

architecture institutions and change

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On the Rise and Apparent Fall of Architectural Psychology in the 1960s, 1970s and early 1980s

The continuing revisions of modernist positivism post World War II led to the increasing recognition of the necessary integration of functionalism with humanistic concerns. As a consequence, psychology, especially behavioural and cognitive psychology, became an area of interest for architecture, urban design and landscape architecture research. During the 1960s this rapidly developed into a diverse field of study, especially blossoming during the 1970s, with many publications and the establishment of new periodicals. However, by the start of the 1980s synergies between architecture and psychology began to fade.

This paper provides a historical review of the rise and apparent fall of architectural psychology, in English-speaking countries, during the 1960s, 1970s and early 1980s. It investigates the conceptual and methodological differences within the variety of relevant works in an attempt to provide a historical account of architectural psychology in this period. Central to the analysis are the semi-institutional influences of journals, professional organisations, conferences, curriculum developments, and most crucially the disciplinary self-referentialism which acted to support and sabotage interdisciplinary collaborations. The paper introduces additional complexities that emerged after this period of peak interest through examples of continuing studies on interactions between people and spatial environments. This is the case for some neighbouring disciplines, such as landscape architecture, and some non-English-speaking countries, such as Portugal, Spain and Brazil.

During the 1960s and early 1970s study of the relationship between human behaviour and the environment was “one of the fastest growing [fields] ... of both psychological and architectural research.”¹ The first conferences devoted to this field were held, new organisations formed, and intense publication followed. However, at the time this was a new field of study, yet to find a name and disciplinary home.

This paper outlines the history of this period by examining the institutional and semi-institutional role of conferences, professional organisations, educational streams and journals. The focus is on the relationship between psychology and architecture, and more broadly between various social sciences and environmental design disciplines, as this new field of study began to articulate itself. Especially important are the dynamics behind the establishment of environmental psychology as a branch of psychology, and the gradual disappearance of architectural interest in psychology.

The rise of environmental psychology

In 2007, Spanish environmental psychologist Enric Pol provided the most comprehensive account of development of environmental psychology, attributing great importance to the late nineteenth and the early twentieth-century developments in Germany and especially to the work of Willy Hellpach whose *Geopsyché* (1911) was translated into French, Dutch and Spanish, but not into English.² Pol’s text also provided a more detailed discussion than common in English texts of the relationship between Gestalt psychology and the Bauhaus during the 1920s in Germany, and of the influence of George Simmel on the formation of the Chicago School of Sociology during the 1920s and 1930s.

Nevertheless, there is an agreement between historians that developments during the 1960s, especially in the United States, led to the establishment of environmental psychology as a distinct field of study.³ For this, the work of Roger Barker and his associates have been acknowledged as particularly significant because their work “laid out a new method for the study of behaviour in the ecological environment based on systematic observation, behaviour specimens, and settings.”⁴ These studies started in 1947, with some early results by the mid-1950s, and with a large proportion of the work following in the 1960s using similar methodological procedures. By the late 1950s two unrelated groups had investigated the impact of hospital ward design on patients: in Canada, Humphrey Osmond and Kyo Izumi studied psychiatric wards, while in the US, Harold Proshansky, William Ittelson and Leane Rivlin researched mental hospitals.⁵ In both cases procedures similar to Baker’s were used. For example, Proshansky, Ittelson and Rivlin reported on experiments with changes of furniture layout to influence the activities on the ward supportive of social interaction or isolation.⁶ Not much later, similar studies by David Canter evaluated the effect of ceiling shape (sloping or flat) on people’s sitting positions.⁷

The 1950s also saw the post-war construction boom, which continued and intensified in the 1960s. Although these efforts took a diversity of forms, especially debated was the relationship between the old and new in cities, as “many [town] councils decided that their

town centres were badly congested and needed replacing by something truly modern.”⁸ But such urban renewal projects were met with public controversy. Publications appeared including Kevin Lynch’s *The Image of the City* (1960), Jane Jacobs’ *Death and Life of Great American Cities* (1961) and Herbert Gans’ *The Urban Villagers* (1962). These works questioned modernist principles of urban planning and design, asserting lack of a deeper understanding of the culture and mental processing of the inhabitants.⁹ By the mid-1960s there was recognition that professional architects and planners “could no longer fully know and understand the future inhabitants of their buildings in the way that was possible in the past.”¹⁰ Such events created the perceived need for study of humans and their environments.

Therefore, while the behaviourist studies of Barker formed the methodological foundation for this developing field of study, the need was fuelled by the intensity of public debate over big modernist urban renewal projects. This combination perhaps explains the intensity of discussion and academic development in the area during the 1950s and 1960s. It is upon this set up that institutional and semi-institutional establishment of environmental psychology took place.

By the late 1950s, a series of conferences had taken place. In 1956, the American Institute of Architects (AIA) approached the National Science Foundation (NSF) asking for a conference on the “relationship of the physical, biological, and social sciences” in search for optimal environments for human activities, although this did not take place until 1959 at the University of Michigan, while in 1958, as part of an AIA Convention in Cleveland, a seminar was held on the same topic.¹¹ Even more significant were two US conferences on architectural psychology held in 1961 and 1966 at the University of Utah convened by architect Roger Bailey and psychologist Calvin Taylor.¹² In 1968, the Design Methods Group held its first conference at the Massachusetts Institute of Technology (MIT).¹³ By the late 1960s similar conferences were taking place elsewhere in the US,¹⁴ and in the UK under the strong influence of David Canter.¹⁵

By the end of the 1960s, several significant events indicate the establishment of environmental psychology as a field of study was fully achieved. The first PhD programme in environmental psychology was established in 1968 at the City University of New York (CUNY),¹⁶ the Environmental Design Research Association (EDRA) was established in 1968,¹⁷ and the journal *Environment and Behavior* in 1969, also at the CUNY.¹⁸ All of these still continue. By the 1970s, establishment was further confirmed with the publication of the 690 page *Environmental Psychology: Man and his Physical Setting*,¹⁹ edited by Proshansky, Ittelson and Rivlin, collaborators at the CUNY who were instrumental in establishing its environmental psychology PhD and *Environment and Behavior*. Their opening statements assert the need to summarise diverse works from the preceding period, and to do so from a position of environmental psychology as a field of study within psychology,²⁰ although they felt their definition of environmental psychology could be “hardly satisfying for these social scientists, architects, and designers who had more than a passing interest in the field.”²¹

This establishment of environmental psychology was to a large extent possible due to

institutional activities primarily associated with the CUNY. The support that the CUNY provided was crucial because they supported some of the early research projects in this area, which has led to methodological articulations, and later supported the establishment of an educational programme and the journal. Thus, the brand of environmental psychology articulated at the CUNY significantly influenced the way others perceived this field, and that included the focus on the US context and behavioural studies and psychology at its core.

Although behavioural studies were the basis upon which other interests were integrated, neither the CUNY group nor the early development of environmental psychology were exclusively focused on behavioural studies. During the early 1970s similar studies continued, but were also expanded to include a more explicit interest in cognitive processing of space. Ittelson edited a book on *Environment and Cognition* (1973) (which included a chapter from Robert Venturi's *Learning from Las Vegas* (1972)).²² Similarly, Canter's *Psychology for Architects* (1974) combined both behavioural and cognitive understanding of space.²³ Even during the 1950s, Lynch collaborated with György Kepes at MIT whilst developing his *Image of the City* project. Kepes was educated in Germany and used principles of Gestalt in his work.²⁴

Because environmental psychology a very diverse and active field of study during the 1960s and early 1970s, important works appeared in different locations and under the influences of various related disciplines. By the late 1970s there were dozens of books in this field,²⁵ and by the early 1980s the first comprehensive textbooks on environmental psychology appeared.²⁶

Prolific development of the environmental psychology during the 1960s and the 1970s, centred in the US, echoed in the subsequent decades in other places and in related disciplines.²⁷ For example, the International Association People-Environment Studies (IAPS), the European counterpart of the EDRA, was only formed in 1981.²⁸ Similarly, in the discipline of landscape architecture interest in environmental psychology started from the early 1970s, but peaked around the mid-1980s.²⁹ In Portugal, Spain and Brazil great increase of interest in psychology in relation to architecture and landscape architecture appeared after the end of the dictatorships in these countries, reflecting a marked increase in importance attributed to the social sciences.³⁰ In recent years, Henrique Muga's *Psychology in Architecture*, published in Portugal in 2005, and Teresinha Maria Gonçalves' *City and Poetry – an environmental psychology study on urban environments*, published in Brazil in 2008, clearly continue this trend,³¹ unmatched by contemporary works in English.

Some of these on-going positive echoes of environmental psychology in other disciplines are due to the discipline specific relevance of some its frameworks. For example, in landscape architecture the idea proposed by the environmental psychologists that natural landscapes satisfy human biological needs better than any built environment, and that this is why people prefer natural landscapes over urban ones,³² is supportive of the overall efforts of landscape architects, and thus this collaboration can be easily seen favourable.

On the apparent fall of architectural psychology

However, by the start of the 1980s it is possible to observe that while environmental psychology continued its development, architecture was rarely mentioned in relation to it. The establishment of the *Journal of Environmental Psychology* in 1981 by the Academic Press in London provides a concentrated discussion of the scope and aims of environmental psychology at this time, making it an excellent place for evaluating the relationship between psychology and architecture. In the editorial of the first issue, founding editors Canter and Kenneth Craik³³ repeat the general invitation for architects to join the journal, but the tone in which this is done is very different from the editorial written by Canter in the late 1960s.³⁴ Environmental psychology is now explicitly argued as a field of study belonging to psychology, even if still interdisciplinary, and editors explain that it is important “not to restrict [the] definition [of the] domain through premature and overly narrow definition,”³⁵ and explain that the early definitions of the field “based solely upon issues derived from architectural and design and urban planning would not have anticipated the research topics subsequently generated by the environmental movement and the current concerns with energy policy.”³⁶ Therefore, inferred in the editorial is the necessity and importance of including study of the environmental movement and energy conservation as part of environmental psychology. This led to broadening its scope from architectural to environmental and required firm anchoring within psychology.

One area where negotiation of the relationship between architecture and environmental psychology was specifically discussed were book reviews in the *Journal of Environmental Psychology*, which in the early issues included architecture books.³⁷ These sources tended to inform psychologists that during the late 1970s and early 1980s the architects were most interested in semiotics, and meaning in architecture and design, and they mentioned authors such as Christopher Alexander, Charles Jencks and Alan Colquhoun.³⁸ This suggests a disciplinary divide given that semiology and linguistic interest in meaning was not at the core of research interests in environmental psychology at the time.

However, these texts went further than just identifying the difference in focus. In 1982, Groat reported on perceived differences between modernism and post-modernism, showing that regardless of the intensity of the debate within the architectural profession, people outside it (in this instance, accountants) did not see the difference.³⁹ In fact, from the position of environmental psychology, it seemed stylistic differences were not core to the psychological concepts lay people used when engaging with architecture. Rather, Groat argued that early empirical studies in environmental psychology⁴⁰ were primarily concerned with “the signified” and she quotes Canter (1975) saying their studies searched for “those general dimensions which may be shown to exist in all cases [environments].”⁴¹ This was fundamentally different than architectural interest in the relationship between “the signifier as well as the signified.”⁴²

Not only was stylistic differentiation in architecture under attack, but experiments conducted by Proshansky, Ittelson and Rivlin in 1970 also showed that “[w]hen a change in physical

setting is not conducive to a pattern of behaviour that has been characteristic of the setting, that behaviour will express itself at a new time or location."⁴³ This implied that people could not be forced to change their behaviour to fit the space, but rather that they tend to find ways around the limitations imposed by space to retain their behaviour. Such a finding undermined one of the core assumptions underlying modern architecture: that people will learn over time to appreciate it. In this context it hardly seems surprising that architecture turned its back on studies which were finding its assumptions to be untrue or irrelevant.

However, this noticeable reduction in collaboration between architects and environmental psychologists during the 1980s coincided with the concerns that the very field of study of environmental psychology at that time stopped growing.⁴⁴ Some more modest organisations devoted to this field, such as Australasian PAPER (People and Physical Environment Research) established in the early 1980s, faded within a decade.⁴⁵ It is through the more explicit integration of the pro-environmental concerns during the 1990s that environmental psychology has been revived and redefined.⁴⁶ However, to date it is hard to observe that architecture has joined this revival.

Conclusion

This paper has shown that the institutional and semi-institutional factors played a significant role in the process of the establishment of environmental psychology as a field of study. The active support from psychology, especially from the CUNY, played a critical role in environmental psychology becoming firmly part of psychology. Despite the excitement observed during the 1960s and early 1970s, by the 1980s differences and decrease in collaboration dominated. It is clear that during this period all disciplines in question evolved, and the format of their collaboration was renegotiated, and from that position the reasons for architecture and environmental psychology growing apart seem clear. However, in the 30 years since this separation both disciplines have undergone much further change, and in both disciplines much work has been done towards becoming more pro-environmental and pro-sustainable. Yet, the disciplinary separation has persisted. Perhaps there still remain some mythicised narratives regarding the rupture between these professions.

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- 1 Gary T. Moore, "Environment and Behavior Research in North America: History, Developments, and Unresolved Issues," in *Handbook of Environmental Psychology, Vol. 2*, ed. Daniel Stokols and Irwin Altman (Malabar, Florida: Krieger Publishing Company, 1991, first published in 1987), 1365.
 - 2 Enric Pol, "Blueprints for a History of Environmental Psychology (I): From First Birth to American Transition," *Medio Ambiente y Comportamiento Humano* 7, no. 1 (2007): 95-113; Enric Pol, "Blueprints for a History of Environmental Psychology (II): From Architectural Psychology to the Challenges of Sustainability," *Medio Ambiente y Comportamiento Humano* 8, no. 1-2 (2007): 1-28.
 - 3 Gary H. Winkel, "Editor's Introduction and Preface," *Environment and Behavior* 1, no. 1 (1969): 3; David V. Canter and Kenneth H. Craik, "Environmental Psychology," *Journal of Environmental Psychology* 1, no. 1 (1981): 1-11; Robert Gifford, *Environmental Psychology: Principles and Practices*, 2nd ed. (Boston: Allyn and Bacon, 1997); Marilia Bonnes and Gianfranco Secchiaroli, *Environmental Psychology: A Psycho-social Introduction* (London: Sage Publications, 1995, originally published in Italian as *Psicologia Ambientale* in 1992); Pol, "Blueprints for a History of Environmental Psychology (I)."

- 4 Moore, "Environment and Behavior Research in North America," 1364.
- 5 Moore, "Environment and Behavior Research in North America," 1364-5; Bonnes and Secchiaroli, *Environmental Psychology*.
- 6 Harold M. Proshansky, William H. Ittelson and Leanne G. Rivlin, "The Influence of the Physical Environment on Behaviour: Some Basic Assumptions," in *Environmental Psychology: Man and his Physical Setting*, ed. Harold M. Proshansky, William H. Ittelson and Leanne G. Rivlin (New York: Holt, Rinehart and Winston, 1970), 27-37.
- 7 David Canter, *Psychology for Architects* (London: Applied Science Publishers, 1974), 21-24.
- 8 John R. Gold, *The Experience of Modernism: Modern Architects and the Future City, 1928-53* (London: E&FN Spon, 1997), ix.
- 9 Anthony Raynsford, "Civic Art in an Age of Cultural Relativism: The Aesthetic Origins of Kevin Lynch's *Image of the City*," *Journal of Urban Design* 16, no. 1 (2011): 43-65.
- 10 Canter and Craik, "Environmental Psychology."
- 11 Moore, "Environment and Behavior Research in North America," 1365; Bonnes and Secchiaroli, *Environmental Psychology*, 5.
- 12 Gifford, *Environmental Psychology*, 6; Moore, "Environment and Behavior Research in North America," 1367; Bonnes and Secchiaroli, *Environmental Psychology*, 5.
- 13 Moore was one of the founding members of both groups. Moore, "Environment and Behavior Research in North America," 1365-7.
- 14 David C. Glass, ed., *Environmental Influences, Biology and Behaviour series, proceedings of a conference under the auspice of Russell Sage Foundation and the Rockefeller University* (New York: Rockefeller University Press and Russell Sage Foundation, 1968).
- 15 David V. Canter, ed., *Architectural Psychology: Proceedings of the conference held at Dalandhui, University of Strathclyde, 1969* (London: RIBA Publications, 1969); Basil Honikman, ed., *Proceedings of the Architectural Psychology conference at Kinston Polytechnic, 1970* (London: Kingston Polytechnic and RIBA Publications, 1971).
- 16 Harold M. Proshansky, William H. Ittelson and Leanne G. Rivlin, "Preface," in *Environmental Psychology: Man and his Physical Setting*, ed. Harold M. Proshansky, William H. Ittelson and Leanne G. Rivlin (New York: Holt, Rinehart and Winston, 1970), vii.
- 17 Moore, "Environment and Behavior Research in North America," 1365.
- 18 Joachim F. Wohlwill, "The Emerging Discipline of Environmental Psychology," *American Psychologist* 25, no. 4 (1970): 303-12.
- 19 Harold M. Proshansky, William H. Ittelson and Leanne G. Rivlin, *Environmental Psychology: Man and his Physical Setting* (New York: Holt, Rinehart and Winston, 1970).
- 20 Proshansky, Ittelson and Rivlin, "Preface," v.
- 21 Proshansky, Ittelson and Rivlin, "Preface," v.
- 22 William H. Ittelson, ed., *Environment and Cognition* (New York; London: Seminar Press, 1973).
- 23 Canter, *Psychology for Architects*.
- 24 Raynsford, "Civic Art in an Age of Cultural Relativism," 46.
- 25 Such as Norman W. Heimstra and Leslie H. McFarling, *Environmental Psychology* (Belmont, California: Wadsworth Publishing, 1974); David Canter and Peter Stringer, *Environmental Interaction: Psychological Approaches to our Physical Settings* (London: Surrey University Press, 1975); Jonathan L. Freedman, *Crowding and Behavior* (New York: Viking Press, 1975); Amos Rapoport, ed., *The Mutual Interaction of People and their Built Environment: A Cross-cultural Perspective* (The Hague; Paris: Mouton Publishers, 1976); Amos Rapoport, *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design* (Oxford: Pergamon Press, 1977); Seymour Wapner, Saul B. Cohen and Bernard Kaplan, *Experiencing the Environment* (New York: Plenum Press, 1976); Charles J. Holahan, *Environment and Behaviour: A Dynamic Perspective* (New York; London: Plenum Press, 1978); Stephen Kaplan and Rachel Kaplan, eds., *Humanscape: Environments for People* (Belmont, California: Wadsworth Publishing, 1978).
- 26 Gifford, *Environmental Psychology*.
- 27 Bonnes and Secchiaroli, *Environmental Psychology*.
- 28 International Association People-Environment Studies (IAPS) website www.iaps-association.org (accessed May 7, 2015).

- 29 Pol, "Blueprints for a History of Environmental Psychology (II)"; Yoji Aoki, "Review article: Trends in the Study of the Psychological Evaluation of Landscape," *Landscape Research* 24, no. 1 (1999): 85-94; E. H. Zube, J. L. Sell and J. G. Taylor, "Landscape Perception: Research, Application and Theory," *Landscape Planning* 9 (1982): 1-33; Baris Kara, "Landscape Design and Cognitive Psychology," *Procedia – Social and Behavioral Sciences* 82 (2013): 288-291; Stephen C. Bourassa, *The Aesthetics of Landscape* (London: Belhaven Press, 1991); E. Zube, "Environmental Psychology, Global Issues and Local Landscape Research," *Journal of Environmental Psychology* 11 (1991): 321-334.
- 30 Maria L. Lima and Elena Sautkina, "Psicologia ambiental: um esboço sobre o seu desenvolvimento em Portugal e no mundo," *Psicologia* 21, no. 2 (2007): 5-15; Jose Luis Pinillos, *Psicopatologia de la vida urbana* (Madrid: SLU Espasa Libros, 1977).
- 31 Henrique Muga, *Psicologia na Arquitectura* (Edição: Edições Gailivro, 2005); Teresinha Maria Gonçalves, *Cidade e Poética – um estudo de psicologia ambiental sobre o ambiente urbano* (Brasil: Editora Unijui, 2008).
- 32 T. Hartig and H. Staats, "The Need for Psychological Restoration as a Determinant of Environmental Preferences," *Journal of Environmental Psychology* 26 (2006): 215-226; A. E. Van den Berg, T. Hartig and H. Staats, "Preference for Nature in Urbanized Societies: Stress, Restoration, and the Pursuit of Sustainability," *Journal of Social Issues* 63, no. 1 (2007): 79-96.
- 33 Canter and Craik, "Environmental Psychology."
- 34 David Canter, "Prologue," in *Architectural Psychology: Proceedings of the conference held at Dalandhui, University of Strathclyde, 1969*, ed. David Canter (London: RIBA Publications, 1969), 3.
- 35 Canter and Craik, "Environmental Psychology," 7.
- 36 Canter and Craik, "Environmental Psychology," 7.
- 37 In the first issue the following architecture related books were reviewed: *Signs, Symbols, and Architecture*, ed. Geoffrey Broadbent (1980), *Architecture and its Interpretation*, by Juan Pablo Bonta (1979), *Meaning in the Urban Environment*, by Martin Krampen (1979), *A Psychology of Building*, by Glenn Robert Lym (1980), *Complicity and Conviction: Steps Towards an Architecture of Convention*, by Willam Hubbard (1980), in *Journal of Environmental Psychology* 1, no. 1 (1981).
- 38 Joseph B. Juhasz, "Christopher Alexander and the Language of Architecture," *Journal of Environmental Psychology* 7, no. 1 (1987): 65-76; Linda Groat, "Recent Developments in Architectural Theory: Implications for Empirical Research," *Journal of Environmental Psychology* 7, no. 1 (1987): 65-76; Linda Groat, "Meaning in Architecture: New Directions and Sources," *Journal of Environmental Psychology* 1, no. 1 (1981): 73-85.
- 39 Linda Groat, "Meaning in Post-modern Architecture: An Examination using the Multiple Sorting Task," *Journal of Environmental Psychology* 2, no.1 (1982): 3-22.
- 40 Groat lists D. V. Canter, *The Study of Meaning in Architecture* (Glasgow: University of Strathclyde, 1968); K. H. Craik, "The Comprehension of the Everyday Physical Environment," *AIP Journal* (January 1968): 29-37; R. G. Hershberger, "A Study of Meaning in Architecture," in *EDRA1*, ed. H. Sanoff and S. Cohen (Raleigh: North Carolina State University, 1969), 86-100; R. G. Hershberger, "Towards a Semantic Scale to Measure the Meaning of Architectural Environments," in *EDRA3*, ed. W. J. Mitchell (Los Angeles: UCLA, 1972), 6:4:1-10. All mentioned in Groat, "Meaning in Architecture," 75.
- 41 Groat, "Meaning in Architecture," 75.
- 42 Groat, "Meaning in Architecture," 75.
- 43 Proshansky, Ittelson and Rivlin, "The Influence of the Physical Environment on Behaviour," 33.
- 44 Daniel Stokols, "The Paradox of Environmental Psychology," *American Psychologist* 50, no. 10 (1995): 821-37.
- 45 Email to authors from David Kernohan, one of the organisers of PAPER conferences during the 1980s.
- 46 Pol, "Blueprints for a History of Environmental Psychology (II)."