

The Broadening Horizons of Environmental Psychology: Where are we going wrong, and where right?"

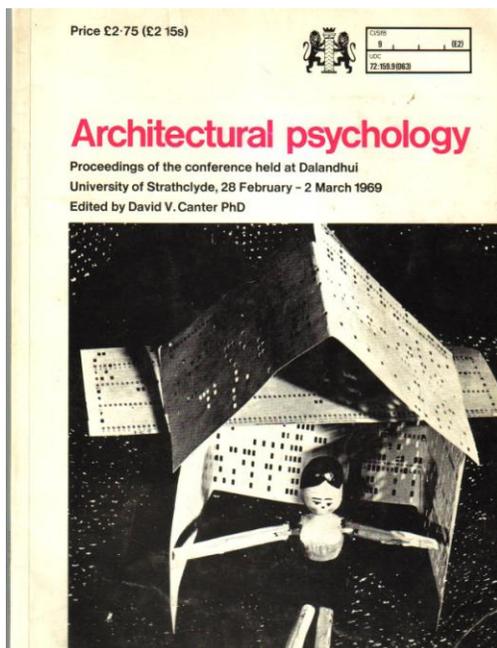
David Canter gives a brief account of the origins of Architectural Psychology its evolution into a neglected aspect of Environmental Psychology and the emergence from it of the vibrant field of Investigative Psychology.

ENVIRONICS IN THE WILD

Dalandhui is the name of the country retreat owned at that time by Strathclyde University, on the shores of Loch Lomond, a short drive North of Glasgow. Its idyllic isolation made a curiously intense setting for the 50 or so people who crowded there for the first conference to introduce Architectural Psychology into Europe, over the weekend of 28th February to 2nd March 1969. I had organized what became known as the *Dalandhui Conference* having just completed my PhD on the psychological implications of open plan office design, after a degree in psychology at Liverpool University and was working as a psychologist within the School of Architecture at Strathclyde in the Building Performance Research Unit established by Tom Markus. So the label 'Architectural Psychology' with direct analogy to Educational or Industrial psychology seemed an obvious one for a conference to launch the new discipline we were developing.

I had just turned 25 and had all the confident optimism of my youth. I thought Architectural Psychology was an inevitable area for the development of psychological theories and methods in ways that would help architects to do their job properly. I and the others who readily agreed to give papers had the arrogance so often found in the behavioural sciences that our empirical research would effortlessly open the way to a new humane architecture.

Looking back on the papers that were published in a book by the Architectural Press for the sum of £2 15s (Canter, 1970) it is interesting to see the variety of topics which were covered, all of which are still relevant today but most of which have fallen out of fashion as 'green' studies have taken over. For example there were laboratory based experimental studies such as that from Ian Griffiths on thermal comfort or Ifor Payne's innovative comparison of pupillary responses of architects and non-architects when looking at pictures of buildings. There were also reports of field studies including David Walters' examination of railway noise annoyance and Gordon Best's forward looking study of direction-finding in buildings. I reported a study of space use in lecture theatres with different seating arrangements to show how students actively make use of space in relation to their understanding of what they think will happen in that space.



The emphasis was distinctly at the scale of building and the focus on the users of buildings. Only Terence Lee, recounting the studies he had carried out a few years earlier, of the meaning of 'neighbourhood', dealt with larger scale environments. But even this work only dealt with local aspects of people's experience not broader environmental implications.

There was a lot of soul searching in many presentations; a call for appropriate theories and methodologies, consideration of the differences between psychology and architecture, and how psychology could influence architecture. Importantly, I recall no discussion of how architecture could influence psychology other than the plea to get psychologists out of their laboratories.

This was an era when some psychologists in the UK were beginning to shake off the chains of behaviourism and the aping of what they thought were the methods of hard science. For me this was most clearly articulated in George Kelly's Personal Construct Theory. The title of one of my papers captured this; 'should we treat building users as subjects or objects?' Reflecting a perspective on models of how people treat each other that I realise still exists in my work today 35 years later when I consider whether serial killers treat their victims as people, vehicles or objects.

The Prologue I wrote (under the title *Environics in the wild*, pity but the term *Environics* never caught on) for that volume resulting from this first conference captures some of the heady enthusiasm of those early days in which all involved saw the clear potential for a productive interaction between architecture and psychology and our desire 'to entice the outsider into the field of architectural psychology'. Part of this enthusiasm arose from no-one being at all sure what the field really covered or what the appropriate methodologies or theories were for the development of the field. There was also interesting, and I think still relevant, discussions of what the roles of architectural psychologists should be. Bill Hillier, notably, who went on to develop the widely used 'space syntax', raised the fundamental point of what architecture should be taken to be, criticising psychologists for being too lax in their definition of environment.

The whole consideration of a psychology of buildings and architecture had been gaining momentum since Peter Manning set up the Pilkington Research Unit in the Department of Building Science and employed a psychologist, Brian Wells (my PhD supervisor) to contribute to multidisciplinary studies of Schools and Offices. This work had its roots in surveys conducted after the Second World War for the UK government as preparation for guidelines on housing design, due to the awareness of the need for the rebuilding of the country after the devastation of aerial bombardment. But it was the establishment of a unit with the clear aim of evaluating the performance of buildings by Tom Markus that drew me into a milieu where I could see the wide range of possibilities for psychological contributions to architecture.

The affiliation of the dozen contributors to the *Dalandhui* volume shows how much this field was the child of developments in architectural thinking. Gordon Best, Ivor Stilitz, and Peter Stringer were at the Bartlett School of Architecture and Bill Hillier was soon to take up a post there. David Walters was at Birmingham School of Architecture and Ifan Payne at the Welsh School of Architecture in Cardiff, from where Tom Markus had recently come to take up the Chair in Building Science at Strathclyde University. He had come there after association with Peter Manning's Pilkington Research Unit, where he had worked on the building science and perceptual challenges of window design. Ian Griffiths, although an experimental psychologist, was also working in an engineering context at the Electricity Council's Research Centre. Except for Terence Lee, who was in a psychology department at University of Dundee, the other contributors, Jackie Lau, Adrian Hill and myself were all in the school of Architecture at Strathclyde. The second Architectural Psychology Conference a year or so later, and the emergence of IAPS all had roots in Architecture Departments until Terence Lee became head of the Psychology at Surrey University and asked me to join him there and set up a Master's programme in Environmental Psychology in 1971. But even then this was still regarded as somewhat maverick within the domain of academic psychology and most of the interest in the work we did came from architecture and planning departments.

It is worth remembering that this was all before President Nixon had declared the management of the environment as a major political issue and long before global warming was a widely debated topic. The 'green movement' had not been named and young activists were far more concerned with nuclear disarmament and getting rid of Trident than melting ice-caps or the demise of whales. Indeed, I remember Ian Griffiths telling me that the Electricity Research Centre he joined was originally set up to help increase electricity usage because it was feared nuclear power stations would generate more electricity than they could get rid of! It was also still the days of high-rise, tower blocks that looked like up-ended match boxes, and rows of uninspiring urban sprawl. It was claimed that more housing had to be built by the end of the century than had ever been built throughout history. The same probably went for schools,

hospitals, office blocks, airports and most other building types. There were therefore many agencies trying to work out how to guide the design and development of all these buildings, and a small number of them and the people designing them did think that there could be some help in making the designs what we might today call more 'user friendly'. It was into this framework, in part, that psychologists were being sucked.

Architectural education was also undergoing one of its perennial bouts of navel gazing. Bill Hillier, Peter Stringer and, of course, Tom Markus and Peter Manning, had all found their way to psychology as part of activity enhancing how architects were educated, and my first book (*Psychology for Architects*) attempted to bring together various strands of psychology from perception, by way of social psychology, through to organisational psychology that were being introduced into schools of architecture. By the mid 1970's most Schools of Architecture in the UK had a reasonable amount of psychology being taught by psychologists. Indeed when I meet practicing architects today who qualified during the 1970's they speak of their awareness of a psychological perspective on architecture that they imbibed during their training. But on the rare occasions when architecture students contact me these days they express surprise that there is actual a named field of scholarship that links psychology and architecture.

But the attractions to many psychologists, and certainly to me, of the opportunities provided by Schools of Architecture was that they opened up the possibilities of a psychology that was not so rigid and experimentally based as was then (and sadly often still is) the norm in many Departments of Psychology. We did not need to study the behaviour or pigeons, goldfish, or rats, or get undergraduates to press buttons in response to flashing lights, or even get psychiatric patients to carry out obscure tests that bore little relationship to their personal pain or difficulties in dealing with the world. In architecture we had ordinary people in real life. They may be patients in hospital, or children in schools, people relaxing in their living rooms, or walking their dogs in the park, office workers trying to cope with heat and noise, or elderly residents of a nursing home trying to find some interest in life. The people we studied were not to be constrained by the demands of some rigid set of hypotheses or some artificially contrived experimental setup. For me this freedom opened-up a pathway that has taken me to a very wide range of topics, as varied as human behaviour in emergencies, the study of serial killers and rapists and even recently prisoners' experience of incarceration.

CHALLENGES TO THE DEVELOPMENT OF ARCHITECTURAL PSYCHOLOGY

There were, almost inevitably, many different cross-currents that undermined the possibilities of the field of Architectural Psychology achieving its potential at the core of architecture, planning and design, as we all had hoped, and some had believed, was possible at Dlandhui. One of the problems we discovered very early on was that in simple direct terms, outside of extreme conditions which can be easily determined, the environment does not directly affect behaviour. So the architectural quest for a few pointers on how to design a building that would make people happy was doomed to failure. Of course social scientists are adept at inventing labels for this discovery, talking about environmental 'interaction' or 'transaction', to capture the fact that it is social processes that influence what is acceptable in any location, and thus how it is experienced, and the physical surroundings may either help or hinder that, but they do not cause the actions or reactions.

This realisation set in motion the natural process of psychologists and other social scientists drifting towards studies of people and their reactions, or indeed examination of what they do to environments, rather than what the environment does to them. Such studies quickly lose interest to an architect who may want, for example, some evidence to support his desire to make the external wall of a building curved even though his client may tell him it will make the building twice as expensive. If the influence of the physical environment is indirect at best, and possibly non-existent, then social scientists are free to indulge their old addiction for opinion questionnaires and attitude surveys. The whole field therefore slipped away from being an applicable branch social science drawing on many different disciplines to being just another area of social psychology focussing on attitudes and how to change them. This lends itself well to the

social scientists' interpretation of 'sustainability' but reduces our influence on these crucial matters for human survival in the same way that we lost any influence within architecture.

To my mind our central weakness in architectural psychology was that we insisted on defining our research problems in terms that were drawn from psychology rather than engaging directly with what it is that architects do. To give a concrete example, instead of my earlier fictional one of curved walls, I was once asked to give guidance on the design of a casino. To provide this guidance I observed what went on there and interviewed staff and management as well as going round a number of casinos with a friend who was an experienced (and reasonably successful) gambler – described in my book *Psychology in Practice*. From this I built up a model of the patterns of activities and their interrelationships, the particular physical demands that some of these activities required and some of the preferred modes of use, for example gamblers like to face the croupier across the gaming table, not from the side if possible. In addition I explored the meanings of the place to the various users and expressed that in a way that the architect could draw on to influence his own creative invention of the appropriate design. This whole bundle provided a framework for the architect to engage with, but specified very few hard and fast details.

THE PSYCHOLOGY OF PLACE

What is especially interesting about this approach is that what is being offered are systematic summaries of a complex process informed by a theory (*The Psychology of Place*) of how people interact with and make use of their surroundings. The contribution for science is not a set of facts or findings but a way of thinking about processes. This may seem very abstract but as Kurt Lewin said 'there is nothing so applicable as a good theory'. I have recently seen the power of this in a Scottish court case in which I appeared as an expert witness, specifically employed as an environmental psychologist.

The case was brought by a Mr Napier who claimed that his imprisonment was inhuman and degrading and therefore illegal under Article 3 of the European Convention on Human Rights. It is instructive to quote directly what the judge said in his argument for why he found in favour of Mr Napier, quoting directly from my evidence:



" 1. Within the cell, the lack of opportunity to create appropriate 'places' for activities, most notably the lack of a distinct place of excretion and associated washing facilities.

2. The sharing of the cell, causing the lack of possibility for creating a "personal space" and distinct area or "territory" for his own activities.

3. The pressure of overcrowding and lack of enough facilities, on the landing and in the block, on the opportunities there might otherwise have been for hygiene, recreation and 'psychological release'.

4. The arbitrariness yet excessive control of the regime over the minutiae of daily activities.

5. The impact of Mr Napier's eczema on his ability to make use of coping strategies that may have alleviated the brutalising quality of his incarceration.

6. The uncertainties associated with being on remand.

7. In my opinion, these conditions interact to create circumstances that in total are more debilitating and dehumanising than could reasonably be expected for imprisonment."

He said "that view is consistent with the impact that the conditions did in fact have upon the petitioner". In other words as any student of architectural psychology will recognise, the judge completely accepted the relevance and importance of a conceptual analysis that was derived directly from a quarter of a century or more of the study of how people use and experience their surroundings.

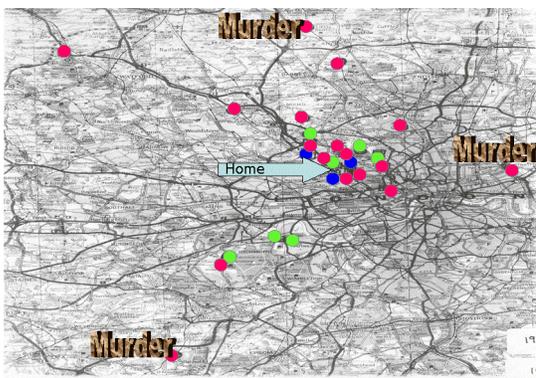
Besides the theoretical challenges of determining how the environment has an impact, and the weaknesses of a perspective that ignores what the decision makers we are trying to interact with are actually doing, there is a third process that has undermined the possibilities for the development of the field. This is rarely spoken of because we pretend science is neutral and untrammelled by mundane concerns. But the simple fact is that very few architecture departments are willing to promote people who are not trained architects. There are exceptions and a notable few (many whom I suspect may read this essay) have risen to senior levels in architecture without being 'architects'. For the less effective and/or fortunate career development is only possible within a social science department. There are a few consultancies, mainly in the USA, that employ psychologists on design and planning projects, but it is the nature of consultancy that it does not contribute a great deal to the development of the discipline. Anything of commercial value is kept in-house and there is often no time or particular incentive to develop for publication the non-commercial work. So psychologists interested in architecture and the environment drift into university departments of many different hues, whether it is psychology, health studies or education. Once there they have to hold their own against colleagues in the department's discipline, removing them even further from direct engagement with environmental decision makers.

Within this framework the rather ambiguous term 'environmental psychology' is much more attractive than the limited professional orientation implied by 'architectural psychology', or the even vaguer variants on 'people-environment studies' or even 'social ecology'. Once released from the pull of architecture I and other psychologists began to explore issues that were more obviously within the realms of the behavioural sciences. My book *The Psychology of Place* was one of the first results of this, really combining aspects of Barker's 'ecological psychology' and Kelly's 'personal construct theory' (although perhaps I did not realise at the time I wrote it how much I had drawn on their pioneering work). This looked at the larger scale environment following up some of the issues Terence Lee had raised in his studies of neighbourhoods, drawing on the work of Bartlett to consider the mental representations people developed and used to help them make sense of their surroundings. The strongly cognitive component of these issues meant that they were soon absorbed into main stream psychology in the work of such leading psychologists as Niesser or Gibson.

GEOGRAPHICAL PROFILING

A particular strength of this work, though, remains from the early initiatives within the profession of architecture. Rather than turning the study of mental maps into a laboratory based problem, which would have been so easy, the psychology of place is still very much an exploration of how people do actually make sense of their world. This meant that when I was asked if I could 'help catch a man before he killed yet again' (as I discuss in my book *Criminal Shadows*) I thought of this criminal as making use of his surrounding like anyone else in his situation might.

The Series of Rapes and Murders Carried Out
by John Duffy



This enabled me to make sense of the pattern of rapes and murders in order to determine where the offender may have lived at the time of his offences. This turned out to be very helpful to the police.

With that intervention I realised there was a whole range of applications to police work that paralleled what we had thought through with architects. Police were also decision makers like architects were supposed to be, so I started to develop the idea of an 'Investigative Psychology'. But I determined from the outset that we would not make the same mistake as we had made in architecture. From the very beginning we sought to work directly with the police and to understand not only their decision processes but also the most effective ways of supporting those decisions. To be fair it is probably much easier to contribute to the core of police work than to the core of architecture. We are concerned directly with the actions of people, even though they are criminals, rather than with the indirect consideration of building forms that may or may not have relevance to human actions, but certainly have relevance to how architects are evaluated by their colleagues and potential clients. Their evaluation by prospective clients may have little to do with the issues to which psychologists can contribute directly, but the understanding of where an offender may live is of immediate significance to a detective.

It also turns out, as I discovered very fortuitously in the case that led to the conviction of John Duffy, that many criminals have patterns of spatial behaviour that yield interesting results when interpreted from the point of view of the sort of mental maps they imply. I was able to explore this possibility in direct application to a number of investigations as I describe in my recent book *Mapping Murder*. We have now been able to take that even further and develop decision support systems, such as my software Dragnet, that can be used directly by police officers.

All this may seem a long way from the Dalandhui conference but the pathway feels very straightforward for me. However, along the way I, like many other architectural and environmental psychologists have left aside very many important questions. This is a pity because I fear the current explorations of psychological contributions to sustainable environments are making many of the mistakes we made at Dalandhui. They are exploring abstract global attitudes in isolation of what it is that environmental decision makers actually do. They are holding onto the 'professional arrogance' which sees the world's problems in peoples' cognitions or attitudes rather than recognising that economic and political processes, as well as entrenched and often irrational value systems, and daily habits, all need to be incorporated into any consideration of any interventions. But most fundamentally they are missing the point that was clear to us at Dalandhui and is still valid today. It is in the day to day experience of buildings and the proximal surroundings that people interact and transact with their environment. Heating, lighting, noise levels, space use, privacy, crowding, way-finding, the symbolic meaning of built and natural forms, and how we move around between them, and all the other details that make up the direct experience of architecture and landscape, are where humanity influences the earth.

We may have been wrong to look for the influence of architecture on people as we realised at Dalandhui. We may be correct now to redress this balance and concern ourselves more with how people are influencing the nature of the environment, but unless we put as much effort as possible into understanding the interaction between these two processes we may find that in another forty years social scientists are still struggling to have their important messages heard.

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