock after having gotten used to working more usually in the worlds of 1:100 and 1:50.

Having completed the design stage, theatre designers work to produce a finished model at 1:25, which is then given to the carpenters and scenic artists to build and create the set. Construction drawings are also produced alongside it, but the primary means of communication of the design to the director, the actors and theatre staff is done through this model, which has

every element on stage modelled and present in its correct position. Any paint or texturing effects are conveyed through the model, which the scenic artists will then use as a reference.

### Inhabited space

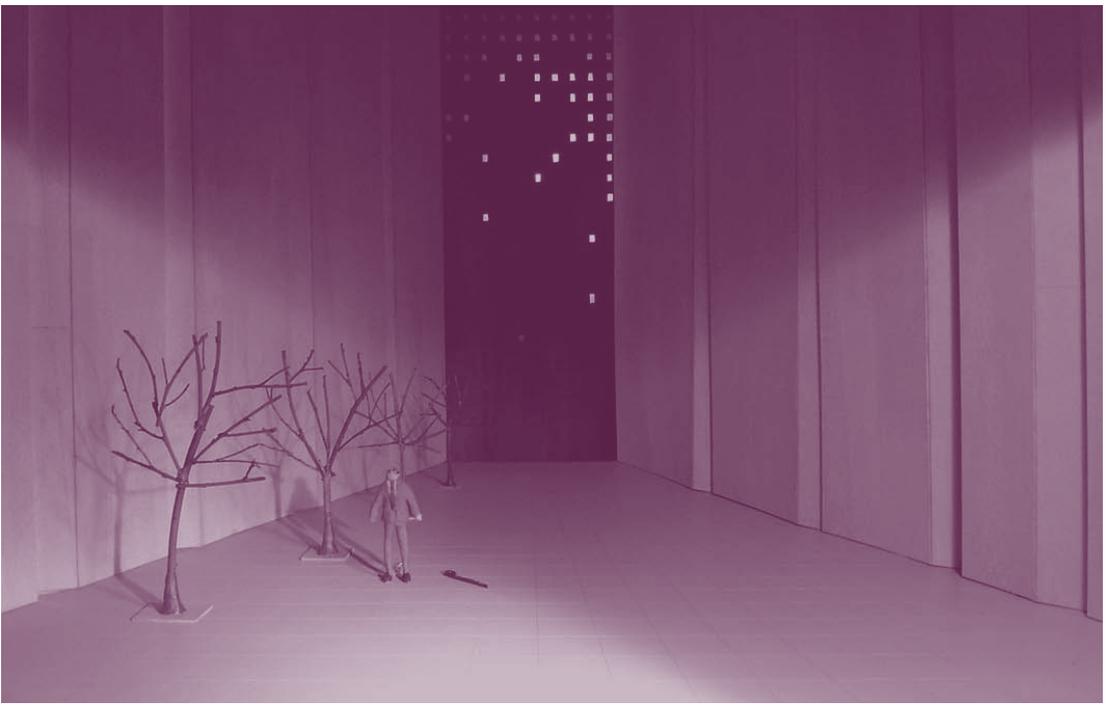
Another issue scale reveals is the notion of empty vs. “inhabited” space. I was thrown in to the deep end during our first project, which required a naturalistic setting of a drawing room of a Victorian house in an industrial town in the North of England in 1910. I had been used to visualising and drawing uncluttered buildings, spaces before people arrive and make their mark. It is a new challenge for me to design all of the ‘stuff’ and clutter of somebody’s life and to go on to model it and include it on a technical drawing. Working at this scale, it feels like the smallest elements take on a much greater significance. Modelling each piece forces a certain amount of thought for each mantelpiece ornament or picture on the wall. It is necessary to carefully consider every element on the stage and all of the parts that go to make up the design. In studying stage design I am trying to learn how to convey the history and lives of the people on stage without taking focus away from the text.

### Observed space

Stage design is primarily thought of as space which is observed rather than functional but this is where I feel it has another parallel with architecture. Many buildings are inaccessible to the public and remain, in a way,

passive observers of space in the same way a theatre audience would. The idea that each person in an audience brings their own visual associations and pre-conceptions to the design is one which has repeatedly come up in discussions about our work and is one which I think could equally be applied to architecture. For example in one of our crits for a Brecht piece, which was set in 1920s Germany, a student had featured a number of silver birch trees in his design. It came out in discussion that silver birch is very often associated with Russia and tends to be thought of as Chekhovian. While this may not necessarily be a problem, it is important to be aware of the implications and symbolism of each element you are using. Often designs can evoke images, ideas and associations of which you may be unaware and I have learned how important it is to be conscious of all aspects of the overall design.

A stage designer works with an entirely controllable environment. This level of control becomes most apparent with the issue of light. A set can be lit in any manner required in order to present the work in any particular way at any given moment. Obviously this same extent of control is not in the hands of the architect, who has the constant movement and elevation of the sun to consider. However I do think there may be an interesting parallel with architecture in terms of how new buildings and designs are presented in journals. Many aspects of the building,



including light, are manipulated and controlled in these images so that we see a space in a particular way, which may differ greatly from how it may actually appear in reality.

### Design tools

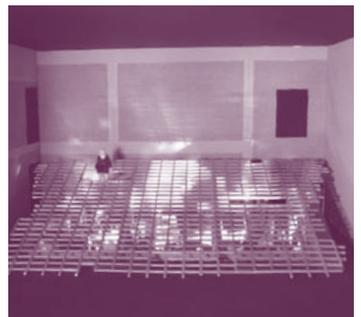
Something which has come up in discussions a lot is the use of computer technology in theatre design, both in the design process as well as in the design itself using video and projection work. In comparison to architecture I have found the use of computers to be slightly more limited in the world of theatre design. However, designers working with the grand opera houses of Europe often discuss the problems of building models at the required 1:25 scale (which often are unwieldy to transport, impractical in size and extremely expensive to produce). There is a movement now to begin using 3D modelling computer programmes, which would address the issues of expense and travel. While there is potential in developing this alternative approach, there also remains the very basic desire for a team of people to sit around with a physical model and experiment with the elements and the figures in the space.

### Time

Another factor shared by the two disciplines on a number of levels is time. Architecture has by its very nature a sense of permanence whereas stage design is transient and constantly changing. Sets may be built to disappear, move and adapt or have a mere life span of days. There is also the issue of trying to convey a period of time for a story that may be situated in the past, present or future or in another world entirely. The issue of dealing with a text/narrative as a starting point for a design is another fundamental difference (however not unlike a brief). It has been an aspect of great importance to begin to learn how to create a space that allows the play to develop and be told without taking away from the importance of the words.

The two disciplines of architecture and stage design feel so similar in so many ways and at the root of this similarity lies the idea of dealing with the body within space. This to me makes it feel that while the fundamental spatial issues are the same it is within these similarities that their differences lay.

**Alyson Cummins** received her B.Arch from UCD in 2004. She recently completed the Motley Theatre Design Course in London and is currently a finalist in the Linbury Biennial Prize for Stage Design.



## Working Materials: or, architecture shows what materials do

DAVID LEATHERBARROW

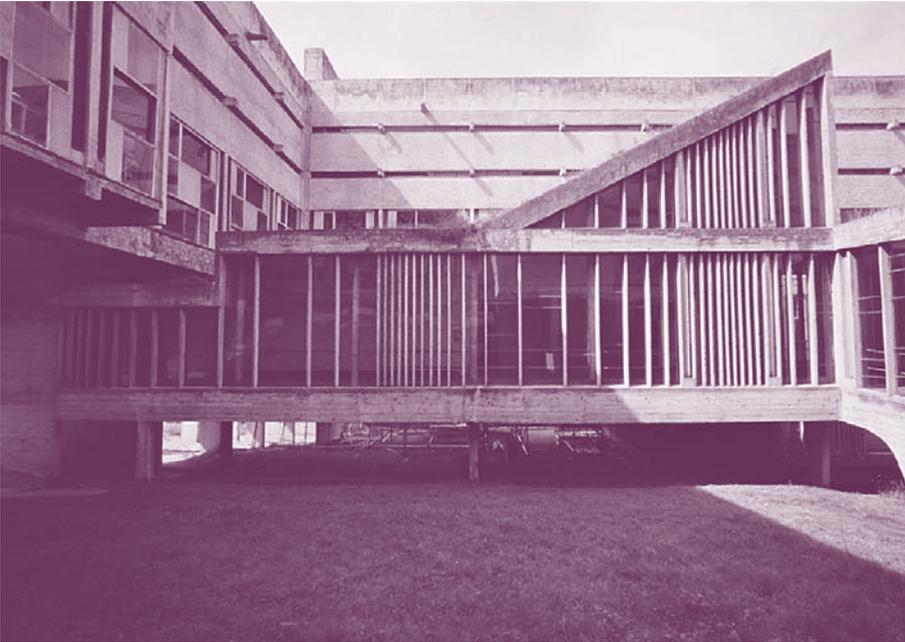
The economy of performance – in a building, as on a stage – is always played out as an exchange between forces and counter-forces. To act is to counteract. Stated in the simplest terms: architectural labour is the effort it takes to participate in this economy, the work the building must perform to keep up or play its part.

There are two types of places in which architectural work of this sort is performed, the building's moving parts – its doors, windows, and screens – and those elements that have the capacity to work against ambient forces, even if they lack the ability to move, or were never intended to change position; I mean floors, columns, and walls, together with the materials out of which they are made.

This split follows one that is basic to modern physics, the separation between kinetic and potential energy; the first indicating action or movement, which is to say energy of motion, and the second the capacity for static things to perform work of some kind, energy of position. In language that is closer to both prosaic experience and pre-modern physics, these two can be described as forces of doing and forces of suffering. Even this usage is difficult with respect to the second type however, for we normally think of force as active and suffering as passive. That enduring takes effort is clear if you think politically, if you consider the strength of conviction required for what has come to be called *passive resistance*. Examples of the first sort of work in building are patently familiar because they perform their duties in ways one can plainly see – the steady spin of a ceiling fan, for example, or the half swing of a revolving door. Examples of the second set accomplish their ends more discretely, even when visible, because their labour is internal, they resist by virtue of their make-up, configuration, and position – retaining walls stand against the slow but steady push of the hillside, shelves bear the weight of books, or roof beams and shingles support wind-swept drifts of snow. In what follows I will concentrate on this second, unobtrusive group of “activities,” and do so for two reasons: their work is largely neglected in contemporary architectural thought, and they can be seen to be more important than the first group. Their significance results from their universality, from the fact that their work – energy of position – can be discovered in all of the building's key parts, even in those that move, for they suffer the effects of ambient influences no less than the parts that never change position.

Considering the potential energy of the building's unmoving parts, still another division is necessary; capacities that allow architectural elements to *yield* to ambient influences are different from those that cause it to resist those same influences. Architectural apertures will be my point of focus, and I'll use Le Corbusier's ideas to introduce the relevant questions.

Le Corbusier's account of the task facing the building's apertures was characteristically dramatic: “during the dog-days of the summer solstice, with its intolerable temperatures, the sun, our customary friend, becomes an implacable enemy.”<sup>i</sup> Deprived of its Homeric colouration, this statement is simple: the intensity of solar radiation varies seasonally. Because the sun is both “enemy” and “friend” the building must alternately resist and encourage its daily advances: sometimes slabs and screens must stand against prevailing conditions, attempting to arrest, impede, or retard their effects, and at other times they must take up a more conciliatory posture, to moderate, filter, or modulate local offerings.



Still another point is hidden in Le Corbusier's agonistic account. During days when the sun's heat is hated its light is desired – more than desired, required. Here too we face a conceptual problem. We tend to assume the divisibility of ambient forces because they are typically controlled or managed by techniques that are devoted to one or another. Yet, when the environment is thought of as the *sum* of distinct energies, the singularity or unique character of a given situation recedes from sight. Nevertheless, the alternative between yielding and resisting is played out variously with respect to each of these dimensions, and with respect to others, calling for different “responses” from the building in each instance. The labour at the building's edge, through the depth of its outer surfaces into the most remote recesses of its interiors, involves varying degrees of acceptance and refusal.

Reyner Banham once observed that the *brise-soleil* emerged historically as a form of compensation.<sup>ii</sup> The development of the load-bearing frame created the possibility of replacing the entire wall with a window. Le Corbusier took this possibility as something of a requirement. The sun screen was invented to compensate for the inability of an infantry of glazing to succeed against the sun's steady offensive, even when backed up by the heavy guns of air conditioning.

Sunshine presented itself as the building's opponent when large expanses of glass faced the South, as they did in his Salvation Army Building in Paris. The building's “neutralizing wall” was supposed to handle heat gain in the walls that endured the sun throughout the day. For many reasons, some outside the architect's control, they did not. Another device became necessary, the external sun-screen, designed to compensate for the window wall's miserable thermal performance. Even more effective solutions were developed at the Clarte Apartments, the Unité, and the large scale buildings in India. Yet, new problems arose in warmer climates because heat was not only reflected but absorbed into the concrete. That meant that the nighttime breezes that would have cooled the building did not because they absorbed heat still radiating from the concrete and then carried that heat into the building. My point here is not to criticise Le Corbusier's solutions, but to point to the plus and minus that exists in such a border exchange: the device that produced cool shadows by day produced heat at night. The first could be described as productive, the second wasted effort. In both cases, however, work was undertaken, despite the fact that there was no movement in any of the façade's component parts. In hindsight, one can see that what was allowed but regretted, night heat, could have been resisted through the use of screens with less mass. Later experiments with sun screens, particularly by South American architects involved just that solution. More recent alternatives use specially treated glass, both vertically and horizontally.

The same alternation between allowing and resisting can be seen in consideration of other ambient forces; light, for example. But as soon as one progresses beyond that very simple alternative, the whole question becomes a matter of degree and quality: more light is desired on the factory floor than on the shelves of a rare book room; light from the North works in a painter's studio, from the South in a greenhouse. On the other side of the equation, the supply side, conditions are just as uneven, depending on time of day, season, and location. Those variables are subject to still greater qualification when the effects of a specific location are considered; when one side of the site is shrouded by the shadow of a tall tower, or another is brightened by the light reflected off a nearby glass façade. And what is true for light is also true for air: ranging from a cooling breeze in the late afternoon to a gale force wind during the rainy season, the first welcome the second obviously not. Insofar as the building's task is to suffer the influence of ambient conditions – sunshine, wind, and gravity, to say nothing (yet) about the behavior of people – there are two sorts of work that need to be performed by the building's parts: tolerating and resisting.

Very much the same sort of thing was intended by the painter Henri Matisse in his account of paintings of architectural interiors emitting a “beneficent radiation.” This term refers to *the capacity of objects to both absorb and emit light*. Easily said, this statement is not easily understood, for the notion of objects emitting light contradicts common sense in at least two ways. The first is that we tend to think of light as one thing and the object as another, each with its own properties, by means of which they enter into specific relationships: light makes some objects glow, others shine; some objects reflect, others absorb it. Suggesting that the one derives from the other, that brightness emerges from an object's dark interior, seems to be either nonsense or loosely metaphorical. A second problem with this notion is that it doubles light's place of origin; it radiates toward and from objects, has an external and internal source. In such a world, things lose the contours and hard edges by which we categorise them – interior or exterior, natural or man-made, weighty or insubstantial – and both interweave and reflect one another, such that each emits some of the qualities of all the others. The painter would seem to be offering a chameleon world of universal kinship.

Matisse finished *La Fenêtre* in 1916. Commenting on the non-perspectival or non-Euclidian depth of his window paintings he observed it was a quality he liked and sought: “space,” he said, “is one unity from the horizon right into the interior of my work room, and the boat which is going past exists in the same space as the familiar objects around me; and the wall with the window does not create two different worlds...”<sup>iii</sup> This passage points to the compacted or compressed quality of his paintings. Yet, despite its insights, this description takes for granted conditions that are at odds with what the paintings show. Initially it makes sense to describe the space of the room as *compacted* because we assume the chair, table, window, and tree are distinct entities, typically placed at distances from one another. Yet, it is precisely this common sense view of things that the painting forces us to reconsider. The painting invites us to imagine an anterior condition of “in-division” among objects, an interrelatedness that analytical, categorical, or objectivist thought disintegrates.

Providing an inventory, Matisse named the painting's rug, table, flowers, window, and garden. He also listed two colors: the green of the garden and the red of the table and zigzag. Curiously, white was left off his list. This is surprising because it is hardly

**The Window, 1916**  
*Henri Matisse*



City of Detroit Purchase  
Photograph © 2001 Detroit Institute of Arts  
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a minor player in the situation. Assuming Matisse was neither forgetful nor coy, the reason for this omission would seem to be that the white cannot be identified with any particular object because it infiltrates several. To explain this I want to return to the business of materials and light absorbing and reflecting one another. The wide white band that passes through the entire canvas from bottom to top affects and is affected by each of the objects it touches: the zigzag of the carpet and that of the floorboards, the table leg and its top, the radiator in-between those two, the flowers, the balcony rail, the garden, and the curtain. Its manner of contact varies with each of these objects. Absorbed into the woven pile of the carpet, its glow is muted. The floor's hardness, by contrast renders the white as pure shine. When the vertical band comes into contact with the table's long leg light is transformed into simple geometry. The black chair leg in the foreground has the same effect; its line, like that of the table leg frames or channels the light's downward fall. Perimeter definition is replaced by pattern distribution when the light meets the petals of the forget-me-nots, resulting in a fairly wild scatter of tints. Around and above the flowers, the curtain so fully suffuses the white with its sheer opacity that it loses its insubstantiality and becomes more or less material – as if stucco, chalk, or well-worn wool. The relationship between the light and the curtain is particularly fascinating, for one cannot be sure where the curtain and light begin and end, or what properties belong to each. But perhaps that is true for all the materials, not one of them can be understood apart from its relationships to the others. Reduced to a statement of principle, one can say *every instance of figuration relies on a topographical configuration*.

When speaking of the relationships between objects in his paintings, Matisse pointed directly to this web of mutualities, or space of indivision:

You must not say that I recreated space starting from the object when I 'discovered' the latter: I never left the object. [Yet,] the object is not interesting in itself. It is the environment that creates the object. Thus I have worked all my life before the same objects which continued to give me the force of reality by engaging my spirit towards everything that these objects had gone through for me and with me. A glass of water with a flower is different from a glass of water and a lemon. The object is an actor: a good actor can have a part in ten different plays; an object can play a different role in ten different pictures. The object is not taken alone; it evokes an ensemble of elements.<sup>iv</sup>

A number of important observations are contained in this remarkable passage. First, that there is nothing particularly interesting about objects in isolation. They merit attention only in their relationships with others. This is because objects in themselves are not the stuff of the world in which we actually live, only the world of analytical thought, the kind of thought that creates a categorical representation of our surroundings in order to facilitate their manipulation. That the object is dependent on its milieu is made clear by Matisse's assertion that the environment "creates" the object. Still, its importance cannot be denied, for only through objects could he (can we) sense "the force of reality," a force that engages the spirit. Matisse repeated his sense of the dependence of things on their surroundings with his comments on a glass changing as a result of its proximity to a lemon or flower. In each case, change resulted from all that the object "had gone through." On this account, the life of an object is basically a story of suffering. When an entire setting is envisaged, he suggests we look for instances

of reciprocal pathos, or try to discover the ways things participate in something like universal sympathy. The key point concerns the object's performative role. Each object, Matisse says, is an actor capable of playing the part its particular situation requires. This ability is what I earlier called capacity. The object or phenomenon with the greatest capacity is light, for it "evokes an ensemble of elements," as does the white in *La fenêtre*. Matisse's paintings bring before our eyes another world, a world of intercorporeality that only seems foreign and unreal because we uncritically accept a compartmentalized view of things.

Our common sense view of the world as a spread of distinct entities is also what makes it hard for us to accept the fact that our science of nature is only one among many. The history of physics attests to different understandings of nature, or what is natural, different symbols and concepts that have succeeded one another since classical antiquity. Given the fact that the latest chapter in this history is being written at present, it seems rather naïve, and possibly arrogant to assume that there will be no need for a new cosmology because we've hit on the final truth. Equally doubtful is the assumption that our notions of the workings of nature are exclusively our own. Physicist Werner Heisenberg acknowledged the fact that modern theories of force and matter are heirs to a tradition they have not all together left behind. Plato, he said, was correct in his belief that the elementary structure of matter demonstrates mathematical symmetries. Quantum mechanics, on his account only verified his premise experimentally.<sup>v</sup>

Nor are modern concepts of force lacking in ancient antecedents. The split between energies of motion and of position, for example, is hardly a discovery of modern science; the same two categories were set out in antiquity by Aristotle, under the headings of actuality and potentiality. Motion, he wrote is an actuality of that which exists in potentiality. In our time Martin Heidegger proposed separating two meanings of Aristotle's term *dynamis*, a force of tolerating and another of resisting. The key passage in Aristotle's *Metaphysics* is as follows: "one kind [of force] is a potency of being acted on. . . and another kind is a state of insusceptibility to change for the worse and to destruction."<sup>vi</sup> Two powers, forces, or potencies are named in this passage; one is the power to tolerate something from another, and the other is the power to resist it, to shelter itself against corrosive or damaging effects. The second of these forces is inherent in matter. Plato thought similarly, he used the word *dynamis* to mean ability or capability, not only to act but also to endure being acted upon. The heat of my hand can warm the glass I hold, or be cooled by the icy water held within it. A correlative term, with the same double meaning is pathos, which explains why our modern sense of the equilibrium of forces was once thought of and described as sympathy.

Heidegger pointed out that the sense of tolerating Aristotle had in mind was something quite different from our concept of painful enduring. Instead, the force of toleration for Aristotle was more like a capacity to allow the influence or impact of a counter-force, to bear it or 'take it on' as we say when referring to a task or responsibility we willingly accept. The consequence of behavior such as this is transformation. When clay tolerates the force of the potter's hands giving it form it did not possess, it changes from being a shapeless lump to a vessel of some sort. In Matisse's *La Fenêtre* the curtain is similarly transformed by the effect of the sunshine, for in yielding to the light it takes on a glow that illuminates the entire room. Work of this kind can be described as undergoing or bearing, doing nothing against the qualifying and modifying that results from the action of some counter-force.

Were there not sheer curtains but blinds on the window in Matisse's painting, they could be expected to behave differently. Their work would involve rejecting the light's effects on the blinds themselves and in the room. In *La Fenêtre* the carpet silences the light more effectively than any other material. Aristotle described this "non-allowance" as a capacity for resistance. It is a non-tolerating, non-enduring, self-asserting stand against anything that is intent on changing it. Resisting means attempting to survive or 'come through' against influences that would lead to degradation or destruction. If glass in a winter window willingly yields to light, it does not give in so easily to cold air. Resistance is the means by which the building's capacities, the energies it possesses by virtue of its materials and position, preserve it in the play (*agon*) of ambient forces that seek to transform it into something other than an architectural work.

One need not rely on ancient science to grasp the decisive importance of resistance in architecture however. The contemporary Swiss architect Peter Zumthor has used the word with some frequency in his few texts. His sense of the word is implied in his idea that a material can "speak its own language."<sup>vii</sup> Architectural resistance involves materials offering obstacles to the unbounded movements in the ambient environment. In their different ways, or by virtue of their distinct capacities, glass, leather, wood, and stone constitute what he called "the hard core of beauty: *concentrated substance*."<sup>viii</sup> This is to say, because they concentrate themselves in themselves walnut and limestone have the capacity to withstand the injuries that result from activities in their midst. Injuries, like suffering are inevitable once "architecture is exposed to life." Maintenance, repair, and restoration attest to this fact, as does the history of building failures.

Resistance however is only half of the building's work. We've seen that both modern and ancient scientists and philosophers have argued that energy of position comes in two forms. Likewise, I've suggested there are two kinds of labor the building must (passively) perform; it must resist and yield ambient conditions.

The French architect Jean Nouvel once said rather provocatively that his buildings "put nature to work."<sup>ix</sup> It is an interesting, and interestingly ambiguous phrase. It seems he was acknowledging the fact that his buildings do not result from design or construction technique alone but also the action of ambient lighting, which variously saturates their skins with fluctuating qualities. His aim was to assimilate the window wall into the natural world so that the (environmental) changes of the second would give animation to the first. This aim suggests that the environment – in this case, natural light – is internal to the building. Workings of the sort Nouvel has in mind are evidences of engagement between what was and what was not constructed, of the building's willingness (or need) to yield to forces it does not control.

Nature, for Nouvel, is not an object to be viewed, but an element that can "structure" the building. He wants the pane of glass to be more than a picture of the landscape. The metaphorical "interpenetration" of inside and outside is also inadequate to his sense of contact with nature. His intention is to have the building and the environment work together, operate as one, performing their task jointly. The aim is to bring architecture to life. For this to occur, the qualities of the landscape must be allowed to saturate surfaces so completely that they become the qualities of the building itself. This, in turn requires that two types of change be accepted: first, the building must be dematerialised; and second, light must be seen and treated as if it were matter.

“Working with transparency,” Nouvel said, “involves nothing more than working with matter to give a building different appearances.”<sup>x</sup> It is not clear in this passage if the matter to which he refers is light or glass. His aim is to see the two as one. Transparency is a kind of evaporation, it is the means by which the building allows itself to be absorbed into the atmosphere or, in reverse, the means by which the atmosphere saturates the building’s surfaces, making them co-extensive with its unbounded expanse.

It is this unstable or enigmatic quality of surfaces saturated with light that Nouvel has sought to achieve in architecture. The capacity of glass to mirror its surroundings was just as important as its transparency. Speaking of his Arab Institute in Paris he stressed the ephemerality of its appearance; its image, he said, changes under different conditions, rain, fog, cloud cover. Architects of our time are trying to capture “variations in time, the seasons, the movements of visitors, etc.”<sup>xi</sup> This effort is not for the sake of novelty but of relevance. Once the building and its materials transcend themselves into the atmosphere the old deadening permanence of architecture is abandoned and the building joins step with the pace of contemporary life.

Nouvel once claimed that the capacity of materials to yield to light, to receive, reflect, and modulate it, is so significant, that it determines the building’s dimensions and geometries.<sup>xii</sup> A theater built out of metal, plastic, and glass cannot be the same as one built out of stone. The ways in which these new materials catch light and orchestrate its effects redefine our conception of theatricality. Were the landscape not “put to work” in the project, these changes would not be so dramatic; but once the building is co-determined by forces outside itself, its essential character results from something other than just design intentionality.

In Nouvel’s Cartier Center the profiles of planes of glass change in concert with the light through drifting clouds. Changes such as this affect not only the window walls, but also the works in the galleries. Likewise for the print of the page one is reading, or the steps of the stairway one is descending. In none of these instances should this work be understood as “suffering.”

Peter Zumthor once observed that events and settings are not two aspects of a place, the first resulting from practical, the second from professional decision making, but one, acting together in reciprocal dependence.<sup>xiii</sup> This raises a basic question about the work to be done by the building, a question about the role of practical affairs – the things people do – in architectural operations. I’ve shown that architectural elements must work with and against ambient forces in the environment. Thus far, “the environment” has meant earth, air, and light, together with buildings, streets, and gardens. The question raised by Zumthor’s comment concerns the role played people, by those who reside in, pass by or through the room, garden, or city. Here the question is not how the building works for people (which was the question addressed in early functionalism) but how with building works *with* and *against* them.

Admittedly odd in its formulation, I like to proceed with this question because I suspect that meaning occurs in different ways in architecture, or at different levels, one of which, one that is normally covered over by conceptual or cognitive kinds of sense, results from the concrete presence or material actuality of the building and the body. Put more exactly, reflection on the consequences of architecture’s physical engagements with the person – its resisting and yielding to movements of the body – may allow us to enlarge our understanding of the ways buildings make sense.



To begin, let me return to Zumthor's observations about the ways buildings are encountered in human experience. He began a short paper on teaching architecture by recalling the fact that architectural experience pre-dates professional knowledge: we all experience architecture "before we have even heard the word."<sup>xiv</sup> He then turned to familiar settings and suggested that our early experience of them is unconscious, by which I think he means that sort of awareness that doesn't require concentrated thought. He also made it plain that the instrument through which unconscious sense occurs is the lived body. Visual experience is part of his account, but it is not seen as superior to other modes of apprehension, such as the feel, smell, or sound of a room, garden, or public square. When reflecting on the qualities we like or dislike about a setting we ask: "what was it that impressed and touched us – and why." Here, already, an economy of powers enters into his account, for the kind of sense he is recalling plays itself out in the arena of forces and counter-forces. This becomes clearer in his questions about the smell in the air, the feel of the floor under his feet, or the door handle in his hand, and the shine on walls. Materials are seen as correlates of the human body: "wooden floors are like light membranes."<sup>xv</sup> Stone is known as a heavy mass, textile as a soft surface. Leather is pliable, and glass is crystalline. These and other materials are the topics of architectural work, and are known to us all. If we think otherwise it is because our professional knowledge has eclipsed a more basic, unstudied, and inevitable kind of understanding.

The name he gives to the results of this experience, images, is surprising. It is an unlikely term because we tend to think of images as visual. Most of his account recalls other dimensions of experience. We tend to think of kinds of sensation as distinct because we have different sensing organs: eyes see, hands touch, ears hear, and so on. That much is obvious. Far less clear is how different modes of experience relate to one another, how the taste and appearance of a piece of fruit add up to make an orange, or our image of one. In psychology and physiology the phenomenon to which I'm referring is called synaesthesia, or the unity of the senses. Modern thought has shown that this unity is not achieved through representation or association, which is to say, by virtue of thought, but something that occurs at a level more basic level, anterior to reflection. Far from being the sum of separate instruments of sensation, the body is a corporeal force that is capable of making its power(s) manifest in different ways, each of which is internally coordinated with all the others, something like a structure of mutual implications or system of equivalences. The question concerning sensory unity is important because it provides the key to moving from the relative opacity of tactile experience to more transparent dimensions of understanding, even conceptual understanding. Nevertheless, on Zumthor's account, our physical contact with the

palpable parts of a setting, the wooden floor or the glass tabletop gives us images of them, or of our sense of them, which he also characterises as “the impression” they make on us. Lastly, the image of a place is rarely an image of just one of its parts, but of the whole: “by its very nature, the image is always the whole of the imagined [or remembered] reality: wall and floor, ceiling and materials, the moods of light and color of a room.”<sup>xvi</sup> I see this observation as equivalent to the sense of “indivision” observed in the Matisse painting: the mutuality of things in the constitution of a specific situation.

One other part of his account merits attention: the idea that the elements of memorable setting have the capacity to “make an impression.” There are a number of ways this phrase can be understood. The most obvious, perhaps is to think of settings having an effect on us. Memorable places move, affect, or touch us in lasting ways. Implicit in this statement is an epistemology that has been key in certain theories of knowledge: recollection draws upon memory traces that are the durable residue of sensory impressions. Accordingly, memory retains vestiges of actual perceptions and in recollection reproduces them in a form that is similar to the original impression. This is a notion with a long history, in modern times it was made famous by John Locke. Leaving aside for a moment the problem of the trace – its meaning, or role in the genesis of meaning – I want to focus on the ways it is produced or generated.

Let’s stick with the metaphor, which incidentally, was not invented by Locke. It is certainly as ancient as Aristotle’s writings. In *Memory and Reminiscence* he wrote: “Obviously one has to look on that which originates through perception in the soul and in the enveloping part of the body, as at a portrait, an affection (*pathos*), the lasting disposition of which we call memory. For the act of perceiving imprints so to speak a schema (*typos*) of the perceived, as if one seals with a signet ring.”<sup>xvii</sup> If this image is the most well known, it is not the oldest. Plato offered the same comparison in *Theaetetus*, describing marks in memory formed like “a signet on a thick slab of wax.”<sup>xviii</sup> The impression is formed by the application of pressure to some surface or ground. Forgetting the mind for a moment, as far as the signet ring is concerned, pressure of this sort is physical, or makes its influence felt through physical means: the seal upon wax, a footprint on the damp soil of a garden walk, or metal typeface on a sheet of paper in a printing press. Each of these traces can be called an impression.

Produced physically, these effects also come into being directly or immediately. This fact seems to have been important to the art critics of the 1860’s and 70’s who used the word “impressionism” to describe the “open air” paintings of Monet, Pissarro, Sisley, and the others. The impression they sought was to leave its trace on the eye or the mind without delay, in the instant of contact. Such an impact can be startling, which is why we say that shocking or disturbing encounters leave an impression on us. In the case of type face on a page or the sole of a shoe on a path the impress is forceful enough to leave a mark. The encounter would have a different result if the path were not soil but stone.

I began this study with a simple observation: acting involves counteracting. The pressure of the impression registers its effect against some surface or material that yields to or resists its force. Zumthor’s comments suggest that one of the tasks the building is to perform is to variously resist and yield to the pressures that attend to the body’s typical behaviours. This is to say, settings make sense when the surfaces they

offer to experience yield to and resist the movements and postures of inhabitation. The hardnesses and softnesses to which Zumthor refers represent in sum a schedule of capacities, an ensemble of preparations for responsiveness to patterns of behavior. Materials are selected, assembled, and finished with precisely these patterns in mind. That is also how they make sense.

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## Monitoring the Mundane

JAMIE WARD

If you were to die today, what information about yourself would you leave behind? If you use the Internet - and who doesn't these days - then it's likely that the answer to that grim-sounding question is, a lot. Photos, emails, contact lists, notes, shopping records, personal diaries, and - increasingly - home videos; for many of us these things are not only stored electronically, but also are also online.

And this is just information that you yourself generate. It does not include the vast amount of information about you - about all of us - kept by commercial and state organisations. Retail outlets and credit card companies know all about our shopping habits - what we bought and when; mobile phone operators know all about the phone calls we've made and received (when and where and with whom). Our government (or some departments thereof) knows the tax we've paid and the benefits we've drawn; they know whenever we board a boat or plane; they even have videos of us as we walk around town.

All of this information - from what you create and manage yourself to what is held about you by someone else - will probably still be around even when you are not. And with every new technology that emerges, this volume of information increases at a rate that is, literally, exponential.

One particular technology that promises to add vast amounts of data to our information legacy (or, at the risk of resurrecting the already dated fashion for prefixing anything to do with technology with an 'e': our 'e-legacy') is wearable computing.

### Wearables

A wearable computer (or simply, *wearable*) is a computing system worn on your body that is designed to help you in your day-to-day life.

An important requirement of a wearable is that it is aware of your context. It needs to be able to know what you are doing at all times so that it can act if and when its services are required. Where a traditional computer requires input from a keypad or mouse, the wearable gets its input from watching you.

The ways in which a wearable might do this are multifarious. With sensors on your body, such as cameras, microphones, electrodes or motion sensors, it might be able to detect details of your environment, your interactions with other people, your movements or your physiological state. It might also use GPS or WiFi to determine your location. Combining all of these, your wearable should be able to compile historical records of your activities so that it might predict how you will respond in future situations and adjust its behaviour accordingly.

The ideal wearable would be a *little brother*, if you like, who watches your every move, learning from you, and helping you out when and wherever it can.<sup>i</sup>

### From little brother to Big Brother

Such talk of a wearable recording your every move raises the inevitable spectre of surveillance by the state (and other undesirables). This is not a concern to be brushed aside lightly: as the information about you grows, so too do questions of ownership and who has the right to see it. Will not your wearable, your *little brother*, make it even easier for others, perhaps the ominous, *Big Brother*, to invade your privacy? The only truthful answer is, 'It might.' But those same privacy violations may well be even worse without wearables.

The fact is that the amount of information about you will continue to grow whether you use a wearable or not - and there is not much that the average person can do to stop that. What you can do, however, is prevent the state (and other organisations) from holding the monopoly on this information.

This is the argument given by Steve Mann, a wearables user who's been plugged into his computer since the early 1980s.<sup>ii</sup> He sees wearables as the logical democratic answer to external surveillance: they provide a means for *sousveillance*, or watching from beneath.

If the state, for example, is the only one pointing cameras at people and is the only one collecting information on them, then there is no-one to challenge it's assertions should they be, in fact,



wrong. The wearable, a strictly personal device, lets you redress this by acting as an information counter-weight: you, the citizen, can be watching them too.

### **Wearable life recording**

One consequence of your wearable's ability to record such vast amounts of detailed - and personal - information about you, will be the possibility for you to go back at a later date and retrieve information from your past.

Thad Starner<sup>iii</sup>, another long-term wearable user (he's been wearing his wearable since 1993), is one of several researchers who envisage *remembrance agents*, a kind of electronic memory augmentation. This is where your wearable picks up important pieces of information and events from your day-to-day - names, addresses, directions, random facts - and reminds you of them when appropriate.

The agent could also be used to record visual and audio data. In a study on long term life monitoring undertaken while at MIT, Brian Clarkson strapped some gyroscopes, a microphone and a couple of fisheye cameras onto his backpack and clothes, and began recording himself for 100 days.

This experiment yielded over 500 gigabytes (500 x 1'000'000'000 bytes) of raw data. Seems like a lot? But with the current rate of technological advancement,<sup>iv</sup> that volume of storage will be cheap and small enough for most of us within the next few years.

What this shows is that it may soon be possible to use a wearable to record your entire life. All of the places you've been, all of the things you've seen, all the people you've met, what you've said, what you've done...

Assuming the average wearable recorded data at an equivalent rate as in Clarkson's experiment, and assuming you live for about 80 years, then nearly 150,000 gigabytes, or 150 terabytes would be required.<sup>v</sup> A small footprint, technically speaking, for an entire lifetime.

### **Our e-legacy**

But why would we want to record our life - and why in such detail?

One only has to look at the growth of all those websites where angst-ridden youths pour out every detail of their lives for everyone and anyone with a web browser to see. Most of us, I suspect, myself included, want to leave a mark on the world. We want to show our peers that we are interesting; we want to remind future generations that we existed. And we, as humans, are fundamentally and irrepressibly obsessed - with ourselves.

In days gone by, when information was expensive, the only lives that got recorded were those of infamy or artistry, or both; only the poet, the architect, the illustrious Pope or the bloodthirsty King got to leave their mark.

But technology changed all that. You probably have a photo or two from when your grandparents were young; from your own youth there is probably an album or three; now, with *flickr* and *YouTube*, you can have thousands of photos of yourself, reams of heartfelt verbal ramblings, and hours of streaming video - and all for the world to see, should they wish to.

Who's to say, perhaps in ten years from now we'll all be uploading our wearable-recorded highlights of the day? And hoping, just hoping, that someone will want to look at it after we've gone.

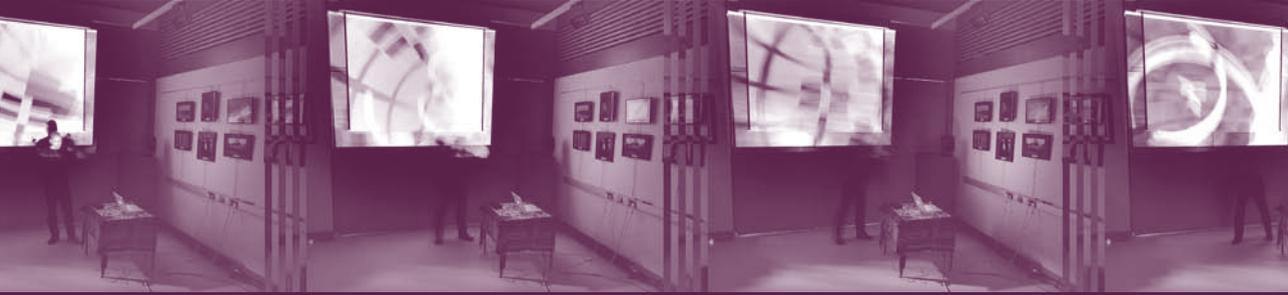
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**Jamie A. Ward** works as a researcher in wearable computing. Previously a member of the Wearable Lab at the Swiss Federal Institute of Technology (ETH) Zurich, Jamie is now a post-doc with Lancaster University.

<sup>i</sup> There are, roughly, four main application areas commonly envisaged - in healthcare, work, lifestyle and home. Research into wearables is being carried out at ETH Zurich. For more information see <http://www.wearable.ethz.ch>. <sup>ii</sup> Mann is often credited, among other things, of being the first human cyborg. See his website on <http://www.wearcam.org>. <sup>iii</sup> <http://www.cc.gatech.edu/fac/Thad.Starner/> <sup>iv</sup> Moore's law, named after Intel's Gordon Moore, implies that storage capacity will double roughly every 18 months - an exponential increase. And as capacity goes up, storage cost and device size comes down. He predicted it in 1965 and remarkably, over 40 years on, it still holds. <sup>v</sup> According to google, 150 terabytes was the space required to store the entire World Wide Web in 2005. But according to Moore's law, this should be the size of most hard disks within a decade.

## Stif(f)le

PIERRE JOLIVET



*Wee have also Sound-houses, wher Wee practise and demonstrate all Sounds and their Generation. Diverse Instruments of Musick likewise to you unknowne, some sweeter than any you have; Together with Bells and Rings that are dainty and sweet. Wee represent Small Sounds as Great and Deepe, Likewise Great Sounds Extenuate and Sharpe, Wee make diverse Tremblings and Warblings of Sounds, which in their Originall are Entire. Wee represent and imitate all articulate Sounds and Letters, and the Voices and Notes of Beasts and Birds. Wee have certaine Helps, which sett to the Eare doe further the Hearing greatly, Wee have also means to convey Sounds in Trunks and Pipes in strange Lines, and Distances.<sup>i</sup>*

The concept of Stif(f)le<sup>ii</sup> is to encompass a space by creating a virtual world based on the use of digital technology. Since my first performance, nearly 25 years ago, progress has been made in creating and controlling the performance in a real time environment. The equipment consists of a single laptop, connected through MIDI to an upper torso exoskeleton and a data projector displaying the visual in sync with the sound feed.

Abolishing the instrument liberates the performer as motion sensors on the body facilitate gesture found in dance or in sculpture.

The minimalist aspect of the performance makes the spectator closer to an altered state of consciousness, a format used since the early sixties repetitive school of music to include the public as part of the event as a cerebral feedback loop.

Pierre Jolivet has been producing music since 1981. His most recent CD Palestine has been released in 2007 in collaboration with Rapoon. His next performance will take place in the DOM Cultural Center, Moscow, Russia.

<sup>i</sup> The New Atlantis, Francis Bacon, 1624

<sup>ii</sup> to suffocate, in the extended connotation of interruption / reconstruction.

## Definition Exploration Reappraisal

LEON MCCARTHY

For Video Goto Website

[www.mercuryboyinc.com/portfolio.html](http://www.mercuryboyinc.com/portfolio.html)

Music Video Jet-One

video = still \* x where x= no. stills

still = photo(f) where f= algorithm

algorithm = automatic visual generator (C+)

human eye = aesthetic arbitrator

When I explain to people that I studied architecture and then switched to media technology, many react with surprise saying, “that was a change in direction”. However, it seems I never changed in approach, only in the medium with which I work. For me, design was always about 3 steps in a feedback system: definition, exploration and reappraisal.

The daunting task of creating something from nothing becomes tangible through the definition of boundaries; be they subjective or practical constraints. Sometimes self-imposed boundaries come from creative algorithms, and I find this much easier to initiate in the realm of media than architecture. From the algorithm and its constraints comes solution to the issue at hand. There may be many paths toward a solution, and at least 2 must be explored to satisfy the scientific mind in me! How can I say I have arrived at the best result if I only investigate one path?

At all times I continue to apply my artistic faculties. Both maths and the human-mind arrive at harmony, but aesthetic beauty sometimes needs sculpting. To trust in the process blindly would be foolhardy. As of yet, I don't believe there is an automaton that can decipher and design for the human as a human can.

So the process is critically reappraised, then adapted and the circle goes on.

In this example shown here I begun by deciding that I need an automated software effect that can generate video by distorting and mapping a still image. It was, at that time, my wish to avoid large video files, starting with simple and small images, hopefully finishing with a complete video. As the code developed, I ran still images into the process, along with audio (which controls the depth of the effect on the image). The recorded video demanded changes in the code, and the circle continued.

With many layers of video recorded, I re-assessed the aesthetic merit of the results, put the code to bed, entered my video editing program and made purely artistic decisions – based on my eye and ear. The result is a music video, of which you see a single image here. Its title is *JetOne* and the full video can be seen under the title in the music-video section at [www.mercuryboyinc.com/portfolio.html](http://www.mercuryboyinc.com/portfolio.html).

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**Leon McCarthy** is a musician, video-artist and director. He produces visuals, shorts & video-virals under MercuryBoy while performing as one half of the promising Dublin electro band - le Bien. Having studied architecture at UCD, he completed a masters in Music & Media Technologies in Trinity College. His work can be seen and heard at: [www.mercuryboyinc.com](http://www.mercuryboyinc.com) and [www.lebienmusique.com](http://www.lebienmusique.com)

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## About ideologies and religions

N55

### Logic

Most of our thinking and our discussions are conducted on a level where we repeat and repeat our habitual conceptions to each other. We assume that there are no other conditions to decide whether something is right or wrong, except that one does not contradict oneself nor is inconsistent with facts. Beyond this there exists only more or less thoroughly grounded subjective opinions. However, there is a level so basic that it normally does not appear in our conscious mind, where everything does not revolve around subjective opinions. At this level things are simply right or wrong.

Logical relations are the most basic and most overlooked phenomenon we know. Logical relations mean that nothing of which we can talk rationally can exist, can be identified or referred to, except through its relations to other things. Logic is necessary relations between different factors, and factors are what exist by the force of those relations. The decisive thing about logical relations is that they cannot be reasoned. Nevertheless, they do constitute conditions necessary for any description, because they cannot be denied without rejecting the factors that are part of the relations. Persons are, for example, totally different from their bodies. Persons can go for a walk and they can make decisions. Bodies cannot do that. Nevertheless, we cannot refer to persons without referring to their bodies. If we say: here we have a person, but he or she unfortunately is lacking a body, it does not make sense. Persons are totally different from the concrete situations they are in. Nevertheless, we cannot refer to persons without referring to the situations they are in. If we say: here we have a person, but this person has never been in a concrete situation, it does not make sense. Language is totally different from reality. Nevertheless, we have to perceive language as something that can be used to talk about reality. If we say: here we have a language, but this language cannot be used to talk about reality, it does not make sense. Logical relations have decisive significance. The absence of logical relations would mean that nothing could be of decisive significance: as long as one does not contradict oneself nor is inconsistent with facts, any point of view may be as good as the next, one can say and mean anything. Logical relations are conditions for talking rationally together. The part of the world we can talk rationally about, can thus be defined as the part we can talk about using logical relations. But we do not have any reason to assume that the world is identical with what we can talk rationally about. Logic is something more basic than language. Logical relations are what makes language a language and what assigns meaning to words. Therefore, it is impossible to learn a language, without learning to respect logical relations. But as we grow up and learn to master language, logical relations are not present on a conscious level. If we are conscious of logical relations, it is possible for us to decide whether something is right or wrong and not to allow ourselves to be ruled by for example habitual conceptions and subjective opinions.

### Persons

A person can be described in an infinite number of ways. None of these descriptions can be completely adequate. We therefore can not describe precisely what a person is. We do however have the possibility to point out necessary relations between persons and other factors. We have to respect these relations and factors in order not to contradict ourselves and in order to be able to talk about persons in a meaningful way. One necessary relation is the relation between persons and bodies. It makes no sense referring to a person without referring to a body. If we for example say: here we have a person, but he or she does not have a body, it does not make sense. Furthermore, there

are necessary relations between persons and the rights of persons. Persons should be treated as persons and therefore as having rights. If we deny this assertion it goes wrong: here is a person, but this person should not be treated as a person, or: here is a person, who should be treated as a person, but not as having rights. Therefore we can only talk about persons in a way that makes sense if we know that persons have rights.

### **Concentrations of power**

Concentrations of power do not always respect the rights of persons. If one denies this fact one gets: concentrations of power always respect the rights of persons. This does not correspond with our experiences. Concentrations of power characterise our society. Concentrations of power force persons to concentrate on participating in competition and power games, in order to create a social position for themselves. Concurrently with the concentrations of power dominating our conscious mind and being decisive to our situations, the significance of our fellow humans diminishes. And our own significance becomes the significance we have for concentrations of power, the growth of concentrations of power, and the conflicts of concentrations of power.

It is clear that persons should be consciously aware of the rights of persons and therefore must seek to organise the smallest concentrations of power possible.

### **Politics**

The fundamental purpose of politics is to protect the rights of persons. If we deny this assertion we get: the fundamental purpose of politics is not to protect the rights of persons. This suggests that one of the basic tasks of politicians could be, for example, to renounce the rights of themselves and of others. This has no meaning. Or that there is a more important purpose to politics which does not have anything to do with persons and therefore also has nothing to do with the rights of persons. That is plain nonsense. Therefore, we now know that the basic purpose of politics is to protect the rights of persons. In other words we cannot talk about politics in a way that makes sense without the assumption that the fundamental purpose of politics is to protect the rights of persons.

### **Ideologies and religions**

Ideologies and religions are systems of thought that shape and decide the way persons and groups of persons think and act.

Ideologies and religions don't necessarily first and foremost respect conditions for description, and hereby logical relations and facts, but are also often the expression of subjective opinions, social conventions and habitual conceptions. Because subjective opinions, social conventions and habitual conceptions are not necessarily in compliance with conditions for description, religious and ideological assertions are often a mixture of right assertions and wrong assertions.

This is a fundamental problem that is shared by for example ideologies like representative democracy, anarchism, neo-liberalism, communism, capitalism, nazism, and religions like christianity, hinduism, judaism, islam, etc.

Experience tells us that religions and ideologies usually don't first and foremost aim to respect conditions for description and hereby the logical relation between persons and persons' rights.

Persons might have personal reasons to believe in ideologies or religions, but ideologies and religions that don't first and foremost aim to respect persons' rights, should never be used as the basis of political action, because the fundamental purpose of politics is to protect the rights of persons.

Instead of using ideologies and religions as the basis of political action, persons ought to use conditions for description as the basis of politics and thereby first and foremost try to respect persons' rights.

## Rethinking Permanence 1 and 2

SALLY TIMMONS

In her practice artist Sally Timmons has *undertaken unproductive* activities such as joke telling, recalling embarrassing memories and random information gathering as an absurd means to bring together and observe some of the symptomatic traits of contemporary society.

Manual for LAND is a project initiated by Danish artists collective N55. This group has been active in addressing political concerns through art in the form of socially designed manuals for contemporary living. As part of Manual for LAND N55 have negotiated the use of various sites or plots of land around the world and have allocated them *as available for use by anyone*. The location of each site is recorded using polar coordinates along with a photograph documenting the site that has been logged on the N55 website. Each plot is also marked in-situ with a 1m high cairn – a stainless steel space-frame made by N55 that holds information on the rules for the use of LAND.

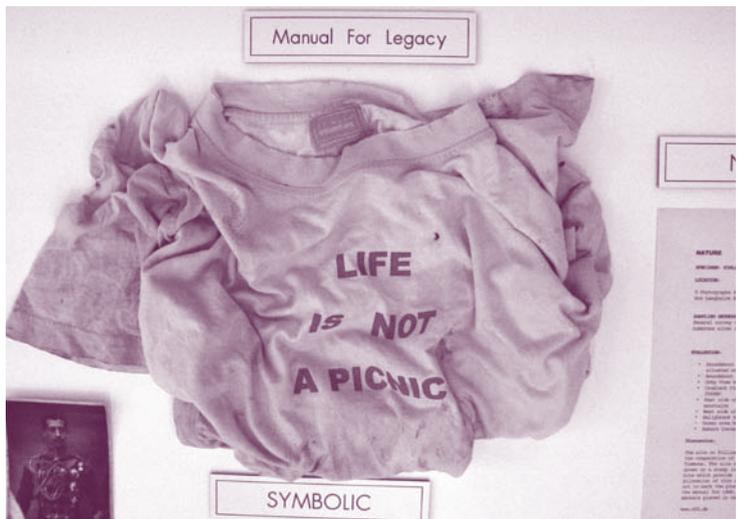
As part of a commissioning process initiated by Dun Laoghaire Rathdown County Council Arts Service in 2006, Sally Timmons and N55 collaborated on the expansion of LAND at Killiney Hill located in Dun Laoghaire Rathdown County. Timmons assumed the role of surveyor through her search for and documentation of the LAND site. Her field studies were documented and exhibited as a Manual For Legacy in the concourse space in the Dun Laoghaire Rathdown Town Hall.

Manual For Legacy acts as a means through which the artist, in response to the activities of N55, identifies cultural strategies towards a symbolic immortality, in which a human presence or mark and its history can be identified through a survey of random found objects.

Each of the five specimens examined in Manual For Legacy have been returned to the site on Killiney Hill.

The cairn has since been removed from the location. In September 2007 a picnic table was placed at the site with a plaque that provides information about LAND and a web address.

[www.sallytimmons.info](http://www.sallytimmons.info)





## Planning for Space

STEVE DALEY

*Ireland is on the way to becoming a city-state, with Dublin dominating everywhere else. Its capital has become an alarming example of the 21st century phenomenon of the 'metacity', with tentacles stretching out all over the province of Leinster - via the spokes of a Dublin-centric motorway network - and pieces of the city popping up on the outskirts of towns and villages within a radius of 80 to 100 kilometres.<sup>i</sup>*

The housing question in Ireland regularly animates controversy. The Urban Forum alarmingly reported in February 2007, that Dublin is expanding so quickly it will soon occupy the same surface area as Los Angeles, but with less than a quarter of its population.<sup>ii</sup> Its report *A Better Quality of Life for All* identified a shopping list of critical issues comprising: increasing domination of the country by Dublin and its environs in terms of population growth and economic development (54% of the population now live in Leinster); rapid growth of the outer suburbs of our towns and cities, while town and city centres are declining; and, last but not least, the explosion in the number of one-off houses – now accounting for up to 40% of our new housing stock. The Urban Forum gloomily persisted that these housing distortions were creating a time bomb of social problems in Ireland, including obesity, cardiovascular disease, asthma and increased rates of social isolation.

The dramatic growth in Ireland's new housing stock has attracted the scorn of urban designers for ruining their best-laid plans for sustainable living. The pejorative acronym UGH has been coined to describe *urban generated housing*, e.g. the sprouting exurbs of Dublin's commuter belt and the proliferation of one-off houses on Irish rural landscapes.<sup>iii</sup> UGH is tagged as a malign symptom of the Celtic Tiger's housing boom. The exodus of urban populations from Ireland's cities and towns are imagined as dots despoiling natural landscapes or as a deluge sinking fragile communities. This derogatory metaphor betrays snobbery among planners and architects.

Ireland's housing boom has opened up a wound in our ambivalent responses to the Irish dream

for bigger, better and more homes. There is a sense of ambiguity in both public and professional perceptions of the explosion in house building in Ireland. Irish society is generally supportive of Irish residents who dream to live in desirable homes, less so on the specifics of its physical presence. There is little sympathy in the common refrain to the aspirations of those building second and third homes for recreational or investment purposes. Developers, farmers and landowners who wish to profit from the proliferation of Irish homes are condemned as mercenaries to mammon. The public interpretation of Ireland's housing boom is tainted with the sentiment that the built environment must be restrained and regulated so that our heritage, be it natural or local, is protected. This distrust of others' plans to transform their dwelling or develop a plot of land is today fought out in public accusations that the planning system is failing us.

### **Ireland follows an English compromise**

Development control and the planning process are relatively new statutory powers in Ireland. The evolution of the Irish planning system has closely mirrored legal changes in the UK. Planning was absent from the laws of Ireland until as late as 1934, when the Town and Country Planning Act was placed on the statute books of the Irish Free State. Its resemblance to the English Town and Country Planning Act of 1932 effectively destroyed its credibility in the Irish Free State and there it remained a dead letter. Modern planning assumed *de facto* existence in Ireland as late as the 1963 Local Government (Planning and Development) Act. Unsurprisingly, this again aped English legislative reform - the 1947 Town and Country Planning Act, a landmark in planning legislation. Despite the loss of Empire, the spirit of this Westminster text has defined the modern planning process in post-colonial jurisdictions across the globe, including the Republic of Ireland.

The novel invention of British planning law inserted the imperative of protecting our landscape from physical alteration through the statutory obligation of the planning permission - development control was inserted into the planning process. This orthodoxy, the outcome of a traditional English compromise in post-war Britain, paved the way



for the development of the New Towns whilst closing the gate for those who wanted to escape city squalor and nest where they pleased. British planning post-1947 presumed unapproved physical development or change of land use, by private individuals or bodies, was a public tort. Property owner's rights to develop existing landscapes and structures were substituted by licensing and prohibition. Development control was imposed as the mutual obligation of strategic planning.

Ireland's planning laws mimic this English fudge of property rights without development rights.<sup>v</sup>

The modern planning process casually belittles the aspirations of the public to build a human environment. The built environment is the object of development control. Rural and urban are given meaning, in modern planning, only as opposites - the former being characterised by the superficial appearance of human absence and the latter as explicit domination by human presence.

Farming is artificially privileged as an activity that decorates the rural idyll with a veneer of simplicity and self-sufficiency. The countryside is considered untainted by the ugly hand of human industry and urban settlement. Physical transformation and human settlement are treated as cankerous growths disfiguring unspoiled countryside and simple community life.

This differential treatment corresponds with a contemporary disillusion with urbanisation and equates human settlement plus human structures with the destruction of natural habitats and rural community. There is clearly a smattering of snobbery and elitism in this imagined essential divide between rural and urban. However, this essay is more concerned with how this anti-development consensus has impacted Ireland's housing record.

#### **Ireland's odd couple: Bubble and Boom**

Skyrocketing house prices have been widely condemned in Ireland for over a decade. This affordability time bomb is not exceptional. It is a common concern of particular housing markets in North America, Western Europe and Australia. In spite of the enormous disparities between the house-building rates in each of these countries, affordability has declined unusually rapidly over the last decade in housing markets that share similar features of development control, and remains steady in countries with more permissive planning regimes. Demographia 2007 indicates artificial creation of development land and real estate scarcity through development control as a common denominator of housing bubbles in residential property markets.<sup>vi</sup>

Ireland's cohabiting couple, housing bubble and housing boom, seem to contradict observations in the UK housing market, where historically low

rates of house-building and the housing bubble are regarded as flip sides of the same coin. The simplistic refrain commonly heard in the UK, that building more houses will reduce the rate of house price growth, flies in the face of recent experience in Ireland. During the unprecedented boom in Irish dwellings built since the 1990s, Irish house prices have continued to rise and rise until reaching an uncertain plateau in 2007.

The unique feature of Ireland's housing bubble of the last decade has been the remarkable house building boom that has seen per capita housing supply reach multiples of those anywhere else in Europe (5 times UK housing supply, 4 times EU average). Supply side constraints are apparently no more or less prohibitive in Ireland than in the UK. Planning practice in Ireland may even be more biased to development control than UK given the unique capacity of third parties to frustrate planning approval, despite the recent introduction of reasonable fees for objections and appeals.

Many Irish commentators lazily assume that the trouble with planning in Ireland has been overcome by government fiat and commercial pragmatism. Such a cursory conclusion is seriously flawed and substantially underestimates the chronic effect of development control on the affordability and spaciousness of Irish homes.

To understand this, it is first important to examine the dynamics of the Irish housing market. Before proceeding, it is useful to be reminded of Ireland's weak inventory of second-hand homes and historically high occupation rates at the beginning of the boom. At the end of the 1980s, Ireland's housing stock and infrastructure was generally dilapidated and over-occupied and household incomes were constrained by high rates of unemployment. This state of affairs was quickly transformed by the emergence of the Celtic Tiger. Ireland's labour force mushroomed from the early 90s as employment levels rose, in particular among the female population. As Irish emigrants and second-generation Irish families returned home, migration trends reversed from the middle of the decade. Later, a new wave of immigrants soaked up the inexorable growth in the labour market. Not only

was Ireland's population increasing absolutely, but the relative size of its labour force was also rising and getting younger. An army of salaried first-time buyers emerged to bolster demand for new housing supply, as the population of 18-34 year olds grew disproportionately in the State due to the 1970s baby boom and, more recently, net migration of twenty-somethings skewed the age composition of Irish households. Cultural changes such as downsizing of Irish household size due to family planning, 'empty nesting' and marital separation all combined with the incredible increase of Ireland's younger labour force and disposable income. These demographic changes in combination with rapid economic growth stimulated the unprecedented demand for housing (in all sectors) from a very low base of housing stock.

These socio-economic drivers of housing demand, or *demographic dividend*, are unique to Ireland and help to explain the phenomenal short-term pressure on house prices from the 90s onward, as supply lagged demand. Thanks to the rising incomes of Ireland's growing labour force and the *demographic dividend*, Irish housing demand has simply been based on Irish household's catch-up with European norms of residential occupancy.

House prices are not only determined by supply and demand. There is an important distinction that must be made here between the normal expectations of rising prices as supply lags demand and speculative behaviour in the housing game. There are few economists who deny that the Irish housing boom has had the characteristics of an asset bubble. Ireland's *housing bubble* lifted house prices to dizzying heights, encouraging further speculative property investment and increasing supply of building labour and development land. However, this still leaves us none the wiser as to how and why bubbles happen.

Bubbles normally occur where assets are not easily replicable and housing bubbles only occur where planning laws impose development control on human settlement. Like most asset bubbles, the feasibility of speculation on residential property presumes the asset is not generic, as is the case for works of art or dotcom shares. In the case of

housing, development control artificially obstructs and distorts the development potential of land, in terms of location, design and process. Speculation in land values and existing housing stock are not the result of under-supply. Planning artificially limits the substitution possibilities of a positional good such as housing, and so will offer arbitrage opportunities.

Development control does not cause housing bubbles, but it is a necessary condition of housing speculation. This may explain why Ireland's hyperinflation in the second-hand housing market and residentially zoned land - as well as inflated prices for agricultural land on the periphery of residential areas - is still showing no signs of returning to normal levels. There is little evidence that we will see the housing market crash despite the rapid slowdown in house building or the huge numbers of empty properties in Ireland. Understanding this role that planning plays in housing bubbles is essential before examining in more detail the specific distorting impact of planning. This approach reveals why greenfield development matters more than planners are prepared to admit.

### **The Celtic Tigers spread out.**

The Celtic Tiger boosted the job market at the end of the 80s, especially service jobs in Ireland's cities. The impact of this adrenalin shot was to attract hundreds of thousands of jobseekers to the capital city. However, an opposite migration also took place due to the desire of existing homeowners to take advantage of their swollen equity and cheap transport to spread their wings to the new commuter towns and exurbs. This two-way traffic was not synchronous: young jobseekers and students moved into the inner city; whilst exurban traffic exited the peripheral wards of the city to resettle in the hinterlands of County Dublin and surrounding towns. Taking a ten-year perspective between 1996 and 2006, three Leinster counties accounted for about 29 per cent of the overall 613,800 growth in population at State level: Fingal, Meath and Kildare. In the same period, Dublin's 40 inner city wards accounted for only 29,624 of this rise and the remaining wards in Dublin City declined by 5,267.<sup>vii</sup>

High levels of private car ownership have permitted householders to live further away from their place of work. The freedom of Irish employees to commute by car has presented planners and environmentalists with misanthropic nightmares of urban sprawl. Conversely, prosperity and cultural changes have allowed Ireland's city dwellers to dream of escaping to the hinterlands. This has presented major difficulties for Irish planning authorities that have sought to protect the countryside from urban encroachment.

The depopulation of the metropolis and the gentrification of its inner city are common trends that shape the history of cities. This process has been presumed by Irish social commentators to be the result of the expulsion of ordinary workers from our cities solely due to the unaffordability of city living. This evades the possibility that the Jackeens of Dublin may actually wish to move their families out of Walkinstown to Kells. What irks the planners is that the *oiks* do not want to stay in their place.

Demand for housing is not as simple as demand for consumer goods like cars or holidays. When we choose to buy homes for occupation or rent, our preferences are complex. Location, design, size, convenience and neighbours all impact on our selection of housing. Importantly, housing demand is shaped as much by our neighbour's proximity as the number of bedrooms it has. City apartment living may be someone's dream or his or her nightmare. As societies have developed, the dominant trend has always been to prefer living outside the city, as the historian Robert Bruegman illustrates in his fascinating book *Sprawl*.<sup>viii</sup> Industry and commerce have traditionally located in the city, so the job market has consequently tied the masses to live within easy reach of employers. This gravitational pull of cities is cyclical and ebbs and flows with the dynamism of economic activity. The secular trend, however, remains that as prosperity, technology and communications improve most city dwellers like to stretch their wings over the hinterlands. The locomotive allowed the middle classes - and now the car has afforded the masses - the luxury of working in the metropolis and living within a manageable commute. Sprawl is aspirational.

The trend towards increasing urbanisation is most evident in Ireland's towns rather than in the cities. The combined population of towns with a population of 10,000 or more almost doubled to 496,000 between 1981 and 2002, and increased by a further 120,000 from 2002-2006. Smaller towns with a population of 1,500 to 9,999 increased in population by 13.9 per cent between 2002 and 2006, well in excess of the national average of 8.2 per cent.<sup>ix</sup> In 2005, most new Irish homes (53%) were built in estates (schemes), with apartments and one-off houses accounting for 22% and 25% of completions respectively.<sup>x</sup>

#### **Mind the gap?**

In 2006, the Irish Architecture Foundation commissioned FKL architects to arrest these nightmares of suburbia and curate Ireland's exhibition, *SubUrban to SuperRural*, at the Venice Biennale. This venture was an attempt by architects to expand our spatial imagination beyond the planning stalemate of 'urban/suburban/sub-rural/rural' and substitute development of 'super rural'. A book of the same title, published to record their proposals, is hugely informative and unwittingly betrays why the urban/rural divide is the key obstacle to those who wish to shape Ireland's territory for human pleasure and material prosperity. It is time to unearth the roots of this rural/urban schizophrenia that threatens to erode our confidence in the human project of building Irish homes fit for people in the 21st century.

The notion of rural and urban remains ill defined in Ireland due to our weak history of urban settlement. In England, the category *rural inhabitant* is defined by DEFRA as those who live outside urban areas exceeding a population of 10,000 and the corresponding figure in England and Wales is 20%. According to Census 2006, over 50% of the Irish population would be defined as rural if we used equivalent thresholds. Land is abundant in Ireland and it is probably more accurate to describe Ireland as an under-populated country, especially when we recall that the population density of Ireland today is a third less than in pre-Famine Ireland.

The low density of Dublin's 'meta-city' is regularly blamed on urban sprawl, ribbon development, and one-off houses. In reality, it is far more a product

of Ireland's poor history of industrialisation and, consequently, urbanisation. When over half the population still live in the country and the long-term trend for those living in towns and cities has been to move out, housing demand in the new suburbs and exurbs has expressed the same desire of those willing to build their own one-off houses on country lanes. The majority of Irish households reason that Irish employment patterns and modern transport permit them to work and live outside the hustle and bustle of cities. Planners and architects react by inventing policies and strategies to modify this allegedly dysfunctional behaviour.

#### **Keep off the grass!**

While journalists and architects complain that the increasing suburbanisation of the countryside is the fault of lax planning, too much development control seems to better describe the Irish experience of the housing boom. During the early years of the Celtic Tiger, the Irish government paid little attention to the housing needs of the expanding labour force. Only when the price of new and second-hand homes rose - 23% and 30% respectively in 1998 - did housing supply come to the cabinet table. Following the recommendations of Peter Bacon in three separate reports in 1998, 1999 and 2000, the government acted cautiously to fast-track serviced land for residential development and encourage higher residential densities as a means to stabilise price rises. The backlog in the servicing of zoned residential land banks was identified and the Strategic Land Initiative identified existing zoned land ready to be serviced. However, national and local government policy was consistently opposed to increasing residential zoning with newly prescribed higher densities. The Strategic Planning Guidelines for the Greater Dublin Area in 1999 committed housing to a strategy that prioritised a clear demarcation between urban and rural areas and the protection of Strategic Green Belts.<sup>xi</sup> The Greater Dublin area experienced the severest demand for new housing, yet protection of the rural hinterland and containment of urban settlement was the order of the day.

It is important to note that there is little evidence that government housing policy led builders to squeeze more units into smaller sites. Higher land

costs, due to the artificial constraints and delays imposed by planning, had already forced builders to seek planning approvals from the mid 1990s to construct at higher densities. Apartment planning permissions had been rising sharply, some 5 years earlier than Bacon, and they had already reached a plateau by the late 90s where they have remained since. What is important is that this commercial response to the market was rubber-stamped by the planning authorities because it concurred with their desire to limit urban encroachment in the rural hinterland. Residential density guidelines were amended in 1999, with the result that the large land banks of zoned land that did exist on the outskirts of Dublin were developed at densities previously unknown in private housing schemes. The phenomenal share of Ireland's new homes in Fingal, Meath and Kildare is a product of an imposed compromise between developers and planners to privilege compact living as the price to be paid by Irish households for the protection of rural Ireland.

The doubling of residential densities by planners in suburban and greenfield sites has benefited only developers and landowners. Spacious detached and semi-detached houses with ample gardens were erased from the drawings of new suburban estates going up on the outskirts of Dublin; and downsized to accommodate apartments, semi-detached and terraced houses. Planners' rural conservation has facilitated a construction boom in compact housing schemes, dispersed in new suburbs and growing towns on the outskirts of Dublin.

There is plenty of evidence to confirm the reduction in dwellings most linked to spacious living. In 2001 almost half (47%) of new completions nationally were composed of bungalows and detached homes, within 4 years such low density house types accounted for only 1 in 4 (26%) of new dwellings completed in 2005, which implies that one-off rural housing has been stemmed if not uprooted as anti-sprawl planners had wished.<sup>xii</sup>

One-off houses tend to be more spacious than the volume scheme developments. The average one-off house has increased in size from just above 180sqm to 220sqm since the beginning of the decade. The

significant proportion of one-off houses in Ireland is not indicative of a less stringent approach in rural areas, as is sometimes claimed. It is clear that one-off houses are more desirable dwellings, since they are more spacious and are more likely to be built according to personal preferences - and this does not simply include custom architectural structures as many households are happy to select their dream home from the many pattern books available at most booksellers. Importantly, planning approval for one-off houses is a far from simple process as confirmed by the Irish Rural Dwellers Association. It is surprising how many people persist with the planning process given the lengthy delays and numerous obstructions that are part and parcel of the planning system.

The *Sustainable Rural Housing Guidelines* are casually lambasted for appeasing to the pester-power of groups like the Irish Rural Dwellers Association. However, these guidelines reveal the common ground that exists between planners, environmentalists and rural campaigners - that territorial expansion of urban living into rural areas is to be avoided at all costs. The farcical inventions of 'local need' - prescribed in the guidelines - presume a distinction exists between rural need and urban generated demand. Both notions are irrelevant in 21st century Ireland. Farming and agricultural based employment is no longer the lifeblood of remote populations in the West of Ireland, where even within farming households family members will be working in non-farm work. When only 5% of the labour force is employed in the food and agricultural sector, the notion of distinct rural and urban planning is anachronistic and parochial.

The truth is that the real problem of Irish housing stems from a feature of Irish society that planners wistfully ignore - the historical underdevelopment of Ireland's cities and towns.

### **Planning for real development**

The nature of the planning process signals how society feels about human needs and desires for the built environment. Our ambition to humanise our environment may be gauged by our success in making our mark on the landscape.

It seems planners have assumed the status of high priests who judiciously curb the selfish desires of landowners and homeowners to develop their estates. The self-righteous invocation of the *common good* is an altruistic charade to excuse policing of the physical development across every acre of land within the State. But good planning is more than a technical skill in adjudicating between competing visions of our landscape. It is surely the sovereignty of politics as expressed in the popular mandate. As Alan Hudson cogently explains, “only through the results of social interaction and social contestation, not technical prescription, will policy solutions arise.” How we wish to develop is best guided by personal freedom, political argument and democratic accountability.

This anthropocentric notion of planning may be described as planning for progress, or ‘predict and provide’. This model of planning has traditionally been the mandate of democratically accountable government, whether local or national, to deliver facilities and infrastructure as desired by the electorate. This democratic impulse has nothing in common with the authoritarian character of the modern planning regime. Strategic planning and development control are not complementary approaches; they are mutually antagonistic. This mismatch in the objectives of planning leads to one of two very different outcomes: either planning that facilitates the aspirations of Irish households and businesses, warts and all, or planning that privileges the ‘common good’ as dictated by the planning authorities. Ireland has inherited the latter

approach - invented at Westminster - that obliges planners to keep a tight rein on the human footprint, and subsequently to keep town and country apart. The *common good* is singularly invoked by planners to proscribe the public from enjoying an informal relationship with the physical environment. This obligation to seek planning permission treats everyone like licensees. Businesses, developers, families and landowners are permitted to establish offices, factories, homes and campsites only if the location, design and use fit the bigger picture. The trouble with planners is that they invert the process of democratic accountability, such that private individuals and businesses are accountable to the planning authority.

It is reasonable that national and local authorities may purchase land or property identified by democratic mandate as of special interest, in terms of local history or natural heritage. In this regard, compulsory purchase orders provide enough leeway for planners to provide infrastructure, services and amenities. There is plenty of scope for the state to protect wildlife parks, recreation zones, and architectural heritage, which does not compel us to seek the approval of the planners but expects the state to purchase land. It is not tolerated that the National Roads Authority or Office of Public Works may insist that private landowners use land according to their plans without having to compensate landowners, so why do we tolerate the planners prohibition on private landowners to protect rural and natural heritage without demanding that the state take full responsibility through purchase or compensation. This framework

would ensure that democratic institutions are accountable to elected representatives for how these limited areas are developed, and thus allow society to debate the relative merits of these specific national investments. This approach also has the benefit of unleashing the potential of Irish architects, engineers and citizens to shape our environment for human satisfaction rather than holding back development. It would not treat us all like criminals when we wish to realise our dreams, but simply allow the state limited powers to guarantee strategic infrastructure for the benefit of society as a whole.

Recent Irish experience suggests that Ireland's housing has been disfigured and stunted by this rural/urban prejudice. As the housing boom stands on the precipice of a downturn in new house building, there is a danger that the social needs and desires of Irish residents for affordable, spacious and exurban homes will be ignored and the market will continue churning out cramped spaces inside compact suburban estates at exorbitant prices.

Housing crash or not, there is one undeniable lesson to be learnt from the experience of Ireland's housing boom: as families and individuals in Ireland prosper a majority desire to escape the metropolis and a young vibrant minority wish to inhabit spacious city dwellings. If planners continue to resist this trend, it is feasible that the housing bubble will be back with or without its Irish bedfellow, housing boom.

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**Steve Daley** is an economist, with a special interest in economic sovereignty of developing countries. This paper is amended from his speech at All Planned Out, organised by AUDACITY in May 2007, at the Building Centre, London. Steve is a documentary film researcher and works closely with the London based charity, WORLDwrite. In 1999, Steve founded Trasna an Domhain go Léir to promote development education and champion global equality.

i McDonald, Frank. 'The Road to God Knows Where' p55 in *SubUrban to SuperRural* Shane O'Toole [ed.], Gandon, 2006 ii <http://www.engineersireland.ie/home/docs/ABetterQualityOfLifeForAll-UrbanForum.pdf> iii McDonald, Frank. *ibid.* p58 iv In this essay, planning and development control are used interchangeably to describe the regulatory powers of planning authorities to prevent unapproved development. v The 1963 Local Government (Planning and Development) Act defined development control and strategic planning as obligations of local government. Local Authorities are required to draft Development Plans at five yearly intervals to give guidance on land-use zoning, traffic, urban renewal and amenity preservation. However, there are important differences to the English system; not least the reserve powers of democratically elected councillors to exclusively decide zoning decisions. In the last decade, democratic accountability has been condemned as a permit for corruption and graft and its erosion has been welcomed as a bulwark against the infamous brown envelope. Another exception stemmed from the unprecedented right of third parties to appeal planning decisions, later to the independent *An Bórd Pleanála*. vi <http://www.demographia.com/dhi-ix2005q3.pdf> vii Final Principal Demographic Results, Census 2006 viii Bruegmann, Robert. *Sprawl: A Compact History*. University of Chicago Press, 2006 ix Final Principal Demographic Results, Census 2006 DoEHLG Housing statistics x [http://www.rpg.ie/spgr\\_1999.html](http://www.rpg.ie/spgr_1999.html) xi DoEHLG Housing Statistics xii Sustainable Rural Housing Guidelines xiii Hudson, Alan. 'The Trouble with Planners' p118 in *Sustaining architecture in the Anti-Machine Age*. Ian Abley, James Heartfield (eds.) Wiley, 2002

## The Oldest Young Architect in New York City

RAYMUND RYAN

Philip Johnson (1906–2005) occupied a unique position in American culture. His architectural career truly began with the Glass House in semi-rural Connecticut. Over the decades, the site extended to sixty acres; and includes a brick guesthouse, galleries for painting and sculpture, an arcaded gazebo on an ornamental pond, and a small library pavilion. Twenty years ago Johnson bequeathed the entire property to America's National Trust. Now, two years after his death, and the death of Johnson's partner David Whitney, the Glass House is open to the public.

This text is from a conversation at Johnson's office in his Lipstick Building, Manhattan on March 29, 1993. Then in his late 80s, Johnson had created a new practice, although he seemed uninterested in discussing the work itself. Instead, the oldest young architect in New York was concerned with international gossip and spinning the possibility he was a better landscape architect than architect – a judgment supported by Johnson's Water Gardens in Fort Worth, his Thanks-Giving Square in Dallas, and New Canaan ([www.philipjohnsonglasshouse.org](http://www.philipjohnsonglasshouse.org)).

**Raymund Ryan:** Let's talk about your professional development and this, its latest manifestation. Is this a new you?

**Philip Johnson:** Well I change all the time anyhow. But this is a new burst of freedom – I didn't know that you could start to work all over again at 86.

**RR:** You seem to be thriving on it. Are the types of jobs you're choosing to do now different?

**PJ** They're very small, very personal.

**RR:** But your work has always been personal, hasn't it? One thinks, obviously, of the house at New Canaan. Are you still working on it? Are you still adding pieces to the estate?

**PJ:** Yes. But because I've been so busy, we haven't started

digging yet. It will be a visitor reception centre. I gave it to the National Trust. They wanted to have a place for visitors so I thought "Well, why don't I build it? Why leave it to them?" So I'm having fun.

**RR:** The house does seem to be a very autobiographical work. Certainly the original Glass House with the guesthouse next to it.

**PJ:** The original Glass House was just a beginning. It's really a landscape job. With a British sensibility.

**RR:** Someone mentioned that you've referred in particular to some quality of Irish landscape.

**PJ:** Well, I've never been to Ireland but that, you see, would be the best.

**RR:** Why "the best"?

**PJ:** Because it's so beautiful! I just can't conceive of why I never went over to Ireland – it doesn't seem possible.

**RR:** So you weren't thinking of one particular estate, for example?

**PJ:** No particular estate comes to mind but I'm sure that this part is the same. I just worked with what I already had. You see the house is on a bluff. I'm from a farm myself, from Ohio, and so what I wanted was fields. But then the fields are very much like what Capability Brown or anybody in their senses would do, which is to cut the trees. I cut the bushes down. I'm an amateur of course. The undergrowth there, the second growth, is disgusting – I call it the Rain Forest. So I break out of it and of course everyone in town thinks I'm a nasty, horrid tree cutter, anti-Nature and all



Photograph ©Paul Warchol

that. I'm for nature. How good is a great oak tree if trees around it prevent you from seeing that tree?

**RR:** Were they pre-existing stone walls?

**PJ:** Oh, eighteenth-century! They had fallen down of course.

**RR:** Had there been a building there before?

**PJ:** No, but there were stone walls because they wanted to use the fields. In the Colonial days, they built what walls they could get out of the fields. That's why it's no longer farming country – it's all rocks. As you plowed, you took them and put them in the wall. The walls then are about that high, not even three feet. And they outline the old field divisions. I've left them, as a mark, to give you a sense of scale.

**RR:** That sounds like something a young contemporary architect might do...

**PJ:** Well, I hope that I'm a young contemporary architect. Playing on my old age, sir, will not get you anywhere! I didn't realise what I was doing until it was pointed out by Kipnis that I was really a landscape architect. It may be true, I don't know. But, anyhow, the working of that landscape has been a continuing architectural experience from when I bought the land to right now. I'm still cutting. As Mr. Rockefeller said, "you never make a mistake cutting down a tree." If you want a tree, put one in. Of course he had more money. I'm now planting oak trees and, I don't know what you'd call them, linden I guess.

**RR:** How long will it take them to grow?

**PJ:** Doesn't make any difference. The place will be there. So I'm planning a grove of those and a grove of oak.

**RR:** Who was the Roman figure who left Rome and went back to the farm?

**PJ:** That was Horace.

**RR:** You do have that classical background, don't you?

**PJ:** I studied philosophy before I studied architecture, but I wasn't any good. My field of concentration was Greek and philosophy. My Greek was better than my philosophy. Then I couldn't help architecture. I realised that everything I had dreamed about was happening in architecture.

**RR:** When and how did you first meet Mies?



**PJ:** 1929. I called his office and went in! He called it “The American Invasion” – I think there were six of us in the party.

**RR:** I see. You barged in and colonised!

**PJ:** That’s right. Of course we got to know to know each other very well.

**RR:** With the house in New Canaan, one thinks of Mies. But it’s quite different, isn’t it?

**PJ:** One thinks of Mies but it’s very different. The differences are much more numerous than the similarities. And Mies hated the house!

**RR:** Did he visit it?

**PJ:** He had to. We were partners, for the Seagram Building. They’re both made of glass but that of course isn’t enough to make them look alike. I admired his house enormously... that was pure modern. I was more interested in hugging the ground, fireplaces and so on. He was interested in the abstract, blocks floating off into the landscape.

**RR:** So you think that he is more modern in some way?

**PJ:** Oh yes! More modern in the old fashioned sense of modern. The International Style. You don’t use that word – we do. It was a stylistic interest he had, the two plans doing this, you see. Mine is on the ground, his is in the air.

**RR:** I think it was Scully who said you have continually a classicising attitude.

**PJ:** I’m very classical, yes. I’ve found symmetry a very handy crutch.

**RR:** Why is classicism so important for you? Is it because of your philosophy background?

**PJ:** I haven’t the slightest idea.

**RR:** Surely one might say it’s because your interest in architecture is, broadly, a cultural one. More than purely to do with technology, for instance.

**PJ:** Yes, that’s right. I wasn’t interested in his idea of technology of our age, or the zeitgeist. I’m not interested in that.



Photograph © Paul Warchol

**RR:** So your work then has continuity in that it's your interests that keep developing?

**PJ:** Yes, that's right. And I was in the revolution, of course against Mies – which is the normal thing. I do keep changing around a lot! And that's of course what I get attacked for mostly, that I'm a chameleon and therefore not very strong and therefore a bad architect. But I don't agree with them, I'm having too much fun!

**RR:** You went to architecture school with a fantastic group of people: Pei, Johansen, and Rudolph. They're making a mess right now of Johansen's embassy in Dublin...

**PJ:** Are they really?

**RR:** Do you know the building?

**PJ:** Yes, of course I know that building, I was there when he was doing it – he lives right next door to me.

**RR:** They're putting in a wall all the way round the periphery so that the triangular plaza, with the trees in it, will become completely private.

**PJ:** Oh, they want to privatise it! It's security!

**RR:** Yet most of those people would not share your predilection, I imagine, for the younger generation.

**PJ:** I should say not!

**RR:** I noticed that you wrote the foreword to Eric Moss's Rizzoli monograph.

**PJ:** Yes, Eric Moss and the guy who is now head of the department at the Museum – do you know him yet?

**RR:** Terence Riley? No, I've never met him.

**PJ:** Sounds a little Irish to me! Dark Irish. Well, like yourself. Oh, you ought to meet him! Good architect too.

**RR:** What's happening at the Modern?

**PJ:** The next big show is of a badly neglected architect, Rem...

**RR:** He's hardly neglected!

**PJ:** Maybe not, but in America he is. I want to see one of his buildings. I think his buildings

from the outside are very boring. He always jazzes them up with projectors or something...

**RR:** ... graphics and things...

**PJ:** Graphics, exactly! At Euralille he's given all the big buildings you see to other people. He is so damned brilliant he can't be that dim. But I judge by what I see, by my eyes, and Euralille is an eight-storey mess of spaghetti. Why, even the library...

**RR:** Which library are you referring to?

**PJ:** The new library he just got in Paris. It's right behind the Institut Arabe, by Nouvel.

**RR:** And Nouvel? How do the new French people strike you?

**PJ:** Well, Nouvel I like. But he's pushy without being good enough to be that pushy! I thought I liked de Portzamparc.

**RR:** He's coming to Dublin, actually, in the next few weeks.

**PJ:** Is he really?

**RR:** Yes, it should be interesting. There's a lecture series...

**PJ:** I'll get my visit to Dublin yet. My grandmother was a Reilly!

*Note: Franz Schulze, Johnson's biographer, has no recollection of any Irish family connection*

Raymund Ryan is Curator of the Heinz Architectural Center, Carnegie Museum of Art, Pittsburgh. His current exhibition Gritty Brits: New London Architecture is at the University Art Museum, Santa Barbara.

## Madrid Abierto: Curatorship, Public Art and the City

CECILIA ANDERSON

*Madrid Abierto* is an event which takes place in the streets of Madrid every February, coinciding with the art fair Arco. Following an open call for submissions a jury led by a guest curator selects interventions, sound works, screenings and performances to be presented along the Castellana. As there is no theme for the submissions, all proposals are judged on their artistic quality and the way the individual artists approach the city.

In *Madrid Abierto* 2007, once the jury had made their initial choices, the curator Juan Antonio Álvarez Reyes was free to formulate the final exhibition and chose to move towards a less physical and more ephemeral presence. The projects involved sound in public spaces with artists including Susan Philipsz, Oswaldo Macia, Alonso Gil/Francis Gomila and Annika Ström, a film screening project in a house by Mandla Reuter, a light installation by Dirk Vollenbroich, a bicycle equipped with an alarm by Leopold Kessler, religious prayers on street corners staged by Dora Garcia and drawings on advertising boards by Dan Perjovschi.

**Cecilia Andersson** is an artist and curator, based between Liverpool and Sweden. In 2003 she established Werk – a curatorial agency in Stockholm. She is currently part of a workshop formed to re-think *Madrid Abierto*. Here she discusses the 2007 event and her ideas on curatorship, the crossover of disciplines and the role of public art.

### Building Material

What is your workshop setting out to address and what are your hopes for the future of *Madrid Abierto*?

#### Cecilia Anderson

The question of an overall theme when calling for submissions – as well as having a curatorial statement – was brought to the fore this year in *Madrid Abierto*. With artists working from a variety of practices and contexts, for an event so temporal and ephemeral, we have found that this model cannot successfully address the complex issues of art in public space. With such a wide range of expressions the potential of the exhibition to really invade the public realm was not realised.

The workshop set up to reshape and formulate a future model for *Madrid Abierto* sees a themed call for submissions as a necessity. The workgroup is planning future events based on accessibility and continuity. Instead of working on an annual basis and restarting each year, it is planned to create continuity and

remaining in conversation throughout the year - perhaps reaching a point where *Madrid Abierto* can contribute and play a role in decisions being made in the city on a political level.

#### BM

The cross-over between disciplines can be creative territory; artists engaging with architecture and the built environment, architects working with artists, artists and architects engaging with the scientific and technological fields. What do you think the artist can bring to architectural practice?

#### CA

The artists I'm interested in reveal and engage relationships between fields of practice that don't have obvious connections in our society, or where connections have been suppressed for one reason or another. Some artists are able to contribute to architectural practice most especially when it comes to ideas of what constitutes community. Linked to that is









an ability to address what is considered knowledge and to rethink education.

**BM**

How does an event like *Madrid Abierto* stimulate dialogue between disciplines, and between groups of participants with different needs and sometimes different agendas? What is the curator's role in all of this?

**CA**

Artists apply to *Madrid Abierto* with ideas for projects already conceived, and are selected on that basis. The curatorial challenge is to situate what at first may seem like vastly different ideas and create coherence. The curator's role is to elicit and make the most of what already exists. The dialogue is there, artists from different countries and with different

cultural backgrounds and, as you say, a panoply of agendas. The curator's role is also to try to steer the discussions in a direction where the accumulated knowledge and experience of participating artists is exposed. The first two days of the event are dedicated to public presentations by the participating artists. My concern is that this presentation needs to be well moderated in order to bring out relevant and focused information. It is also desirable for the audience to be able to take part in this discussion. The more focused the discussion is, the more both artist and audience will get out of it.

**BM**

You are a curator but your background was initially as an artist. How does your artistic practice inform the way you approach curatorship?

**CA**

Initially I was a critic, writing mainly about photography. One day I realised that in addition to writing and illustrating articles, I could develop similar arguments on a gallery wall. In a gallery space I would be able to let the images speak 'louder' than in a magazine. Only later did I study and practice photography. When photography became a digital medium my interest diversified and I started to look at other digitally based art forms. Lately I've moved out of the gallery context and into a more publicly oriented realm where I'm interested in the social relationships that contemporary artists explore. But writing is still what lurks in the background of my curatorship, writing and reading. I consider both to be creative processes and attempt to make use of both. Reading is what helps me with interpretation and making connections between - what may seem - unrelated territories, visually and/or conceptually. Writing brings the work together and places it in a context that explores what structure works best.

**BM**

How do projects like *Madrid Abierto* respond to or challenge different social and political groups that inhabit the city?

**CA**

In the current incarnation of *Madrid Abierto*, the more sculptural interventions are carried out in central locations and on main routes; few people live nearby. The locations are predetermined and recur annually. The two institutions that host some of the interventions have wide audiences, visiting for music, film and library access. There are also interventions that take place on screens in the underground and sound works transmitted by radio stations. Efforts are made to work across media in order to reach a variety of audiences.

In the case of *Madrid Abierto* it is the artists themselves and their projects that potentially challenge and respond to social and political groups in the city. *Madrid Abierto* functions mostly as a platform, providing the means to produce and market their efforts.

**BM**

What can architects learn from this process of engagement with place and working in the public realm?

**CA**

First of all, I think architects can learn about some kind of social ambition. When you look at works that have a temporal life span, as is the case with the *Madrid Abierto* projects, to be successful they have to function in ways that openly engage people. Projects must be inviting and encourage participation and a sense of belonging. This is where the idea of community comes in. It's socially engaging. Sometimes that is all it takes. Through a longer perspective and at a second reading you are able to establish relationships to context, critical analysis, education and knowledge. How public space is approached curatorially is a relatively new challenge. Public art in our cities is becoming more prevalent and presents a chance to turn the public realm into a space of poetry. The curator plays an important role in seeing this potential and making the most of each opportunity.

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Stephen Mulhall of building material was in conversation with Cecilia Anderson.

## Des/IRE - Designing houses for contemporary Ireland

MIRIAM DELANEY



The National Sculpture factory initiated the Des/IRE conference as a forum for highlighting the current problems in residential development and proposing new planning strategies. Held over three days twenty-five speakers were selected to represent a variety of disciplines including planning, art, architecture, sociology and politics as well as developers and critics. The broad range of speakers held the promise of an open exchange of ideas and cross-discipline interaction.

Dr. Mary P. Corcoran, of Maynooth NUI Department of Sociology, delivered the opening lecture *Making sense of place in the Irish suburb*, which was one of the key papers of the conference. The issues she raised in relation to the sociology of suburbia resonated with a number of later lectures. Dr. Corcoran spoke of assumptions made by architects and urban planners about monotonous placeless suburbia, whereas her research shows a much more nuanced reality. Referring to her study of three suburban towns on the outskirts of Dublin, Dr. Corcoran discussed the importance of image signifiers in achieving a sense of place. Historical signifiers were held to be particularly important in residents' attachment to a particular area, as were local historical groups and the G.A.A. Dr. Corcoran also spoke of the importance, in terms of children's development, of the leftover, informal play spaces between housing estates. Speaking of new sub-urban towns such as Adamstown, she expressed concern about the lack of informal undesigned places for older children. As the only sociologist addressing the conference Dr. Corcoran offered a unique perspective on the elements needed for successful community formation in new satellite towns.

One of the clearest articulations of multidisciplinary communication that the conference promised occurred during Thursday afternoon's discussion on the Ballymun Regeneration project *When people move in*. This exchange between Mick McDonagh [Cork City Architect and former architect with Ballymun Regeneration Ltd.], Ballymun resident Lynda Ward and Evelyn Hanlon of Dublin City Council was lively and engaging. Mick McDonagh outlined the history of the original Ballymun project, the establishment of the Ballymun Regeneration Ltd. and its work to date. A former resident of the Ballymun towers, Lynda Ward now lives in one of the new BRL developments. She spoke from personal experience about the difficulties encountered by the residents in engaging with architects and planners. Her articulate descriptions of the process of change in Ballymun, brought to life the master-plans and drawings shown by Mick McDonagh.



Later on Thursday afternoon Patrick Sheridan of Urban Splash gave a brief history of the UK property development company Urban Splash and outlined the company's philosophy, completed work and on-going projects. He emphasised the economic sense of good design, and referred to an increasingly sophisticated market, which expect design to be a feature of new developments. Sheridan emphasised the important role that marketing plays in Urban Splash's work and the attraction of a star-architect's name on a development.

Dominic Stevens' lecture *Neo-Vernacular: what happens to our society if we build our own homes?* Provided a contrasting viewpoint to Sheridan's address. Stevens' focus was on housing in the Irish countryside, and the destruction of rural communities in the race to gain a step up the property ladder. Building his own home in Leitrim has prompted research into other self-build projects around Ireland. He criticised the language of developers - the branding of property and mortgages – that, he believes has no connection to the making of a home.

Unfortunately, there was no interaction or debate between these two speakers, both of whom offered very different perspectives on the idea of home. This criticism could be levelled at the conference as a whole: vastly differing view points, sometimes juxtaposed in the order of speakers were not given a forum for proper debate or exchange.

Wayne Hemingway, formerly of *Red or Dead* spoke on Friday morning about his recent work in the Hemingway Foundation. Although, at times, he seemed to state the obvious, his outlook was positive and his enthusiasm palpable. Showing depressing images of squalid housing estates, he proposed an evaluation system for planning new developments that would extend beyond the current limited planning concerns. His *housing for life* programme rates housing developments in terms of landscaping, demographic mix, environmental measures, community infrastructure and design quality. The advice offered seemed obvious and yet seemed like a good starting point.

Micheál Martin, Minister for Enterprise, spoke highly of recent architecture in Cork, in particular the de Blacam and Meagher architects' work in CIT. While speaking positively about the need for quality development, the Minister was not seriously

challenged about the government's record on planning and construction. Alan Mee (who spoke later about international planning models), asked the Minister to consider establishing a ministry of spatial planning, an idea that resurfaced at various times during the conference and was met with a mixed reaction. The CABE model in the UK was held up as a viable alternative - an inter-departmental group promoting quality of design, interacting with the existing government departments.

The conference ended on a pessimistic note, with an indictment of the current state of planning and housing in Ireland and little visible sign of change. Frank McDonald claimed that there is no support at Government level for policy change. Firmly rejecting comments from other speakers on the merits of un-planned building zones, he insisted the issue of housing is too important to leave to chance. Both McDonald and Shane O'Toole spoke passionately about the crisis in Irish planning, and the need for urgent action, rather than more discussion. It was unfortunate, given the vigour with which Frank McDonald spoke, that he was not on hand earlier in the day to challenge Minister Micheál Martin on his government's record in Planning and development.

The Des/IRE conference laid down its three aims in promotional literature in advance of the event:

1. To push forward the agenda in Ireland in making a case for an intermediary body between the government, developers and architects
- 2 To demonstrate that good design is increasingly a commercial necessity and
3. To highlight the need for greater design awareness through education and the involvement of the young in the creation of their built environment.

These aims were met with varying degrees of success. The primary aim, listed first, was challenged throughout the conference. The danger of such a body becoming a talk shop between like minded individuals, with little power to change policy or influence those in power was highlighted. No clear consensus emerged about the role of such a group, and as far as I'm aware no steps have been taken to establish this body. The second and third aims remained peripheral during the conference.

The National Sculpture Factory deserves commendation for establishing the conference and bringing together practitioners and theoreticians from many different disciplines. The conference was exceptional in the range of speakers involved and the high level of presentations offered. The short films shown during intervals were of a very high quality, and Gemma Tipton (chairing the event) organised the speakers and debates very well. I would like to see some of the suggestions from the conference brought together and presented to national and local politicians, senior planners and architects. If the suggested inter-disciplinary group is to have a realistic chance of success it will require the broadest possible support base.

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Miriam Delaney is an architect currently working with FKL architects, and teaching in UCD.

## Encounter/Exchange/Experience/EASA

HUGO LAMONT AND JURRIEN VAN DUIJKEREN



### **EASA as a temporary construct**

We are proud to announce that EASA does not exist. EASA is a concept. No institution. No headquarters. No members. EASA is a practical network for architecture, communication and cultural exchange. Everything is provided for a metropolitan routine with minimal sleep, minimal comfort and maximal activity: a refugee camp for designers.

### **EASA as a body for cultural exchange**

Living communally, sharing similar interests and bound together by architecture, there is a strange intensity to the minute-to-minute unfolding of the assembly. Random encounters over breakfast can lead to a decision to leave your job and go to work and live in another country. Collaborating with an inspiring tutor can convince you to go and study in their school. EASA is unrecognisable in comparison with a stillborn Erasmus programme - everyone is going into the unknown. Everyone is parachuted into a foreign culture.

### **EASA as a city within a city**

EASA is the negative of the Forbidden City - everything changes, everything is open, everything is immediate, everything is temporary. This polis operates under the premise of a non-hierarchical collective collaborating through the media of workshops and discussions to produce a body of work that is representative of four hundred people from forty countries living together for two weeks under one theme.

### **Immediate EASA**

EASA is about immediacy. The ankylosis that comes in everyday architectural life - both intellectually in the design process and physically during the construction period - is remedied through enthusiasm, rash decision-making, unmakeable deadlines and the ever-presence of a whole raft of critical voices. For two weeks, participants suck the marrow out of life.

### **Inexperience/Experience EASA**

Inexperience is a defining trait of EASA workshops. Ideas are brought to the assembly from a bewilderingly diverse range of backgrounds and undergo mutations, discussions, arguments, enforced changes and willful moves from a similarly diverse chorus of participants. The realisations that emerge from this twelve-day pregnancy can be radically different from the initial proposition - sometimes these discrepancies are to the benefit of the workshop, sometimes they're detrimental. These rushed, teetering piles of experiences can be instructive, even formative.



### **No Catalogue**

EASA is over-documented. Everybody brings a different experience back with them. EASA is an index of different encounters: work, talk, argument, competition, party, dinner, sport, lecture, sleep, wake. It is your entire college experience crammed into two weeks.

EASA is a collage. EASA is a Saturday Night Special. EASA is a 35 yard screamer. EASA is Glenn Kotche's drumming.

EASA (European Architecture Students Assembly) is an annual assembly of 400 architecture students which takes place over a two week period every August. The aim of the organisation is to encourage cooperation between students and young architects from over forty European countries through the media of architectural workshops, communal responsibility, lectures, debates and exhibitions. Ireland will host EASA for the first time from the 9 - 24 August 2008 in Dublin and Letterfrack under the theme Adaptation.

[www.easa008.ie](http://www.easa008.ie)

[www.easa.tk](http://www.easa.tk)

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Hugo Lamont is an Irish architect. Jurrien Van Duijkeren is a Dutch architect. They know each other through EASA.



# Membership Form

Dear Members,

As a voluntary non-profit organisation our dependency on the support of our members is paramount. It is only through the continued involvement of our membership that the AAI can fulfil its charter 'to provide a medium of friendly communication between members and others interested in the progress of architecture'. To this end we look forward to seeing you at AAI events.

Regards,  
The Committee

(PLEASE FILL OUT ALL IN BLOCK CAPITALS)

Membership term runs from 01/07/07 to 30/05/08

Name:

Address:

Email:

Nationality:

Membership category:  (Please tick one from the list A-H)

Student (school)  Year

## Membership category/fee structure

### Full Membership

- A** Member (other then below) €80
- B** Member (retired or unemployed) €20
- C** Member (student over 2nd Year) €20
- D** Member (student 1st & 2nd Year) Free
- E** Member (honorary) Free

### Associate member

- F** Associate member €20  
(other than approved organisations\*)
- G** Associate Member (single event - non student) €10
- H** Associate Member (single event - student) €10

(\*members of ICS, SSI and EEI)

*Important Notice Regarding Site Visits: The AAI Insurance Policy covers only paid-up members of the AAI, for instance children are NOT covered. Entrance to site would be refused to non-AAI members. It is also requested that AAI-members visiting sites provide their own safety equipment (minimum safety boots and hard-hat). Entrance to site could be refused for lack of safety equipment.*

## Payment Details

For Credit Payment please fill out in block capitals. All sections must be completed along with one payment method only.

Name:

Billing address:

Membership Category:  (A-H)

Applicable Fee:

### Credit Card Payment

Visa  Mastercard  Other

Card Number:

Expiry date:  /  Security Code:

Signature: \_\_\_\_\_

Laser Card Payment (IN BLOCK) BOI  AIB  OTHER

Card Number:

Sort Code:

Expiry date:

Signature: \_\_\_\_\_

Phone No.

Office No.1, 43/44 Temple Bar, Dublin 2.

t: + 353 1 6351428 f: + 353 1 6351429

e: aaiadmin@eircom.net w: www.aai-ireland.com

In the interest keeping our members up to date with all events, the AAI would like to encourage as many members that have the facility to receive email to kindly fill out the following:

- I would like to be reminded of AAI events by email
- I would like to receive the AAI events by email (PDF format)

Age Group: 19-29  30-39  40-49  50-59  60+

AAI Lectures & Site visits qualify as 'Formal CPD activity' as approved by RIAI council

- Lectures
- AAI Awards
- Site Visits
- Exhibitions
- Building Material
- Social events (tennis tournament etc)

