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LOOKING BACK TO THE FUTURE
SE RETOURNER VERS L'AVENIR

IAPS 10/1988

Proceedings of the tenth bienal conference of the International Association for the Study of People and their Physical Surroundings, Delft, the Netherlands, july 5-8, 1988

Vol. I: Program and Abstracts/Programme et résumés

Herbert van Hoogdalem
Niels L. Prak
Theo J.M. van der Voordt
Herman B.R. van Wegen

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Delft, Department of Architecture
PREFACE

Giving form to the links between human activities and physical space is the essence of environmental design. The association of social-scientists, architects and planners within IAPS has therefore been a deliberate choice, some twenty years ago. Its international character bears evidence to the interrelatedness of problems manifesting themselves in many different countries: quite often the problems of a particular period vary less from one country to another, than they vary between our period and another within one country.

In its recent 4th Memorandum on Environmental Planning, the Dutch government has strongly emphasized the value of spatial quality. According to our Minister of Housing, Planning and Environmental Management, spatial policy should aim at the realization of three values: the functional, the experiential and the future value.

The first and the second values were not invented by our Minister, but already formulated about two thousand years ago by Vitruvius. The functional value expresses the necessity to fit our buildings, cities and landscapes to the needs of society. The experiential value touches upon that complicated relation between design and its appreciation by the users. The third element, the future value, is relatively new. Sometimes one has the feeling, that this value was formulated at a time that relatively new buildings and urban areas appeared to be little valued, necessitating major rehabilitation after only a short period since their completion. Put paradoxically: "Areas with future value are those which were not planned with that principle in mind". One can think of areas from a more remote past, e.g. the medieval inner cities, which in hindsight have proved capable to accommodating major socio-economic changes in their buildings and urban spaces.

This brings me to the theme of IAPS-10, "Looking back to the future". I think it was an excellent choice to hold this conference in Delft. Delft has a beautiful medieval inner city, relatively unscarred by time. This core is surrounded by the successive layers of 19th and especially 20th century extensions. The University of Technology, originally integrated in the historical core, has grown so impetuously after World War Two, that a separate campus with all its advantages and disadvantages became necessary.

The intimate links of the university with the totality of urban life had to be cut because of the large scale of the faculty buildings; yet another contribution to a world which falls apart. The theme of this conference urges us to look back to the past, to see which qualities were won and which were lost in the historic development of our spatial environment. In principle, one might expect that growing experience would bring a clearer insight in the needs of the future. Very often however, a new generation seems to demand the right to make its own mistakes. Probably the rapid evolution of our society poses a host of new problems, for which lessons from the past can only provide partial answers.

In the City of Delft, the present, the past and the orientation towards the future show themselves clearly in the varied urban landscape.

I wish the participants of IAPS-10 a good and successful conference, and, inspired by the past, a bright future.

Co van Tol
Dean of the Faculty of Architecture
Delft University of Technology
INTRODUCTION

Dans la planification de notre milieu spatial, la relation entre les activités humaines et l'espace est un facteur primordial car l'espace sert de fond pour toutes les activités de l'individu et pour celles de la société. Cela explique le choix des chercheurs en sciences sociales, des architectes et des urbanistes de se réunir dans l'IAPS. Le caractère international de l'association témoigne des relations étroites entre les problèmes dans les pays différents. Ces problèmes se ressemblant plutôt en fonction d'une certaine époque qu'en fonction de leur localité.

Le quatrième mémoire du gouvernement néerlandais sur l'aménagement du territoire fait grand cas de la qualité spatiale. Selon le ministre concerné, la politique spatiale doit viser à trois valeurs, c'est-à-dire, à l'utilité, au vécu et à l'avenir.

La troisième de ces valeurs, l'avenir, est relativement nouvelle. On dirait que cette valeur fut déterminée au moment où nombre de bâtiments et de quartiers assez nouvellement construits ne s'avèrent avoir que peu d'avenir, ce qui nécessita une rénovation précoce. On en pourrait formuler le paradoxe suivant: "Les quartiers ayant une valeur d'avenir sont ceux qui n'ont pas été projetés comme tels". N'y-a-t-il pas un certain nombre de quartiers anciens qui, parfois remontant au Moyen Age, aujourd'hui, témoignent d'une grande valeur d'avenir, de sorte que des changements sociaux qui, depuis, se sont produits soient facilement intégrés à l'intérieur des bâtiments comme dans l'ensemble de ces anciens quartiers?

Cela me mène au thème de l'IAPS-10 "se retourner vers l'avenir". Le choix de Delft pour cette conférence me paraît excellent. Delft possède un bel ancien cœur médiéval, qui n'est guère endommagé et qui est entouré de faubourgs du 19e et du 20e siècle. L'université technique qui, initialement, fit part ou s'approcha de l'ancienne ville, s'est étendue comme quartier universitaire à part entière, en entraînant tous ses avantages et ses désavantages.

Il a fallu rompre le réseau étroit entre l'université et la totalité de la vie urbaine à cause de la grande échelle des bâtiments universitaire ce qui a contribué à "un monde qui se décompose".

Le thème de cette conférence rappelle une fois de plus la nécessité de se retourner vers le passé, pour voir plus clair les qualités et les défauts qui se sont produits lors de l'évolution du milieu spatial.

En principe, il fallait que la connaissance de ce qu'il faut pour l'avenir s'augmente avec la croissance de l'expérience. Mais tout se passe comme si chaque génération exige la liberté de faire ses propres erreurs. Mais, probablement les problèmes seront tellement nouveaux à cause du développement rapide de la société que les leçons du passé n'auront qu'une valeur restreinte.

Le présent, le passé et l'avenir sont tous visibles dans le milieu urbain de Delft qui témoigne d'une diversité surprenante.

Je souhaite à tous les participants une bonne et fructueuse conférence qui leur permettra de se faire inspirer du passé pour se diriger vers l'avenir.

Co van Tol
Doyen du Secteur d'Architcure
de l'Université Technique de Delft
ACKNOWLEDGEMENTS / REMERCIEMENTS

It is impossible to organize an international conference of this scope and size without the enthusiastic support of a great number of people. We would like to thank the Executive Committee of the IAPS board: Gilles Barbey, Martin Symes, Peter Ellis, Lenelis Kruse en Sua-Ann Lee for their help.
We are also grateful for the financial, administrative and organizational support given by the Faculty of Architecture and the OSPA research institute.

Il est impossible d'organiser une conférence internationale d'une telle importance et d'un tel ampleur sans l'appui enthousiaste d'un grand nombre de personnes. Nous remercions les membres du Comité Exécutif de la Commission de l'IAPS: Gilles Barbey, Martin Symes, Peter Ellis, Lenelis Kruse et Sue-Ann Lee pour leurs conseils. Nous remercions également la Section d'architecture de l'Université Technique de Delft et son institut de recherches l'OSPA pour leur appui financier, administratif et organisationnel.

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Catering Staff of the Auditorium TU Delft
International Office TU Delft
Dish Hotel, W. Mook
Students of the Faculty of Architecture
City Council of Delft
VVV Rotterdam
VVV Delft
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<td>2</td>
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<td>The neighbourhood: perception, identity and</td>
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<td></td>
<td>quality (P)</td>
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<td>4</td>
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<td>Environments for special groups (P)</td>
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<td>The home and its meanings (P)</td>
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<td>Aud.</td>
<td>16.00-17.00</td>
<td>Plenary session: speaker Niels Prak</td>
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<td>Caf.</td>
<td>17.00-18.00</td>
<td>Drinks</td>
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<td>18.00-23.00</td>
<td>FAREWELL DINNER ON BOARD OF M.S.</td>
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<td>&quot;ROTTERDAM&quot; (in Rotterdam)</td>
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Detailed programme of symposia/
Programme détaillé des symposiums
<table>
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<tr>
<th>ROOM</th>
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<th>SYMPOSIUM</th>
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<tbody>
<tr>
<td>A</td>
<td>13.30-17.00</td>
<td>POST OCCUPANCY EVALUATION</td>
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<tr>
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<td></td>
<td>(POE-enquêtes auprès des utilisateurs)</td>
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<td>Organizer and chair: Wolfgang Preiser</td>
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<td>Contributors (in order of presentation as indicated by the chair):</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Wolfgang Preiser</strong></td>
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<tr>
<td></td>
<td></td>
<td>Introduction of the symposium</td>
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<td><strong>Harvey Rabinowitz</strong></td>
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<td>Overview of uses and boundaries of POE</td>
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<td><strong>Wolfgang Preiser</strong></td>
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<tr>
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<td>Towards more rigorous and systematic POE</td>
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<td><strong>Craig Zimring</strong></td>
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<td>Advances in POE knowledge</td>
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<td>general discussion with the audience</td>
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<td>Caf.</td>
<td>15.00-15.30</td>
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<td><strong>Robert Bechtel:</strong></td>
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<td>Advances in POE methods</td>
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<td><strong>Roger Pegrum and Peter Bycroff</strong></td>
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<td>Quality down under - a POE application case study</td>
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<td><strong>Edward White</strong></td>
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<td>POE from the client's perspective</td>
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<td>general discussion with the audience</td>
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Symposium to be continued next Wednesday-morning in room A  
(Symposium à suivre mercredi-matin à salle A)
ROOM SALLE  TIME HEURE  SYMPOSIUM

B  13.30-17.00  DEFENSIBLE SPACE
(Contrôle de l'espace)

Organizer and chair: Oscar Newman

Contributors (in alphabetical order):

Jean Chaguiboff and Yvonne Bernard
The spatial representation of insecurity

Alice Coleman
Returning to our civilised roots

Oscar Newman
Factors influencing crime and instability in federally assisted housing developments

Theo van der Voordt and Herman van Wegen
A checklist on crime prevention through environmental design: usefulness and limitations

Adrie van der Wurff and Peter Stringer
Fear of crime in residential areas: defensible space and beyond

Caf.  15.00-15.30
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<th>ROOM</th>
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<tr>
<td>C</td>
<td>13.30-17.00</td>
<td>RESEARCH UTILIZATION (Utilisation des données de recherches)</td>
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<td></td>
<td>Organizer and chair: <strong>Joost van Andel</strong> - introduction</td>
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<td>Co-organizer: <strong>Gary T. Moore</strong></td>
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<td>Contributors (in alphabetical order):</td>
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<td></td>
<td></td>
<td><strong>Joost van Andel</strong> Expert systems in environmental psychology</td>
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<td><strong>Peter Ellis</strong> The usefulness of research on social episodes</td>
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<td><strong>Ronald Hamel</strong> Stages of the design process and the use of information</td>
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<td><strong>Duncan Joiner</strong> Designers participating in research</td>
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<td><strong>Gary Moore</strong> Discussion: Two-community and one-community theories as means for thinking about research utilization</td>
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<td><strong>Henri Sanoff</strong> Integrating research and design participation: new paradigm for the future</td>
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<td><strong>Jonathan Sime, James Powell, Paul Newland, Chris Reed</strong> Environment-behaviour research and information transfer</td>
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<td><strong>Martin Symes</strong> Architects information requirements</td>
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<td><strong>Yigal Tzamir and Iris Aravot</strong> Architecture and E-B research - The gap of knowledge</td>
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<td><strong>Caf. 15.00-15.30</strong> symposium to be continued on thursday morning in the same room (symposium à suivre le jeudi matin, même salle)</td>
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<td>D</td>
<td>13.30-17.00</td>
<td>LANDSCAPE network meeting</td>
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<td>SALLE</td>
<td>09.00-12.30</td>
<td>POST OCCUPANCY EVALUATION (POE-enquêtes auprès des utilisateurs)</td>
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<td>Organizer and chair: Wolfgang Preiser</td>
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<tr>
<td></td>
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<td>Franklin Becker</td>
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<td>POE as a research paradigm</td>
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<td>Peter Jokusch</td>
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<td>Assessment of future needs anticipation and briefing</td>
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<td>Michael Durkin</td>
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<td>The role of POEs in earthquake hazard mitigation</td>
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<td>Geraldo Serra</td>
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<td>POE at the urban scale in Brazil</td>
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<td>General discussion with the audience</td>
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<td>Caf.</td>
<td>10.30-11.00</td>
<td>Guido Francescato</td>
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<td>An expanded model of residential satisfaction</td>
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<td>Jay Farbstein</td>
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<td>Advances in POE applications</td>
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<td>Hans-Joachim Klein</td>
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<td>Evaluation of museum effectiveness</td>
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<td>Francis Ventre</td>
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<td>Statistical Sampling</td>
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<td>Robert Marans</td>
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<td>Office lighting and evaluation methodology</td>
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<td>Peter Ellis and Duncan Joiner</td>
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<td>Making POE work in an organization</td>
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<td>General discussion with the audience</td>
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<td>Caf.</td>
<td>12.30-13.30</td>
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SYMPOSIUM

ROOM SALLE TIME HEURE

A 13.30-17.00 ESTHETIQUE ET TECHNOSTRUCTURE
(Aesthetics and technocracy)

Organisatrice et président: Marion Segaud - introduction

Contributeurs: (en ordre alphabétique):

R. Frances
La musique contemporaine, artefact économique
et sociotechnique

Catherine Mougenot
La qualité architecturale en Belgique: anciennes
et nouvelles tendances sociales

Henri Raymond
Technostructure et architecture: l'exemple cor-
buséen

Marion Segaud
Compétence esthétique et architecture

Martin Symes
Urbanisme contemporain en Angleterre et aux
Etats Unis

Caf. 15.00-15.30
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<tr>
<th>ROOM SALLE</th>
<th>TIME HEURE</th>
<th>SYMPOSIUM</th>
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<tr>
<td>B</td>
<td>09.00-17.00</td>
<td>ENVIRONMENT, BEHAVIOR AND DESIGN THEORY (Environnement, comportement et théorie)</td>
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<td>Organizer and chair: <strong>Gary T. Moore</strong></td>
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<td>Introduction: Conceptualizing EBS and design theories of the Middle Range</td>
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<td>Co-chair: <strong>Andreas F. van Wagenberg</strong></td>
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<td>Discussant: <strong>Martin Symes</strong></td>
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<td>Contributors (in alphabetical order):</td>
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<td><strong>Thijs Bax</strong></td>
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<td>&quot;New Netherland 2050&quot;. The role of a centrale design team in a decentralized design process</td>
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<td><strong>Linda Groat</strong></td>
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<td>The significance of architectural theory for environmental design research</td>
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<td><strong>Martin Krampen</strong></td>
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<td>Advances in research on environmental meaning and symbolism</td>
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<td><strong>Jon Lang</strong></td>
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<td>Design theories from an environment-behavior perspective</td>
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<td><strong>Roderick Lawrence</strong></td>
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<td>Structuralist theories in environment-behavior-design research</td>
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<td><strong>Harry Lievaart</strong></td>
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<td>Integrated design: coping with constraints and images</td>
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<td><strong>Henk Trum</strong></td>
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<td>On the concept of function in building science</td>
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<td><strong>Andreas van Wagenberg</strong></td>
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<td>A conceptual &quot;environment-behavior&quot; model to assist decision-making in a design process</td>
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<td>Caf.</td>
<td>10.30-11.00</td>
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<td>Caf.</td>
<td>12.30-13.30</td>
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<tr>
<td>B</td>
<td>13.30-17.00</td>
<td>Continuation of this morning's symposium on Environment, Behaviour and Design Theory</td>
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<td>Caf.</td>
<td>15.00-15.30</td>
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(continuation of wednesday pm)

C  09.00-12.30  RESEARCH UTILIZATION  
    (Utilisation des données de recherches)

Organizer and chair: Joost van Andel  
Co-organizer: Gary T. Moore  

Contributors: see wednesday pm - room C

Caf.  10.30-11.00

Caf.  12.30-13.30

C  13.30-17.00  ECOLOGICAL PSYCHOLOGY  
    (Psychologie de l'écologie)

Organizers and chairs: Lenelis Kruse and Gerhard Kaminski - introduction

Contributors (in alphabetical order):

Robert Bechtel  
Back to the future.... again. A perspective on ecological psychology

Urs Fuhrer  
Learning how to act in behavior settings: the case of newcomers

Gerhard Kaminski  
The psychological experiment as a behavior setting genotype

Lenelis Kruse  
Behavior settings, cognitive scripts, linguistic frames

Volker Linneweber  
Jeopardizing patterns of settings: deviations and deviation counterings

Caf.  15.00-15.30

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<th>ROOM</th>
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</table>
| D     | 09.00-12.30 | **ASPECTS PHENOMENOLOGIQUES DU CHEZ-SOI**  
(Phenomenological aspects of the home environment)  
Organisateur et président: **Gilles Barbey** - introduction  
Contribueurs (en ordre alphabétique):  
Pascal Amphoux  
Le chez-soi, un espace propre et un temps paradoxal  
**Gilles Barbey**  
Esquisse de la relation affective au chez-soi  
Anne Buttimer  
Phénix, Faust, Narcisse: à la recherche du chez-soi  
**Carl Graumann**  
Towards a phenomenology of being at home  
**Perla Korosec-Serfaty**  
Le chez-soi: secret et proximité de l'autre  
**Maurice Sauzet**  
La phénoménologie sensorielle comme référence du projet d'architecture  
**Maria Villela-Petit**  
Le chez-soi: espace et identité |
| Caf.  | 10.30-11.00 | [image]                                                                   |
| Caf.  | 12.30-13.30 | [image]                                                                   |
| D     | 13.30-17.00 | **HOUSING** (network meeting)                                             |
| Caf.  | 15.00-15.30 | [image]                                                                   |
Room: A  
Time: 09.00-12.30

Symposium: Environmental Stress (Stress dû à l'environnement)

Organizer and chair: Rikard Küller - Introduction

Contributors (in alphabetical order):
- Gary Moore, M. Palsane, Stephen Lepore, Janaea Martin
- Crowding and social support
- Rikard Küller
- Environmental activation of old persons suffering from senile dementia
- Byron Mikellides
- Colour and psychological arousal
- Daniel Stokols, Arza Churchman, Cathy Kawasaki, Janaea Martin, Renee Nishimoto, Beth Quinn, Ted Scharf, Marianne Seifert, Steven Wright
- Stress and people at work: the impact of relocation

Caf.: 10.30-11.00

Caf.: 12.30-13.30
**Symposium**

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<tbody>
<tr>
<td>A</td>
<td>13.30-15.30</td>
<td><strong>THE ROLE OF THE HISTORICAL ANALYSES IN THEORY, RESEARCH AND PRACTICE TO PEOPLE AND THEIR SURROUNDINGS</strong> (Le rôle de l'analyse historique dans les recherches sur l'homme et son environnement)</td>
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<td>Organizer and chair: <strong>Maxine Wolfe</strong> - introduction</td>
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<td>Contributors (in alphabetical order):</td>
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<td><strong>Gert Gröning</strong> Research in open space planning - From belief to social science</td>
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<td><strong>Jamie Horwitz</strong> The history of technology and domestic life</td>
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<td><strong>Anthony D. King</strong> Ideology and environments: critical histories and historical critiques</td>
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<td><strong>Leanne Rivlin</strong> The history of homelessness</td>
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<td><strong>Maxine Wolfe</strong> The history of changes in children's institutions and action research</td>
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**Caf.** 15.30-16.00
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<tr>
<td>B</td>
<td>09.00-12.30</td>
<td>OFFICES AND OFFICE SYSTEMS (Bureaux et systèmes d'équipement)</td>
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<td>Organizer and chair: Andreas F. van Wagenberg - introduction</td>
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<td>Co-organizer: Robert W. Marans</td>
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<tr>
<td></td>
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<td>Alan Hedge</td>
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<td>Investigating the &quot;Sick building syndrome&quot; in offices: methodological and conceptual issues</td>
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<td>Herbert van Hoogdalem</td>
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<td>Sick buildings in the Netherlands</td>
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<td>Robert Marans</td>
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<td>Effects of different lighting designs on the office worker's perceptions of the visual environment</td>
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<td>Andreas van Wagenberg</td>
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<td>Environmental psychological research integrated in the redesign of an office environment: the case of a design office</td>
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<td>Ronald Wilmes</td>
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<td>Facilities management based upon environmental technological research</td>
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<td>Jean Wineman</td>
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<td>Reconceptualizing the workplace to support emerging models of organizational effectiveness</td>
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| Caf.  | 10.30-11.00 | |

<p>| Caf.  | 12.30-13.30 | |</p>
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<th>ROOM</th>
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</table>
| B    | 13.30-15.30 | ENVIRONMENTAL PSYCHOLOGY IN THE THIRD WORLD  
  (Méthodology et théorie dans le Tiers Monde) |
|      |         | Organizer and chair: David Canter - introduction                           |
|      |         | Contributors (in alphabetical order):                                       |
|      |         | **Setha Low**  
  Culture, politics and the plaza: an ethnographic approach to the study of urban public spaces in Latin America |
|      |         | **Circe Monteiro**  
  An environmental approach to Shantytown urbanisation in developing countries |
|      |         | **Henry Sanoff**  
  Housing strategies for South Africa's future |
|      |         | **Graham Tipple**  
  Low income housing and world-view in Asante: problems and possibilities for policy in Kumasi, Ghana |
|      |         | **Javier Ubrina-Soria**  
  Latin America priorities in environmental psychology |

Caf. 15.30-16.00
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<td>C</td>
<td>09.00-12.30</td>
<td>CHANGING NOTIONS OF LANDSCAPE AND ITS IMPLICATIONS FOR THE SOCIAL AND SPA-</td>
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<td>TIAL ENVIRONMENT</td>
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<td>(Paysage: évolution des idées et implications pour l'environnement social et spatial).</td>
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<td>Organizer and chair: Gert Gröning - introduction</td>
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<tr>
<td></td>
<td></td>
<td><strong>Helen Armstrong</strong></td>
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<td>Changing notions of the landscape - the avenue in the new world, its socia-</td>
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<td><strong>Elvor Bucht</strong></td>
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<td>From a place for recreation to a scheme for recreation - the failure of a goal-oriented approach to open space design in Sweden</td>
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<td><strong>Jan Coeterier</strong></td>
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<td>A picturesque tour of landscape sociology</td>
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<td><strong>Joachim Wolschke-Bulmahn</strong></td>
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<td>The fear of the new landscape: aspects of the perception of landscape in the German bourgeois youth movement between 1900 and 1933</td>
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PERCEIVING, COGNIZING AND MEMORIZING THE AFFORDANCES OF THE ENVIRONMENT
(Perception, cognition et mémorisation de l'environnement)

Organizer and chair: Klaus Landwehr - introduction

Contributors (in alphabetical order):

Giovanna Axia
Language and roration: memory for route elements in verbal descriptions by children and adults

Anders Böök
The role of the perspective recognition of real-life scenes

Klaus Landwehr
Wayfinding with and without signs

Sefen Lengyel and Norbert Hammer
Do we only see what we already know?

Design research by eye-movement recording

Mark May
Methods for studying mental representations of real world environments
**ROOM** | **TIME** | **SYMPOSIUM**
---|---|---
D | 09.00-12.30 | GREEN SOLAR ARCHITECTURE  
(Architecture solaire)  
Organizer and chair: Dieter Schempp - introduction  
Contributors (in alphabetic order):  
Jürgen Frantz  
Interior gardening  
Friedrich Grimme  
Progress achieved in the development of the solar aperture  
Winfried Klimesch  
An administration building according to the principles of "Green solar architecture" (GSA)  
Martin Krampen  
Differences between glasshouse office and office landscape  
Fred Mollring  
The transfer of technology to solar architecture  
Dimitri Procos  
Does street orientation have an effect on passive solar heating ?  
Dieter Schempp  
Future scope of green solar architecture (GSA)  
Gerhard Steiner  
Technology and glass

Caf. | 10.30-11.00

D | 13.30-15.30 | WOMEN AND ENVIRONMENTS:  
LOOKING BACK AT RESEARCH, LOOKING FORWARD TO CHANGE  
(Les femmes et l'environnement)  
Organizers, chairs and contributors:  
Sherry Ahrentzen and Denise Piché

Caf. | 15.30-16.00
3 Detailed programme of papersessions/
Programme détaillé des séances de communications
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<td>13.30-17.00</td>
<td>HOUSING: PARTICIPATION AND REHABILITATION</td>
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<td>(Chair: Arza Churchman)</td>
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<td>Dean Adjakovic</td>
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<td>Some correlates of housing types preferences</td>
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<td>Rachel Kaplan</td>
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<td>Environmental preferences and public participation</td>
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<td>Naomi Carmon</td>
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<td>Self-help improvement of public housing</td>
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<td>Rehabilitation of post-war public housing</td>
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<td>13.30-17.00</td>
<td>PERCEPTION ET SYMBOLISME (en français)</td>
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<td>(président: François Grivel)</td>
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<td>13.30</td>
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<td>Perception tactile des sols</td>
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<td>Milieux artificiels</td>
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<td>François Grivel, G. Wittersheim</td>
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<td>La chaleur jugée dans le bruit, le bruit jugé à la chaleur</td>
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<td>Patrick Péruich, Marie-Dominique Giraud</td>
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<td>Le style à l'origine de la naissance des façades quadrillées</td>
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| SALLE 3 | 13.30-15.00 | DEVELOPMENTS IN ENVIRONMENT/BEHAVIOR RESEARCH  
(chair: Roger Chouinard) |
| | 13.30 | Stephen Kaplan  
Uses of the past: enhancing cognition and environment by incorporating historical information |
| | 14.00 | Enric Pol  
Environmental psychology in Europe |
| | 14.30 | Roger Chouinard  
Looking back to the future through the looking glass of the present |
| | 15.00-15.30 | |
| SALLE 3 | 15.30-17.00 | EXHIBITION ENVIRONMENTS  
(chair: Uriel Cohen) |
| | 15.30 | Jon Sanford, Ted Finlay  
The effect of exhibits signage on visitor behavior |
| | 16.00 | Krzystof Lenartowicz, Jacek Czekai, Witold Gawlowski  
Silesian museum in Katowice |
| | 16.30 | Uriel Cohen  
The new museum: new roles, new experiences, new forms |
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<td>WORK ENVIRONMENTS (chair: William Voelker)</td>
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<td>Open office planning and design reflecting organi-</td>
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<td><strong>Satoshi Kose, Toshimoto Miyata</strong></td>
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<td>Personalization of narrow office room space in a</td>
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<td><strong>Paul Heimplaetzer, Floor Koorneef</strong></td>
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<td>Functional safety in hospital building design</td>
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<td>GENDER AND CULTURAL DIFFERENCES (chair: Suzanne Kretschmann)</td>
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<td><strong>Vana Tentokali, Sandra Howell</strong></td>
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<td>A cross-cultural analysis of the domestic privacy:</td>
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<td>House design and Saudi women</td>
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<td><strong>Suzanne Kretschmann</strong></td>
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<td>Are there sex-related differences in housing</td>
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<td>HOUSING THE UNDERPRIVILEGED (chair: Tetsuo Seguchi)</td>
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<td><strong>Yurdanur Aksoylu</strong></td>
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<td>Changing concepts of privacy, territoriality and</td>
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<td>Homelessness and assistance measures in Japan</td>
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<td><strong>Ramesh Manandhar</strong></td>
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<td>Housing in the Pacific</td>
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<td><strong>Ranvinder Singh Sandhu</strong></td>
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<td>Caste, income and housing among the slumdwellers</td>
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<td>PERCEPTION AND SYMBOLISM (chair: Tom Mitchell)</td>
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<td>Artefacts and personal symbolism</td>
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<td>Artificial lighting interpreted as a system of symbols</td>
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<td>Urs Kalbermatten, Sandro Looser, Ladislav Valach</td>
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<td>The session of the Swiss national council on &quot;dying forests&quot;</td>
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<td>Ahmet Alp</td>
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<td>Experimental methods for a systematic evaluation of the architectonic environment</td>
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<td>Psychological dimensions of planned and traditional shopping centres</td>
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<td>Martin Koeppl</td>
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<td>Representation and the enactment of social ideals</td>
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<td>13.30-17.00</td>
<td><strong>ENVIRONMENTS FOR SPECIAL GROUPS</strong> (chair: Tommy Gärling)</td>
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<td><strong>Kim Blakely</strong></td>
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<td>Parents' conception of safety in a neighborhood</td>
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<td><strong>Tommy Gärling, Anita Gärling, Eva Mauritzson-Sandberg</strong></td>
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<td>Mothers' cognitive representations of young children's accident risks in the home</td>
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<td><strong>Pia Björklid</strong></td>
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<td>Children and road safety</td>
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<td><strong>Henry Sanoff, Joan Sanoff</strong></td>
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<td>Participatory programming of a campus child development facility</td>
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<td><strong>Eva Mauritzson-Sandberg, Lennart Sandberg</strong></td>
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<td>Children's psychological reactions to wearing respiratory protective devices</td>
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<td>GARDENS, LANDSCAPE, TOWNPLANNING (chair: Marc Francis)</td>
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<td><strong>Henk Staats</strong></td>
<td>Landscape evaluation: explaining the psychological process</td>
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<td><strong>Jussi Rautsi</strong></td>
<td>Alvar Aalto's urban plans 1940-1970</td>
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<td><strong>Mark Francis</strong></td>
<td>Gardens in the mind and in the heart</td>
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<td><strong>Koichi Amano, Osamu Shinohara</strong></td>
<td>Etude de l'évolution du paysage de l'avenue de Ginza</td>
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<td><strong>Masami Kobayashi, Kiyoshi Kawasaki</strong></td>
<td>Analysis of approach design in Daitoku - Ji Temple, Kyoto</td>
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<td><strong>Jasmine Pinard</strong></td>
<td>Shinsui Koen, des égouts au parc de loisirs</td>
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<td><strong>Yoichi Kubota</strong></td>
<td>Evaluative differentiation of riverscape</td>
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<td><strong>Nobuhiro Suzuki, Yoshihiro Kondo and Toshio Tsuhina</strong></td>
<td>A survey of water imagery</td>
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<td><strong>Yoshio Nakamura, Shin-Ichi Kitamura, Ushio Saito and Yasushi Onodera</strong></td>
<td>Landscape design and implementation for the river banks at Hiroshima</td>
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<td><strong>George van der Meulen</strong></td>
<td>TABLET, an adapted approach for analysis of the use of land and floorspace in urban areas in developing countries</td>
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<td>ARCHITECTURAL THEORY, HISTORY AND EDUCATION</td>
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<td>09.00-15.30</td>
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|      | 09.00       | Andrzej Niezabitowski  
branche et the need for security |
|      | 09.30       | Katharina Werezch  
ranch of architectural sociology |
|      | 10.00       | Edward Hulsbergen  
Which spaces for whom ? |
|      | 10.30-11.00 | |
|      | 11.00       | Joseph Grange  
Environmental ethics and the need for a categorial scheme |
|      | 11.30       | Kim Dovey  
Place, ideology and postmodernism |
|      | 12.00       | Howard Harris, Alan Lipman  
Form and content in contemporary architecture |
|      | 12.30-13.30 | |
|      | 13.30       | Reid Bishop  
Environmental psychology and local history |
|      | 14.00       | Titi Papadopoulou, Eleni Seferzi  
Architectural forms and social groups |
|      | 14.30       | Yurika Imai  
Analysis of the design process |
|      | 15.00       | Martin Symes  
Experiments in architectural education |
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<td>THE NEIGHBOURHOOD: ITS PERCEPTION, IDENTITY AND QUALITY (chair: Marc Fried)</td>
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<td>Roberta Feldman Psychological bounds with types of settlements</td>
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<td>Marc Fried Place identity: psychological origins and adaptive consequences</td>
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<td>Wolfgang Plöger, Marco Lalli Urban self presentation and residential identification</td>
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<td>Robert Mugerauer Housing, community and landscape in the American suburb</td>
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<td>Jordi Freixes, M. Juanaola, J. Mouleivi, S. Valera The Barcelona district's look</td>
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<td>Carlo Bagnasco, Mirilla Bonnes, Maria Giuliani, Giuseppina Rulo Objective and subjective aspects of the quality of urban environment</td>
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<td>Anne Faure, Yves Trochel, Thomas Priestley La cartographie perceptive</td>
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<td>Mirilla Bonnes, Anna de Rosa, Rita Ardone Perception of the quality of the residential environment and temporal dimension of the residential experience</td>
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<td>Thomas Priestley Study of the effects of an electric transmission line on perceived neighborhood quality</td>
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<td>Pink Palace to Rosa Park Towers</td>
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<td>10.30-11.00</td>
<td>Bettye Connell</td>
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<td>Opportunities for EB-research on falls among the elderly</td>
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<td>Cees Aarts, Piet Evenblij</td>
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<td>Man and measure, why?</td>
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<td>12.30-13.00</td>
<td>Hans-Joachim Harloff</td>
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<td>Small nets as learning experience</td>
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<td>Intentions of architects, appropriation and well-being in innovative</td>
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<td>single-family housing projects</td>
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<td>Distance working and electronic homework</td>
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<td>Hiroshi Shinobe, Tetsuo Seguchi</td>
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<td>A study of the adjustment of the district with the change of industry structure</td>
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*July 8*
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<th>ROOM SALLE</th>
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<td>09.00-15.30</td>
<td>THE HOME AND ITS MEANINGS (chair: Tommy Gärling)</td>
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|            | 09.00      | **Judith Sixsmith**
|            |            | Remembering the world \ ----|
|            | 09.30      | **Gilles Verpraet**
|            |            | Housing: toward a model of neighbourhood relations |
|            | 10.00      | **Roderick Lawrence**
|            |            | Transformations in domesticity, household demography and dwelling designs |
|            | 10.30-11.00| ❖|
|            | 11.00      | **Andrew Sixsmith**
|            |            | Unemployed at home: prison or refuge ? \ ----|
|            | 11.30      | **Maria Giuliani, Giuseppina Rullo**
|            |            | Territorial organization of domestic space in different types of households |
|            | 12.00      | **Erik Lindberg, Tommy Gärling, Henry Montgomery**
|            |            | A study of residential preferences and choices |
|            | 12.30-13.30| ❖ |
|            |            | (chair: Roderick Lawrence) |
|            | 13.30      | **Toomas Niit**
|            |            | A methodological model for studying families in dwelling environments |
|            | 14.00      | **Lisa Horelli**
|            |            | The meaning and the role of physical environment in housing |
|            | 14.30      | **Christos Saccopoulos**
|            |            | Design of a summer house on Kyhnis  |
Abstracts of Symposia/
Résumés des Symposiums
RESEARCH UTILIZATION
(Utilization des données de recherche)

Contributors: J. van Andel; I. Aravot; P. Ellis; R. Hamel; D. Joiner; G.T. Moore; P. Newland; J. Powell; Chr. Reed; H. Sanoff; J. Sime; M. Symes; Y. Tzamir

Introduction

Looking back, we see that the transfer of results from research in environment-behaviour studies to practical people, for instance designers and policy makers, is an old problem. Researchers are accused of studying the wrong problems; and practical men are asking the wrong questions. Different reasons for this miscommunication have been given and a number of possible solutions have been proposed.

In this symposium eight speakers will treat different parts of this problem. Tzamir & Aravot will stress the role of the different spheres of knowledge of architects and researchers. Hamel will present an empirically tested model of the design process, while Symes pays most attention to the complexity and diversity of architects information needs. Each of the next five speakers will elaborate upon a specific method or technique to improve the communication between researchers and architects. Both Joiner and Sanoff will speak about the implementation of participation of various interested parties in the design process. Ellis will stress the use of 'social episodes' as a research technique. Both van Andel and Sime a.o. will discuss the potentials of computerized techniques, respectively of videodisc-systems and of expert-systems.

The symposium consists of short individual presentations and/or demonstrations, concluded by a general discussion between participants and the audience of about 45 minutes.

Abstracts of contributors

Peter Ellis, Organisational Psychologist, 37c Prince of Wales Road, London NW5, Great Britain.

THE USEFULNESS OF RESEARCH ON SOCIAL EPISODES

This paper will discuss the usefulness to designers and planners of research which addresses itself to social episodes. This type of research
has been common in European social psychology for the past ten years, but has been hardly used by environmental researchers. Social episode research attempts to analyse discreet social events in terms of the roles of the participants and the rules which govern social behaviour, using participants' own accounts of these events as primary data. The way in which this methodology can be applied to yield useful information for designers and planners, will be discussed with reference to a multi-national research project on office planning in which the author is currently engaged.

Joost van Andel, Department of Social Sciences HG 9.50, Eindhoven University of Technology; PO BOX 513, 5600 MB Eindhoven, Netherlands.

EXPERT SYSTEMS IN ENVIRONMENTAL PSYCHOLOGY

The knowledge gathered through research in environmental psychology is not optimally used by designers and other people working in applied settings such as politicians and civil servants. In this paper a number of causes and possible improvements of this situation will be discussed. Two aspects are highlighted in particular: the structure and the presentation of information. A recent development to present knowledge from environmental psychology is the use of computerized information systems or expert systems. Limitations and possibilities of expert systems in general and for environmental psychology in particular will be discussed. The issue is illustrated with parts of an expert system on the design of children's play environments using the pattern language as a structure to present information efficiently and attractively to designers.

Jonathan Slime, James Powell, Paul Newland, Chris Reed; School of Architecture, Portsmouth Polytechnic, King Henry 1 Street, Portsmouth PO1 2DY, Great Britain.

ENVIRONMENT-BEHAVIOUR RESEARCH AND INFORMATION TRANSFER

With the advent of new information technology what for many years has been known as the 'applicability gap' between research and design, is currently receiving attention under the heading of 'information transfer'. While rapid information retrieval systems operated by computer are becoming available, there still is insufficient understanding of the relationship between research information and the design process. While researchers might decry the architectural profession for not making use of published research information, and designers might criticise researchers for ignoring the type of information they feel they most need, effective application of environment-behaviour research in design will only be achieved by an appreciation of the reciprocal importance of research to design and design to research. Central to the problem of information transfer is insufficient attention to the physical environment.
and the design process in environment-behaviour studies, a lack of research tradition in architectural education, a decreasing willingness to absorb specialist information in any detail as a student progresses through an architectural course and, in particular, insufficient reference to environment-behaviour findings, and indeed other design science research, in the criteria used by the architectural profession to evaluate what a 'good' or 'bad' building is. Bearing in mind the particular problems of research information not being in a form which architects are predisposed or readily able to use when designing, a microcomputer design research program (contextual fit in housing design), a video-disc 'building event' simulation (escape from burning buildings) and a video-disc information and educational package (on energy saving design), all developed at the School of Architecture, Portsmouth, are discussed. The visual impact and interactive nature of these information retrieval, experiential and learning packages, enable designers and building users to begin to understand the research and design process in a way that has previously been very difficult before. The advantages and limitations of such information systems are likely to have for the future application of environment-behaviour research in design and policy making, are outlined.

Gary T. Moore, Ph.D. Program in Architecture and center for Architecture and Urban Planning Research, University of Wisconsin–Milwaukee, Milwaukee, Wisconsin 53201, USA.

DISCUSSION: TWO-COMMUNITY AND ONE-COMMUNITY THEORIES AS MEANS FOR THINKING ABOUT RESEARCH UTILIZATION

The papers in this session are of two types, with a possible middle ground. Working with Min Byung-Ho on his Ph.D. dissertation in architecture, we have to come to the realization there appear to be two main approaches to resolving the utilization question. Two-community theory is based on the notion that research and practice are separate (read: "transfer," "communication," "information requirements," "channels of influence," "use of knowledge," "informing design," "the assembly of knowledge," and "design guides"). One-community theory, on the other hand, is based on the notion that research and practice are integrated (read: "participation," "share experiences and negotiate priorities," "direct involvement of the public," and "organized and participatory approach"). The advantages and limitations of these two approaches will be explored by reference to the work presented in the papers of this symposium.

Martin Symes, Bartlett School of Architecture and Planning, University College London, Gower Street, London, WCl E6BT, Great Britain.

ARCHITECTS INFORMATION REQUIREMENTS

This paper suggests that some of the difficulties of research utilisation in architecture stem from the complexity and diversity of architects needs.
The architectural design process may be seen as proceeding through a series of sub-processes: briefing, design, implementation, evaluation. In each sub-process, designers and their collaborators generate a set of 'hypotheses' and then test them, drawing conclusions for further action. As this technical work is carried out, members of the design team must interact with each other and with 'outsiders', so naturally their behaviour affects the decisions which are made. In any of the sub-processes of design, architects and their collaborators may thus need information concerning possible 'hypotheses', concerning testing mechanisms or concerning the behavioural context within which they are working. In some instances they may need information of more than one kind. Clearly it would be of interest to the research community to establish a full empirical classification of the information requirements of each sub-process. This paper will therefore use case studies written over the last five years by the author and his colleagues to indicate the types of result which could be obtained.

Interestingly these particular data suggest that social and psychological research is often not available when it is most needed.

Duncan Joiner, Architectural Division, Ministry of Works and Development, PO BOX 12-041, Wellington, New Zealand

DESIGNERS PARTICIPATING IN RESEARCH

The experience of New Zealand Ministry of Works and Development architects with post-occupancy evaluation techniques has suggested that the keys to ensuring utilization of research in design are processes of participation and social negotiation. They are developing a range of consultancy techniques and an organizational structure for their practice which recognize these processes.

Consultants working with the Ministry's architects have been reviewing public building delivery in New Zealand, and the review has focused on the problems of informing design from research. Research, and the assembly of social and technical knowledge do not easily form an intrinsic part of the creative processes of design, where designers draw largely on direct personal experience in preference to documented information. The Ministry has extensive technical resources and well developed post-occupancy evaluation methods which incorporate behavioural information into the technical knowledge base. But the technical resources are under-utilized, and the reports from post-occupancy evaluations are not widely applied to new design projects. Architects participating in evaluations are however enthusiastic about the enriching learning experience they provide, not only from the buildings evaluated, but from how other participants in the evaluations respond to buildings.

The review has recommended changes to working methods to gain the benefits evident in the participatory post-occupancy evaluation process. Instead of further refinement of documented data and design guides, emphasis is being placed on other interest groups to share their experiences, thereby providing a common basis for agreeing upon building performance rather than establishing normative or prescriptive criteria.
Participatory post-occupancy evaluation methods are being extended and adapted as techniques for programming and designing new buildings and for their management through construction stages. The review has also shown that successful transfer of research information into design requires a supportive organizational structure. Among the organizational changes made to provide this support has been the establishment of a Practice Support Group. The Practice Support Group provides a network of experts and an accompanying design information service. It enables designers to participate directly in bringing research knowledge to design. It enables them to share their experiences and to negotiate their priorities for research.

Henry Sanoff, School of Design, North Carolina State University, Raleigh, North Carolina, NC 27650, USA.

INTEGRATING RESEARCH AND DESIGN PARTICIPATION: NEW PARADIGM FOR THE FUTURE

Architecture in the future may be characterized by an increasing participation of the user in its organizational and formal definition. This is evident from the work of the last two decades where there has been a considerable movement towards the direct involvement of the public in the definition of their environment.

A review of the theories and practices of participation suggest that the architects' job is no longer to produce finished and unalterable solutions, but to extract solutions from a continuous confrontation with those who will use his/her work. The architects' energy and imagination will be completely directed to raising the level of awareness of clients/users in the discussion, where the solution generated from this approach will need to be made 'transparent' so that the decisions are understood by all the people who made them.

In order to respond to this situation examples will illustrate how architects will need to do everything possible to make design solutions more the representation of its users even though difficulties arise in applying the concept of participation in the decision making process such as the organizational and methodological problems of the process itself. The potential benefits offered by an organized participatory approach, effecting the community, the users, and the architect are numerous and constitute logical, technological and economic tenets for it's use.

Yigal Tzamir & Iris Aravot, Faculty of Architecture and Town Planning Technion University, Haifa 32000, Israel.

ARCHITECTURE AND E-B RESEARCH – THE GAP OF KNOWLEDGE

The main stream of research on relations between people and their physical surroundings is still expected to set up scientific support to
architecture and environmental design. In spite of the ongoing strive for communication between the disciplines, this aim has not been achieved yet.

This paper intends to examine the problem from a theoretical point of view, in order to clarify that miscommunication is not a consequence of instrumental or methodological deficiencies, but can be explained by the inherent gap between different spheres of knowledge.

The discussion is based upon a model of knowledge (after G. Ryle, 1946). This model, applied to architecture, shows the potential channels of communication between specific spheres of knowledge in architecture and E-B studies.

The results of this analysis negate the very basic premise held by both E-B scientists and architects, that direct utilization of research results in architectural practice is possible and desirable.

The paper concludes by illustrating the nature of different channels of influence between architects and E-B scientists.

Ronald Hamel, Department of Psychology, University of Amsterdam, Weesperplein 8, Amsterdam, Netherlands.

STAGES OF THE DESIGN PROCESS AND THE USE OF INFORMATION

The intake and processing of information by architects was studied by analysing the protocols of twelve architects who worked on a design thinking aloud. The analysis was carried out using a descriptive model of the design process.

The model itself is based on the analysis of the task and a psychological analysis of the capacities and limitations of the designer. It explicitly describes the activities, the use of knowledge, and the intake of information during each part of the process.

Some of the practical implications for environment-behaviour research concerning the choice of the phenomena to be studied, the communication of research findings, and the reception of the information as a function of both the knowledge of the designer and the stage of the process will be discussed in more detail.
Introduction

Abstracts of contributors

Pascal Amphoux, Institut de Recherche sur l’Environnement Construit, Ecole Polytechnique Fédérale de Lausanne, Avenue Église-Anglaise 14, 1006 Lausanne - Suisse

LE CHEZ-SOI, UN ESPACE PROPRE ET UN TEMPS PARADOXAL

Plus que le "chez-soi" que nous ne pouvons définir de manière absolue, c’est le "sentiment du chez-soi" que nous éprouvons au plus profond de notre être et qu’il s’agit de "dire".

De fait, le chez-soi n’est pas un concept monovalent mais une notion floue qu’on ne peut ressaisir que de manière indirecte et par des moyens détournés. Sa richesse sémantique repose en français sur l’ambiguïté fondamentale qu’elle entretient sur l’intimité du logement et celle de la personne. Ni objet, ni sujet, elle relève très directement des principes d’une approche phénoménologique. En d’autres termes, il ne s’agit ni de chercher à définir le chez-soi en soi, ni de prétendre qu’il n’y a de chez-soi que pour soi, mais il s’agit de montrer comment pour soi il peut y avoir un chez-soi en soi ...

Nous aborderons cette réflexion sous l’angle des configurations spatiales et temporelles de l’habitat, en retenant deux arguments :
- d’une part, le problème de la délimitation d’un espace propre, qui permettra d’aborder les questions de l’autoréférence, de la constitution d’une identité et de l’appropriation des lieux;
- d’autre part, l’existence d’un temps discret et paradoxal, qui permettra d’aborder les thèmes de la synchronisation, de la discontinuité et de l’immédiatisation des rythmes et des activités domestiques.

Du point de vue opératoire, l’espace propre sera ressaisi à travers le concept de "motif" (entendu à la fois comme forme schématique et motivation) et connoté d’exemples recherchés dans le domaine de l’usage et du rôle de la lumière à l’intérieur du logement; quant à l’enchevêtrement des temporalités, il le sera à travers le concept d’"effet" (entendu à la fois comme impact psychologique et comme illusion sensorielle) et connoté d’exemples repérés dans le domaine des pratiques sonores des habitants.

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Parmi les buts prioritaires d'une phénoménologie domestique figure indiscutablement l'évocation des relations affectives que l'habitant établit avec son logis. Afin de cerner la question dans sa dimension la plus manifeste, le champ d'observation a été volontairement limité à la perspective qui confronte l'individu à sa chambre propre. On entrevoyait aisément à quel point ce rapport, en apparence élémentaire, prête à une lecture complexe, qui révèle les mille facettes de la notion d'habiter, avec un rapprochement correspondant de la spatialité et de la temporalité, qui contribuent à conférer son sens à l'existence individuelle.

Le présent texte fait suite à une série de communications sur le thème "configuration et expérience vécue de la chambre" présentées à Londres et Rome (1983), Berlin (1984), Melbourne et Paris (1985). La problématique évoquée est la nature des liens affectifs que l'habitant tisse avec son cadre familial, qui combine parfois lieux de séjour et de travail. L'origine du propos est à situer dans le vers de Paul Eluard "la maison est dans notre chambre", où cette dernière est la partie prise pour le tout, attestant ainsi l'importance de la dimension camérale, qui est paradoxalement ignorée dans une large mesure par les chercheurs des sciences sociales.

La perspective phénoménologique adoptée entend débusquer jusque dans le détail l'éventail de sens attribué à ce site de la vie intime. Une telle topoanalyse puise ses références à des sources multiples : le témoignage oral ou écrit, l'expression picturale ou, plus simplement, le vécu personnel.

Ma contribution principale à ce symposium pourrait être un commentaire sur les autres communications. Il serait certainement contraire à l'esprit de la phénoménologie de proposer une interprétation avant de laisser les textes parler d'eux-mêmes! Me fondant sur les titres et indications reçus jusqu'ici, je m'envisage qu'un exposé de type conjectural. Son but, comme je l'ai annoncé antérieurement, serait de déceler certains éléments de continuité entre les contributions du symposium et le thème plus large de la conférence (se retourner vers l'avenir).
A ce stade, mon commentaire pourrait se développer à partir des notions suivantes :


**PERSPECTIVE** : mise en relation des concepts dérivés des perspectives philosophiques et psychologiques et ceux propres à la recherche dans le domaine de la géographie et de l'environnement. Des considérations sur le langage et la métaphore pourraient avoir leur place ici.


Carl, F. Graumann, Psychologisches Institut, Universität Heidelberg, Hauptstr. 47-51, Fed.Rep. of Germany

**TOWARDS A PHENOMENOLOGY OF BEING AT HOME**

Phenomenology emphasizes and explicates the intentional relationship between bodily subjects and their material and social environment. This relationship is conceived of as reciprocal. Individuals, (as well as groups) experience (perceive, judge, feel, evaluate) and act upon their concrete, i.e., situated, environment which, in turn, has its impact on its inhabitants. Some of the modalities of both the environment as intended and as happening ("unintentionally") will be demonstrated and discussed with respect to living at home.

Perla Korosec-Serfaty, School of Architecture and Urban Design, 205 Marvin Hall, The University of Kansas, Lawrence, Kansas 66045 - U.S.A.

**LE CHEZ SOI : SECRET ET PROXIMITÉ DE L'AUTRE**

L'histoire des modes de vie familiale et des mentalités, comme les apports anthropologiques ou ethnologiques de la vie privée et sociale montrent que les conceptions du chez soi varient en fonction des lieux et des époques. Nous avons souligné au cours de travaux antérieurs l'importance du secret dans l'expérience moderne et occidentale du chez soi. Mais le secret n'est tel que dans la mesure où il s'inscrit dans une dialectique de révélation et d'ouverture à autrui. Nous tenterons donc d'entreprendre une phénoménologie du secret et de l'hospitalité comme expérience unique de la présence de l'autre au cœur de soi.
L'habitant et son lieu de vie, par adaptations successives, dialoguent.

C'est dans le mot "habiter" qu'on perçoit la dimension du façon­nement réciproque.

Si "habiter" conceptualise le rapport d'échanges entre l'individu et son lieu - le lieu étant à sa création le plus souvent neutre - imaginons un autre concept où le lieu naîtrait chargé d'intention, comme l'est une église.

"Surhabiter" serait aussi distant en valeur positive de "habiter" que "habiter" l'est de "loger".

La surhabitation proposerait un lieu actif de haute potentialité. Par le lien du corps au monde, on peut espérer créer ce surhabi­tat.

Comment, par des méthodes d'études adaptées, peut-on favoriser ce lien de l'homme au monde ?

Comment l'espace du béton et du verre peut-il être organisé pour agir sur les individus ?

La méthode sera celle du parcours qui lie espace et temps.

Les outils, mis en oeuvre dans ce parcours, seront :

- La dialectique du dedans/dehors, privilège fondamental de l'architecture
- Le cadrage des vues ou le pouvoir du béton et du verre de montrer ou de cacher
- L'action sur le temps par le pouvoir du mur à régler les distances et les vitesses
- L'action sur le corps par le volume bâti qui règle les gestes et l'action kinesthésique.

Nous examinerons successivement les documents graphiques illustrant l'évolution d'une théorie architecturale :

- L'idée rencontrée dans l'espace des temples Bouddhistes Zen de KYOTO
- L'enseignement reçu dans l'Agence SAKAKURA en 1960, sous la direction de Fumitaka NISCHISAWA
- La réalisation de plusieurs générations d'habitations construites en France de 1974 à 1987
- L'étude d'un collège en cours de réalisation, aboutissement de l'expérience acquise.
Notre réflexion prendra son départ dans une analyse de l'expression "chez soi". Cette expression nous donnera une première incitation à penser l'être chez soi, par le rapprochement qu'elle suggère entre la spatialité de la maison et l'identité personnelle. En creusant la distinction entre loger et habiter, nous parviendrons à un envisagement de l'habiter comme processus d'interaction dynamique. Pour mieux comprendre ce processus, seront à prendre en compte, d'une part, le monde auquel la maison renvoie, d'autre part, l'insertion de l'habitant dans un réseau de relations interpersonnelles qui affectent de part en part sa manière d'être, c'est-à-dire d'habiter. Une telle approche implique une critique des façons habituelles de penser la relation de l'homme à la maison, ainsi que, plus généralement, la relation dedans/dehors.
Introduction

David Canter

Historically, Environmental Psychology and the related studies of the interplay between people and their physical surroundings has had its origins in the developed countries of the North Atlantic basin. Other developments in Australia and South-East Asia have also focussed on problems that clearly have their roots in the problems associated with affluent societies. Concerns such as effective office building design, the maintenance of wilderness and associated resource planning concerns, together with problems of forming internal representation of well-established urban environments, are all issues that assume a well-founded industrial base and a firmly established democratic political system.

It is therefore not surprising that the methodologies that are characteristic of much research on people and their relationships with their physical surroundings are appropriate to developed countries. Theoretical frameworks will be formed such as those, for example, that derive from the relationships between established nuclear families in a developed country. The study of privacy is a very good case in point.

The purpose of this symposium is to explore what methodology and theories can be transported to developing countries and what topics of study have a special relevance to the problems that the third world is facing.

Abstracts of contributors

Setha M. Low

CULTURE, POLITICS AND THE PLAZA: AN ETHNOGRAPHIC APPROACH TO THE STUDY OF URBAN PUBLIC SPACES IN LATIN AMERICA

Environment-behaviour studies of plaza use in the United States have relied upon traditional methods of behavioural mapping, behaviour setting observation and time lapse photography. The results have been useful for the evaluation of the design of these urban public spaces. However, a theory of
plaza use that departs from urban design principles or that includes the sociocultural dimensions of plaza, plays a culturally significant role in the expression and cultural representation of urban life and as such requires a more contextual and interpretive theory and method to understand the meaning of this important part of everyday behaviour. Further, the political and economic dimensions of plaza design and construction are linked to historical and colonial power relations that still have meaning today. This presentation outlines an ethnographic approach to the environment-behaviour study of the plaza and suggests that such a meaning-centred and culturally sensitive theory/method provides a more adequate perspective for the study of the complex problem of urban public space in the Third World.

Circe Monteiro

AN ENVIRONMENTAL APPROACH TO SHANTYTOWN URBANISATION IN DEVELOPING COUNTRIES

This investigation analyses social relations in three different neighbourhoods in Recife-Brazil: a favela, a public housing estate and a middle-class neighbourhood. The investigation was structured by means of Facet theory and the result analysed using the Smallest Space Analyses. It presents projections on the Level of Interaction, the Referent of Action and the Associates. The results show that casual interactions between neighbours form, paradoxically, one of the most important social relationships in the favela, and that questions of space play a determining role in the establishment of these social relationships. The middle-class arena for entertainment and the kind of interaction which takes place in the home is determined by the social role of the associates. Public housing dwellers present a stricter pattern of social interactions not directly influenced by other facets. Results demonstrate that these groups conceptualize and use residential space differently. Urban planning proposals aimed at favelas should consider that changes in spatial organization will also imply changes in social relations and life style.

Henry Sanoff

HOUSING STRATEGIES FOR SOUTH AFRICA'S FUTURE

Many developing nations such as South Africa have a formidable housing crisis. The cost of housing is usually beyond the reach of what the urban poor can afford. Because of the great variety of ethnic groupings in South African communities, the future housing options need to be culturally as well as socially and economically more appropriate than those generated by theories of housing development which are deeply rooted in Western industrial society. The environment must be appropriate to the needs of those it is being planned for and should respond to the employment needs of
the residents and, if possible, help to support an informal economic sector. Participation in housing can be seen as a continuum where the user helps to shape a building by acting as a client of an architect while at the other end the users actually build for themselves. People must stay involved throughout the process and take responsibility with their professionals to see that there are results.

Graham Tipple

LOW INCOME HOUSING AND WORLD-VIEW IN ASANTE: PROBLEMS AND POSSIBILITIES FOR POLICY IN KUMASI, GHANA

The need for large increments in low income housing in Kumasi is established using data from surveys in 1980 and 1986. The scale of the need is such that reliance on the initiative of ordinary people is indicated for any realistic policy. Most theory on such initiatives relies on a world-view in which housing is a marketable good for which individual action is the major initiator and economic security or gain the major motivator. This paper shows how the Asante world-view, which dominates activity in Kumasi, imposes very particular constraints and opportunities for the housing policy maker. Their effect on the provision of housing is assessed and alternative approaches are recommended which are congruent with the local world-view.

Javier Ubrina-Soria

LATIN AMERICAN PRIORITIES IN ENVIRONMENTAL PSYCHOLOGY

This paper describes the environmental conditions which directly affect the quality of life of the inhabitants of Latin America. It reviews what have up to now been the principal guidelines in Environmental Psychology in Europe and the United States in contrast with Latin-American needs. At the same time it proposes concrete exchange and collaboration which could enhance the application of Environmental Psychology in Latin America.
Organizer and chair: Gert Gröning

CHANGING NOTIONS OF LANDSCAPE AND ITS IMPLICATIONS FOR THE SOCIAL AND SPATIAL ENVIRONMENT
(Paysage: évolution des idées et implications pour l'environnement social et spatial).

Contributors: H. Amstrong, E. Bucht; J. Coeterier; M. Conan; G. Gröning; J. Wolschke-Bulmahn.

Introduction

Gert Groening (organizer), West-Germany - Hochschule der Künste Berlin, Fachgebiet Gartenkultur und Freiraumentwicklung

Notions of landscape seem to encompass elements of stability, of continuity, of eternity in an otherwise unstable, erratic, rapidly changing context. Landscape seems to be a notion void of ideology and history and full of science, especially ecology. Consequently occupation with landscape seems to liberate the researcher from the consideration of political and historical dimensions.

Working and publishing in the field of the history of landscape architecture and garden architecture myself in the past years, I feel the need for an international exchange of research results in that field.

It is the idea of this symposium at IAPS-10 in Delft to bring together for the first time scholars from all over the world who distrust such 'objective' notions of landscape as mentioned above by the very evidence of their research, part of which will be presented at the symposium. I assume that more researchers work on the topic of this symposium or related issues worldwide than I am aware of. So the symposium also could bring together some of those who are interested in scolary research in this field and we may find out if a world wide network on this topic is worth establishing. Also the idea of a small conference about that theme within the IAPS conference frame may become a point of discussion as a consequence of the symposium. All the participants have been working scholarly in the field of landscape history and people-landscape relationships. All of the papers address the topic of the symposium and should guarantee for a thought provoking session.
Abstracts of contributors

Helen Armstrong

CHANGING NOTIONS OF THE LANDSCAPE - THE AVENUE IN THE NEW WORLD, ITS SOCIAL AND SPATIAL IMPLICATIONS

This paper considers the changing notion of landscape in contrast to environment using the avenue as an element of the landscape. It explores the avenue from the Renaissance to the 18th century in Europe and Britain and then moves to the New World. It particularly examines the changing notions of the avenue in Australia contrasting the early notions of baroque idealism with the eventual ordered grid, developed by surveyors. The notion of avenue and the tree species used are considered in terms of their meaning to the community revealing some interesting paradoxes in social attitudes to environment and landscape.

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FROM A PLACE FOR RECREATION TO A SCHEME FOR RECREATION - THE FAILURE OF A GOALORIENTED APPROACH TO OPEN SPACE DESIGN IN SWEDEN

There is a general conflict affecting open space design. Opinions advocating design for multifunctional use over time, is as general sites stand against goaloriented approaches in which open spaces are specified and functionally defined as a basis for their spatial distribution and arrangement. In Sweden the goaloriented approach resulting in technical standards for open spaces has had an immense impact since 1960. The dominating result is a highly static and atomized environment. The basic problem affects both the goaloriented approach as such and its implementation in a technically dominated building process.

J.F. Coeterier

CHANGING NOTIONS OF LANDSCAPE: SEVEN CAUSES OF ALIENATION

The gap between planning procedures and human needs is widening. This causes feelings of alienation. Seven causes are identified: A loss of human scale, of place identity, of environmental meaning and diversity of relationships, a high degree of mechanization, a utilitarian way of looking at things, having no voice in public matters, and dilapidation and unsafety due to financial restrictions. Although of different order they all hang together. Alienation is more widespread than is generally recognized but because its roots lie in the way society develops as a whole, its cure is far from simple.
A PICTURESQUE TOUR OF LANDSCAPE SOCIOLOGY

French sociological research on landscape issues during the last fifteen years is briefly surveyed. It shows how a picturesque visual literacy has shaped the French cultural elite attitudes with respect to landscape appreciation and public management. Yet it calls attention to the competing cultural models which are used by other social groups striving to achieve some sense of place. Then, this Brownian notion of landscape attitudes is shown to reflect a very deep change from an aesthetic to a symbolic value of landscape. Bibliography and notes.

THE FEAR OF THE NEW LANDSCAPE, ASPECTS OF THE PERCEPTION OF LANDSCAPE IN THE GERMAN BOURGEOIS YOUTH MOVEMENT BETWEEN 1900 AND 1933

Landscape has had a central meaning for the German youth movement of the Weimar Republic. The bourgeois part of this movement has developed respectively taken over (Riehl, Löns, Francé) an immobile ideal picture of landscape which corresponded to a preindustrial societies way of nature appropriation and power structure. Their perception of landscape ignored people living there. Man was understood not as a social being but as coined by landscape, culture was understood as rooted in the landscape. Therefore a change of landscapes was perceived as destructive for culture and man. The immobile picture of an ideal landscape has been stable over the last five or six decades with some groups of society. It has had its highpoint during National socialism, but is of influence still today in Germany. It appears that this immobility is detrimental towards conceptions of a democratic society at the doorstep to the 21st century.
Introduction

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Gerhard Kaminski*, Psychologisches Institut, Universität Tübingen, Friedrichstraße 21, 7400 Tübingen, FRG

Ecological psychology did not emerge as a component of the "ecological movement". It arose much earlier and owes its existence to Barker's idea that psychology - in analogy to biology - needs an ecological subdiscipline or an ecological perspective, as an indispensible complement to experimentally oriented methodology. Ecological psychology nevertheless also has good reasons to ascertain, in "looking back", that its hopes had been somewhat too optimistic. Why did they to some extent remain unfulfilled? What is our present point of view? What are our plans and expectations for the future?

The symposium will be focussed on Barker's "behavior setting" concept which, in the meantime, has undergone various further developments, though less than would have been possible and desirable. Most of these trends and attempts appear, on the whole rather incidental, sporadic, non-systematic. However, due to their respective independence they reveal the multiplicity of potentialities and tasks for further progress in ecological psychology. As a complex systemic unit, the "behavior setting" lends itself to extensons in quite different directions. At least five main tasks or trends seem to be taking shape so far:

1. "Psychological ecology" aims at taking a descriptive-taxonomic inventory of all naturally functioning systems of person-environment-inter-relationships. What are "natural units" above and below the "behavior setting" level? How are they defined and delimited?

2. The "behavior setting" itself, as the basic unit of Barker's "ecobehavioral" approach, deserves further elaboration. Is there any news about it?

3. The individual participant of a behavior setting system can (while actually participating in it) be viewed in traditional or current psychological terms. How does this enrich and differentiate behavior setting theory and research? How does the systematic context determine details of the individual's participation processing?
4. The individual as a whole, viewed in different longitudinal perspectives, overarches, as a different kind of "natural" systemic unit, all his/her various actual behavior setting participations. How can (individual) behavior setting participations be integrated into an ecological personology?

5. Although points 1 to 4 figures as issues in basic research they nevertheless can also raise questions of practical applicability.

Abstracts of contributors

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BACK TO THE FUTURE ... AGAIN - A PERSPECTIVE ON ECOLOGICAL PSYCHOLOGY

Some confusion exists about the element of ecological psychology. Behavior Specimen Records were the first attempt to capture the richness of daily behavior. Behavior Settings were the units of behavior discovered after conventional psychology was abandoned, but these were relayed to the community as a whole and individual behavior was deemphasized. This may account for the lack of acceptance in U.S. Psychology. But behavior settings when compared across communities and organizations of differing size led to undermanning theory which explained higher participation levels in smaller groups and organizations. The main philosophy of data collection in ecological psychology was to adopt the role of transducer and not impose manipulation of variables. While none of these concepts has been accepted by mainstream U.S. Psychology, the need for unobtrusive, wholistic data collection is still felt as manifested in the transactional perspective, which repeats many of the tenets of early ecological psychology. Thus, the hope of the future is that this need will continue to be felt and the principles of ecological psychology will be discovered by a new generation in whatever form they may take.

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LEARNING HOW TO ACT IN BEHAVIOR SETTINGS: THE CASE OF NEWCOMERS

In the present paper the behavior setting perspective is applied on learning in naturalistic settings. According to my theory, behavior settings are interpreted as resources of knowledge which is available from other setting participants and from instructional material as well. Behavior settings impose social forces upon the behavior of newcomers. Thus, when the newco-
mer participates in a behavior setting, usually he/she tries to create the impression of acting in conformity with the behavior setting's standards of appropriate behavior. Empirical studies with first-time users of libraries and career planning and placement centers were aimed at uncovering the newcomer's competence by asking questions. The most significant result of this research is that individual differences in the number of questions asked reflect different tactics to create favorable impressions on others. Since other setting participants will interpret the newcomer's behavior in relation to what they expect of him/her, it seems likely that he/she will consider what constitutes a reasonable goal within the particular behavior setting when formulating impression management tactics in the process of learning or knowledge acquisition.

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THE PSYCHOLOGICAL EXPERIMENT AS A BEHAVIOR SETTING GENOTYPE

Ecological psychology and experimental psychology appear as two different, unconnected worlds. Could they be reconciled or even integrated to one world? Ecological psychology claims to be responsible for all kinds of person-environment - interrelationships and may attempt to usurp experimental psychology by pronouncing all psychological experiments to be behavior settings. Supposing experimental psychology would not resist: would that have any consequences for it? Or would that amount to a Pyrrhic victory for ecological psychology? And how could experimental psychology enter into the realm of ecological psychology? What would be the repercussions on itself? The paper attempts to find at least some answers.

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BEHAVIOR SETTINGS, COGNITIVE SCRIPTS, LINGUISTIC FRAMES

Behavior settings in the Barker tradition are conceptualized as non-psychological, supra-individual entities. It will be argued that it is useful to expand this conception toward a socio-cultural setting, stressing the fact that behavior settings are heavily influenced by the shared norms and value systems of a society. For the development of a truly ecobehavioral approach it appears necessary, however, to complement the behavior setting concept by psychological concepts that help to explain and predict typical verbal and non-verbal behaviors of setting participants. It will be proposed that the concept of script may serve as a cognitive correlate of behavior setting as it represents sequences of actions in typical settings. The linguistic concept of frame provides a further complement as it refers to setting-specific forms of speech. A theoretical and empirical integration of these concepts contributes to a more productive relationship between social and environmental psychology.
Although Barker theoretically conceptualized discrepancies between the "program" of the setting and events actually happening, he was primarily interested in states of "congruence" or "fit". Theoretical considerations and results of empirical studies are presented which focus on intra- and interpersonal processes resulting from events evaluated as contradicting to programs of settings. The results and their interpretation indicate that

(a) Barker's approach generally offers room for this kind of events
(b) criticisms concerning the static and a-psychological character of his concept may be taken up productively
(c) for this, a crossfertilization of ecological with social-psychological concepts is inevitable.
In a recent review Evans and Cohen (1987, p. 574) identifies four general types of environmental stressors. Catastrophic events, stressful life events, daily hassles, and ambient stressors. With the exception of catastrophic events, all these areas will be covered in the present symposium. Initially, stress was studied as a response to single environmental factors. In at least one of the papers, the one on colour and physiological arousal, this approach dominates. However, already in the 1960's, stress researchers began to look at more complex human situations. This approach may be exemplified by two of the other contributions, one dealing with crowding and social support in an Indian setting, and the other with collective housing for old persons suffering from senile dementia. These contributions also exemplify the close link that exists between stress research per se and the well established fields of environmental psychology commonly referred to as personal space, crowding, and human territoriality.

The importance of the concept of stress for environmental psychology emanates from the definition of stress as a generalized response to environmental factors. It is generally assumed that stress is a response to overload, resulting in a shift in bodily physiology, like blood pressure, pulse rate, and the secretion of adrenalin, noradrenalin, and cortisol. In addition there might be changes in perception, emotion, and behaviour. However, this straightforward view on the relationship between overload and stress is now being replaced by more elaborate models where cognitive or motivational factors are assumed to mediate the stress reaction (Küller 1987, p. 1251). In this context it is intriguing to take part of the hypothesis presented in one of the papers, that the breakdown of social support systems under high density living conditions may account for at least part of the deleterious effect that crowding has on mental health.

The two contributions concerning colour and arousal and the activation of elderly people, however points to one of the limitations of the stress concept. Stress is commonly understood as a negative effect of too much stimulation. Therefore it often becomes necessary to point out that mild or moderate stress levels might be beneficial to the human organism. In those instances stress is instead regarded as a positive quality, and opposed to
understimulation. It seems desirable to make a better distinction between the concept of stress on one hand, and the more general dimensions of activation and arousal on the other. Should we continue to regard stress as a generalized response to overload, or should stress instead be regarded as a positive force of everyday life?

The organizers of IAPS 10 have asked us to look back into the future, which means we should try to compare the expectations we had twenty years ago to the present situation. I have come to the conclusion, that perhaps stress research is unique within the field of environmental psychology, in combining sound theoretical reasoning in physiology, psychology and sociology with a powerful set of methods and an eye for real world problems. Stress researcher actually seem to come to terms with a number of environmental problems (Küller 1987, p. 1267). I believe that this conclusion will become consolidated by the presentations at this symposium.

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Abstracts of contributors

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CROWDING AND SOCIAL SUPPORT

People adapt to crowded settings by social withdrawal and avoidance of interaction. This coping strategy may loosen social bonds. An empirical study of residential crowding in India verifies the hypothesis that the adverse consequences of crowding on male adult's psychological health are mediated by a breakdown of social support systems. Residential density predicts psychological symptoms after controlling for income and education. The addition of a social support term to the regression analysis, however, removes the significant effect of density on psychological symptoms.
ENVIRONMENTAL ACTIVATION OF OLD PERSONS SUFFERING FROM SENILE DEMENTIA

It was hypothesized that a familiar environment would activate old habits established through lifelong experience, thus increasing the functional and social competence of patients suffering from senile dementia. Two collective housing units for about ten patients each were built at the Kroksbäck housing area in Malmö. The intention was to follow the patients for two months when they remained at the geriatric hospital and then for another four months after they had moved to the two collective housing units. The results showed that collective housing in small units, especially if the environment was decorated in an old and familiar style, had an activating effect on patients with old age dementia. It actually provided a much better therapeutic environment than the conventional geriatric hospital.

COLOUR AND PHYSIOLOGICAL AROUSAL

There is more to colour than meets the eye and an account of some of the purported psychophysiological effects is given. The question whether Red is a more activating colour than Blue is discussed by reference to two opposing schools of thought, one based on colour light and measured by physiological changes in the central and autonomic nervous system and the other based on colour pigment applied in interior and exterior spaces while varying the dimensions of hue, chromatic strength and lightness. An experiment is discussed where subjects experience realistic full scale Red and Blue spaces and where both physiological and affective measures are taken.

STRESS AND PEOPLE AT WORK: THE IMPACT OF RELOCATION

The present study involved a longitudinal survey of office workers whose departments either (1) relocated from one facility to another, (2) renovated or rearranged their existing facility, or (3) experienced no change in the location or arrangement of their offices. All groups were surveyed twice.
The relocation groups completed a pre-move survey and a post-move survey that was administered approximately four to six months after the relocation. Non-relocation and office-renovation groups also were surveyed at two different times during the year (which roughly approximated the same testing intervals used for the relocation groups). Approximately 300 participants provided data relating to various aspects of employee health, productivity, and satisfaction with the work environment. As well, detailed assessments of the physical conditions within participants' offices were obtained (e.g., work station configurations and amenities; noise, lighting, temperature, and humidity levels). Health, productivity, and satisfaction differences between work groups experiencing various levels of environmental change were examined. Implications of the findings for the development of theoretical perspectives on people-environment transactions are discussed.
GENERAL AIMS OF THE SYMPOSIUM
Our symposium is intended to explore the complex interrelations between perceptual and other cognitive activity in the encountering of our everyday environment. The discussion will focus on the controversy whether "available optical stimulus information" as conceptualized by the late James Gibson (1979) is sufficient for supporting and guiding goal-directed action or whether it has to be supplemented by additional cognitive processing.

SPECIFIC TOPICS
We shall deal with large scale, outdoor environments first, and then also look at the smaller scale - the behavioural affordances of everyday commodities and industrial design. With regard to the first theme, there will be papers on wayfinding as well as on representation - of environments. With regard to design at the smaller scale we shall examine the technique of eye movement recording as an indicator for specific cognitive activity.

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Abstracts of contributors
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LANGUAGE AND ORIENTATION: MEMORY FOR ROUTE ELEMENTS IN VERBAL DESCRIPTIONS BY CHILDREN AND ADULTS
The main aim of the present study is to investigate the relationship between knowledge represented by language and ability in purposefully remembering information about new environments. Subjects were 22 6-year-old children and 22 adults, whose verbal descriptions of a route in a novel urban environment were analyzed. Results show that adults remember more structural features of urban environments than low landmark potential elements. The same trend was observed in 6-year-olds with
high conceptual-linguistic ability, while the opposite trend was found in 6-
year-olds with normal such ability. The results are interpreted focusing on
the role of the "knowledge base" in memory strategies.

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THE ROLE OF PERSPECTIVE IN RECOGNITION OF REAL-LIFE SCENES

A study of recognition of pictures was conducted with reference to the as­
sumption that direction changes in wayfinding are specified through a pro­
cess of perspective coordination. Perspective of the pictured scenes was
varied as a judgment factor in the study phase. The distractors used in the
recognition test consisted of new scenes in one condition but new perspec­
tives of old scenes in a second condition. Performance in the former condi­
tion decreased when subjects judged dimensions related to perspective in
the study phase as compared to dimensions related to content. Equal
performance was obtained when new perspectives were used as distractors.
A mixture of two recognition strategies in the latter condition, assumed to
be relevant in the real environment, was proposed as an account for the
failure to obtain the predicted cross-over interaction.

Klaus Landwehr, Bonn, FRG

WAYFINDING WITH AND WITHOUT SIGNS

A case study of a walk through a "town-parkscape" towards a specified goal
is being presented. Several strategies and means which might aid in way­
finding are discussed: propositional description, cognitive mapping, etc.
Emphasis is laid on available optical stimulus information which in a self­
explanatory way specifies continuability of a path and perhaps goal-orien­
tation. Implications for planning are derived. The study is richly illustrated
with photographic and cartographic materials.

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DO WE ONLY SEE WHAT WE ALREADY KNOW?
- DESIGN RESEARCH BY EYE-MOVEMENT RECORDING -

According to today's general tendency towards more emotionalism in design
the meaning of symbols gains importance. However, we do know very little
about how these symbols are visually perceived and interpreted by the user
of a design object. By means of eye-movement recording techniques we try
to localize individual symbols in a design object according to correlated
meanings. In a here cited experiment we analysed electrical coffee- and
teamakers to find out which are the specific formal elements denoting "coffee" or "tea". With this research we want to give a contribution to the recent discussion of productsemantics.

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METHODS FOR STUDYING MENTAL REPRESENTATIONS OF REAL WORLD ENVIRONMENTS

Research on cognitive maps as mental representations of real world environments can considered to be confronted with two central problems: (1) The attainment of an adequate theoretical formulation of the ambiguous concept of cognitive maps, and (2) the development of a well-suited methodology for externalizing these mental maps. On the basis of model-theoretical considerations, a 'method-comparison strategy' for research on cognitive maps is proposed. An experimental design comparing different methods for gaining access to mental representations of city structure will be outlined, the results of which will be reported at the conference.
Organizers and chairs: Gary T. Moore and Andreas van Wagenberg

ENVIRONMENT, BEHAVIOR AND DESIGN THEORY
(Environnement, comportement et théorie)

Contributors: Th. Bax; L.N. Groat; M. Krampen; J. Lang; R.L. Lawrence; H.H. Lievaart; G. Moore; M. Symes; H.M.G.J. Trum; A. van Wagenberg.

Introduction

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The purpose of this symposium was to bring together some of the leading exponents of different theoretical positions on the environment-behavior interface with implications for design.

Altman and Rogoff (1987) and Moore (1987) have presented two frameworks for conceptualizing theory. Earlier symposia convened at the EDRA-Atlanta, IAPS-Haifa, IAAP-Jerusalem, and EDRA-Ottawa conferences have explored the implications of these two competing frameworks. Chapters on theory have been published in Advances in Environment, Behavior, and Design (Vol. 1, 1987; Vol. 2, in press). This symposium built off those sessions and chapters and again provided an opportunity for some of the leading theoreticians to present their ideas and to expose them to critical commentary by colleagues and IAPS members.

As stated in the Preface to Volume 1 of the Advances series, there are at least three different orientations to the field: the pragmatic, social problem orientation; a range of empirical orientations; and various theoretical orientations. "Theories" have been called by a number of different names--explanatory theories, design theories, theories of good form, manifestos, conceptual frameworks, models, world views, theoretical orientations, and even metaphysical blueprints. The Altman-Rogoff and Moore taxonomies have been proposed as a way of structuring this seeming morass and bringing some order to this burgeoning aspect of our field. The past symposia, and the first two volumes of the Advances series, have critically examined some of these theoretical directions including phenomenology, empiricism, structuralism, and behavioral ecology.
The symposium this year focused on normative or explanatory environment-behavior theories and positive or prescriptive design theories. Included in the discussion was the relation between empirically-based explanatory environment-behavior theories and

REFERENCES


Abstracts of contributors

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"NEW NETHERLAND 2050";
THE ROLE OF A CENTRAL DESIGN TEAM IN A DECENTRALIZED DESIGN PROCESS

Reflection on participation of a design team in activities, resulting in the exhibition "New Netherland, 2050", led to a new insight in the structure of design processes and their contribution to the spatial organisation on a national level and for a long span of time. There will be a full explanation of the chosen design strategy, focusing on the role of a central design team in the framework of a decentralised design process and the methods and techniques involved. The viewpoint that the far future is only conceivable as a historical reflection on the past links this paper to the theme of the conference.
THE SIGNIFICANCE OF ARCHITECTURAL THEORY FOR ENVIRONMENTAL DESIGN RESEARCH

This paper argues that environmental design must, if it is to influence architectural design in any fundamental way, incorporate not only empirically-based theory derived from the social sciences, but architectural theory as well. With this argument as a premise, three phases in the history of architectural theory - Classical, Modern, and Post-Modern - are described in terms of both rhetoric (underlying goals) and strategy (their compositional principles). One important conclusion drawn from this analysis is that architectural theory has increasingly assumed a relativist stance, the deconstructionist position being the most extreme version of this. Given this lack of a consensual basis for design, environmental design research offers the possibility, through its empirically-based methodologies, of identifying the current cultural conventions by which built form is interpreted. Unfortunately, because this body of research has tended to ignore the significance of the compositional principles that are embedded in all architecture, this potential has barely been realized.

ADVANCES IN RESEARCH ON ENVIRONMENTAL MEANING AND SYMBOLISM

Early Italian and French semiological approaches to environmental meaning were advanced by philosophers and architects. The empirically oriented work in environmental psychology, sociology and geography on the topic originated in English speaking countries. Both approaches are currently being broadened to take account of complex multifunctional, multicode, multivariate problems and of advances in the cognitive sciences. But recently there has been an awareness that the subject/object split dominating research on environmental meaning might have to be replaced by the ecological view that the environment issues meaningful information directly geared to perception and action of the (human) species.
STRUCTURALIST THEORIES IN ENVIRONMENT-BEHAVIOR-DESIGN RESEARCH

This presentation will provide a brief overview of diverse interpretations of structural theories and structuralist methods that have been applied to study people and the built environment. Particular attention will be given to "cognitive structuralism" and "Marxist structuralism", as well as "space syntax" and architectural semiotics. This presentation shows that this complex range of contributions cannot be considered as sharing common theoretical and methodological perspectives. The differences between these interpretations will be illustrated by referring to recent studies of the interrelations between people and the built environment.

INTEGRATED DESIGN: COPING WITH CONSTRAINTS AND IMAGES

An architectural design should be the integration of knowledge and experience of all the participants in the design process. In order to make a usable model for well-integrated decision making, it is necessary to study what architects do, especially how they use constraints and images to fulfill goals and wishes of the participants.

The analysis of the design process takes place with the help of the IDEF-0 technique, which is a systems-analysis technique used to structure information. The model of the process is tested by observations of design exercises. Some results of this research will be presented. The abstract model presentation is translated into diagrams and drawings, which can be understood easily by everybody involved in architectural decision making.

DISCUSSION OF ENVIRONMENT-BEHAVIOUR AND DESIGN THEORIES

This presentation will aim to evaluate the issues raised by Groat and Lang. Its starting point may be the notion that there are two types of theory required for an understanding of environmental action: theories which are explanatory and theories which are suggestive. The differences and the similarities between these types of theory may be catalogued and the possibility of metatheories which encompass them both can then be considered.
ON THE CONCEPT OF FUNCTION IN BUILDING SCIENCE

In the obviously increasing need for quality control in building, a renewed attention for the concept of function may be observed. Although the history of "function goes back as far as Vitruvius, a considerable amount of confusion about this concept seems to exist, disturbing communication and hampering decision-making, especially in the promising surroundings of interdisciplinary cooperation.

It turns out that the basic mathematical concept of function is surprisingly well applicable on architectural design. The use of the mathematical way of thinking about "function" also enables to relate conceptually experimental research and design activities. Some simple examples originating from both fields will be elaborated.

A CONCEPTUAL "ENVIRONMENT-BEHAVIOR" MODEL TO ASSIST DECISION-MAKING IN A DESIGN PROCESS

A growing number of users of environments have negative feelings about contemporary products of architects, urban planners and interior designers. Their criticism is functional as well as aesthetic. Discontentment of users signals a low level of quality and should be concern of environmental designers. The proposed model explains which aspects of the build environment, do influence environmental value judgements of users. It deals with four aspects: the social aspect, the spacial aspect, the organisational aspect and the service aspect (Canter, 1983).

Such a model is only useful in a design process when it is related existing structures of decisionmaking and does express itself in a language that designers understand. It is important to acknowledge in this context that design decisions are made at different levels of abstraction and scale.

The use of this model in design and evaluation research is discussed, using examples out of our own practise.

REFERENCE

Organizer and chair: Oscar Newman

DEFENSIBLE SPACE
(Contrôle de l'espace)

Contributors: Y. Bernard; J. Chaguiboff; A. Coleman; O. Newman; P. Stringer; D.J.M. van der Voordt; H.B.R. van Wegen; A. van der Wurff.

Abstracts of contributors

Jean Chaguiboff
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LA REPRESENTATION SPATIALE DE L'INSECURITE

Le sentiment d'insécurité a le plus souvent donné lieu à des travaux d'ordre sociologique. Dans le présent compte-rendu c'est au contraire la nature et le vécu du sentiment d'insécurité qui font l'objet d'investigations. Les auteurs y présentent les résultats d'une étude menée auprès des habitants d'un quartier parisiens les Halles. Il n'y a pas de cas où le sentiment d'insécurité paraisse trouver son origine directement dans l'aspect des lieux. Toutefois, lorsque l'inquiétude est présente, tout lieu possède des caréristiques de nature à l'accroitre ou la diminuer. On les résumera par trois termes: l'issue, le recours, le refuge. Il est ressorti par ailleurs au cours de l'étude que l'insécurité était un concept dont les limites n'étaient pas aussi clairement définies qu'il le paraissait au premier abord.

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FACTORS INFLUENCING CRIME AND INSTABILITY IN FEDERALLY ASSISTED HOUSING DEVELOPMENTS

This research set out to determine which social and physical factors are the strongest determinants of crime, fear, and instability in federally-assisted housing developments. The study examined all federally-assisted, moderate-income developments in Newark, St. Louis, and San Francisco, as well as public housing projects in San Francisco. The primary source of data for this study is a survey of households conducted in a single stage in late 1976 and early 1977 in which interviews were obtained from residents living in the study sites. Housing managers and city police were also interviewed. Archival data collected from housing management and police files were used to supplement the interviews with residents, management, and police.
A CHECKLIST ON CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN: USEFULNESS AND LIMITATIONS

In the seventies and eighties an impressive number of books and articles were published on crime prevention through environmental design. In order to involve the results of widespread research in design practice in a systematic way, a checklist may be useful. In this paper the framework of such a checklist will be presented. In addition some preliminary results are discussed of a field project that was initiated to evaluate this checklist on its utility and validity.

FEAR OF CRIME IN RESIDENTIAL AREAS: DEFENSIBLE SPACE AND BEYOND

A socio-psychological model of fear of crime is described, in which environmental influences are represented by the factor 'criminalisable space'. The underlying concept was in part developed through a review of the 'defensible space' literature. Three issues from the review are highlighted here: the charge of determinism; the relative weights of physical and social factors; and the absence of a sociophysical, interactionist approach. More recent concepts of relevance to the environmental study of crime and fear of crime are referred to, e.g. 'signs of incivility'. Attention is drawn to their value-assumptions.

'Criminalisable space' and its empirical use is further elucidated.
Organizers and chairs: Denise Piché and Sherry Arentzen

WOMEN AND ENVIRONMENTS: LOOKING BACK AT RESEARCH, LOOKING FORWARD TO CHANGE
(Les femmes et l'environnement)

Contributors: S. Ahrentzen; D. Piché and others.

Introduction

Sherry Arentzen, Ph. D., School of Architecture, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin
Denise Piché, Ph. D., École d'architecture, Université Laval, Québec, Canada.

This symposium brings together researchers and practitioners actively involved in researching, designing, and developing policies and programs for environments planned by, with, and for women in various countries throughout the world. The intent of this symposium is to disseminate information of these designs policies, and research among the symposium participants and audience, and to generate international collaboration and exchange for action addressing the problems, ideas, and concerns of women today.

The field of "women and environments" has been growing in the last decade, but primarily the research and information of this field has been disseminated and cultivated within national boundaries: Canada, Britain, Sweden, West Germany, United States, Netherlands, for example. Since IAPS is an international organization, this forum provides an opportunity for researchers, designers, and activists to exchange information, ideas, and policies, and to begin collaboration on new developments in research and environmental application on an international scale.

The symposium is organized such that the three listed participants will speak briefly on research and design programs they have been involved with, highlighting issues and implications. After these brief presentations, discussions will follow among the participants and audience.
Abstracts of contributors

Sherry Ahrentzen, Ph.D., Department of Architecture, University of Wisconsin-Milwaukee.

She will discuss the meaning and experience of alternative work and home settings among women in the U.S. She is currently co-editing a book with Karen Franck called Alternatives to the Single Family Home, highlighting the design and development of housing projects in the United States, Canada, and Europe for single-person occupancy hotels, housing for single parent families, and collective housing arrangements for families. She has recently completed a study of the socio-spatial consequences of home-based (paid) work (i.e. both business and residence in the home). Her discussion will focus on the spatial merging of traditionally-distinct settings (e.g. workplace vs residence) and the positive and negative consequences this has for women in terms of role conflict, time and stress demands, status, social and economic mobility, and the meaning of these settings in their lives. Her discussion includes a comparison of the U.S. experience with findings from research of home-based work in developing countries (i.e. Mexico, India).

Denise Piché, Ph. D., École d'architecture, Université Laval.

She will be discussing one approach to the study of women's relationships with the environment: the study of women's experience of the environment within the context of action research. Drawing upon her involvement with various women's organizations, particularly with single parents' associations, her presentation will examine why the women's movement has focused little attention on the environment, why women are very little involved in the planning process and how one can work at bridging the gap by doing qualitative research into women's lives and by initiating, at the same time, actions in order to implicate them in decision making about their environment. This action research approach is seen as a necessary complement to a more traditional approach to planning for women's changing roles: its emphasis bears on building a city with women given (or taking) the power to create their own visions and plans.

Another author has not sent in her abstract.
POST OCCUPANCY EVALUATION
(POE-enquêtes auprès des utilisateurs)

Contributors: J.R. Anderson; R.B. Bechtel; F.D. Becker; P. Bycroff; M.E. Durkin; P. Ellis; J. Farbstein; G. Francescato; J. Harvey; D. Joiner; P. Jokusch; K. Kelly; H.J. Klein; R. Marans; S. Parshall; R. Pegrum; W. Preiser; H.Z. Rabinowitz; G. Serra; F.T. Ventre; J. Vischer; S. Weidemann; E.T. White; J. Zeisel; C. Zimring.

Introduction

Wolfgang F.E. Preiser, Center for Research and Development, School of Architecture and Planning, University of New Mexico, 2414 Central SE, Albuquerque NM 87131.

ADVANCES IN POST-OCCUPANCY EVALUATION: KNOWLEDGE, METHODS AND APPLICATIONS

The purpose of this symposium is to describe recent developments in the field of post-occupancy evaluation. The five papers which follow, range from uses and boundaries of POEs and a performance-based conceptual framework for systematic POEs to advances in POE methods as well as applications. First, recent developments are noted and the developments that may represent advances for the field are identified. These include an apparent increase in the volume and acceptance of POEs, and shifts in the sponsorship and in the types of POE programs that are run by certain sponsors.

Possible advances include the integration of behavioral and technical assessments, moving toward the application of "total building performance", and the development of greater sophistication in dealing with organizational issues and the clearer discrimination of multiple levels of POE.

Abstracts of contributors

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ADVANCES IN POE METHODS

Design research should now be differentiated into Pre-Design Research (PDR) and Post Occupancy Evaluations (POEs). While most methods overlap, the different purposes of these two types of research influence selection of methods and analyses and modify methods to suit each. Simulation is the only method peculiar just to PDR and is rapidly advancing to a micro stage through electronic advances. The self-report controversy continues for all methods that use self-report forms of answers. The newest field, the
transactional approach, also stirs controversy. Industry and government clients are preferring expert and focussed groups and these may be in danger of crowding out the more tried methods of social science.

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ADVANCES IN POST-OCCUPANCY EVALUATION APPLICATIONS

Advances in post-occupancy evaluation (POE) applications are looked at from two points of view. First, recent developments are observed and, second, those developments that may represent advances for the field are identified. Developments in POE applications include an apparent increase in the volume and acceptance of POEs, shifts in the sponsorship of POEs, and changes in the types of POE programs that are run by some sponsors. Possible advances include the integration of behavioral and technical assessments, moving toward the application of "total building performance". Other changes due to sponsor demands include a growing awareness of "bottom line" measures of performance in POE. Possible changes due to experience with large scale POE programs which may also advance the field include the development of greater sophistication in dealing with organizational issues and the clearer discrimination of multiple levels of POE.

Hans-Joachim Klein

EVALUATION OF MUSEUM EDUCATIONAL EFFECTIVENESS

The display of continuous and temporal exhibitions should be organized with regard to efficient dissemination of background ideas and intended messages towards an interested public. In most cases this public is not known in advance, neither in its quantity nor in its structure. In order to get information, whether the general demand and special issues are or are not performed by the realized exhibition, it is necessary to define operational goals and make explicit statements on its contents.

With the help of a inventory like this it is possible, not only to measure the "success" of an exhibition by comparing the number of visitors with those expected to come, but to carry out "summative evaluation" of the distribution of learning effects among the public. It is important to stress the fact, that the outcome of all surveys of this type has the form of "data-distributions", with partially contradictory tendencies. This is because of the heterogeneity of visitors, their individual predispositions and selective perception, the different meaning exhibits present to different people etc. Therefore it is quite normal, to expect a considerable gap between intentions, layout and presentation structures on the one hand and preferences, capacities of understanding and interest of the target groups on the other.

In order to adapt concept, design and didactic means to the latter - which in most cases is a question of finding acceptable compromises - it is useful
and sometimes necessary to get the information about the "gaps" and their causes already before furnishing the final exhibition display. Therefore, "formative evaluation" with the help of mock-up environments has proved to be an instructive step bringing feedback on the consequences of alternative exhibitional versions into the planning process. If there is already an existing presentation to be improved or modernized, it is helpful to start with a status quo evaluation in order to analyze its most serious shortcomings and weak points.

The contribution to present will describe experience in different types of museums with these approaches, the difficulties to establish this kind of empirical research and to integrate it into the planning and designing process and will try to illustrate pitfalls and benefits of the method for museums and visitors.

Harvey Z. Rabinowitz, School of Architecture and Urban Planning, University of Wisconsin, Milwaukee, Milwaukee, Wisconsin 53211, U.S.A.

THE USES AND BOUNDARIES OF POST OCCUPANCY EVALUATION

POE is now 25 years old. Phases in the development of POE in the 1960's, 70's and 80's are examined and characteristics of POEs in these decades are discussed in terms of the 1) types and size of buildings evaluated 2) variables included in the evaluation 3) the relationships among the variables and 4) intentions of the investigation.

POE has evolved from research into an applications-oriented activity over the past three decades. Building types and clients have also changed - in the U.S. large, private sector firms are increasingly utilizing POE. Research in POE also continues emphasizing the interaction between, and the relative influence of environmental and non-environmental variables, as well as the development of databases for POE utilization.

Edward T. White (architect), USA - Florida A&M Université, School of Architecture

POE FROM THE CLIENT'S PERSPECTIVE

This paper discusses the concerns, questions, problems and opportunities of POE from the client's perspective. Its thesis is that the planning of POE must not only satisfy professional criteria such as reliability and integrity, but that the fundamental strategy and planning of the POE should also be sensitive to the client's personal, organizational and political context. Specifically, the paper addresses how POE planning factors such as purpose, building sample, content, rigor, tools and techniques, participants, scheduling and cost may be made responsive to client concerns such as avoiding embarrassment, defending results, satisfying administrative superiors, boosting morale, minimizing disruption, resolving conflicts and obtaining maximum public relations benefit from the POE study. Neglect of these contextual factors can lead to POE results which satisfy professional criteria, but which are useless and even counterproductive for the client's organization.
Peter Ellis, UK - organizational psychologist, London
Duncan Joiner, New Zealand - Ministry of Works and Development

MAKING POST OCCUPANCY EVALUATION WORK IN AN ORGANIZATION

The Ministry of Works and Development (MWO) of the New Zealand government started conducting post-occupancy evaluations of government-designed buildings in 1978. A system for POEs was designed with the help of researchers from the School of Architecture of the Victoria University of Wellington.

In the eight years since the first initiative, building evaluations have been completed and the programme has become firmly established. Apart from developing and modifying the techniques for POE, MWO has also learned a good deal about the organizational aspects of operating a POE programme which is the subject of this paper.

In this paper we describe the early period of using POE with MWO and the problems associated with establishing and maintaining a POE programme within an organization. The paper discusses POE as an organizational process and the contribution it can make to improving design quality and standards. We go on to consider recent and current changes in MWO's mode of operation as an agency producing public buildings, and the role of POE in MWO's marketing strategy. Then we discuss some of the organizational problems of building a data base out of POE for use in future design. Finally, we attempt to draw some conclusions.

Craig M. Zimring - USA College of Architecture, Georgia Institute of Technology

THEORY AND POST-OCCUPANCY EVALUATION

This paper argues that whereas post-occupancy evaluation (POE) is experiencing considerable success as an applied area it will not and cannot develop unique theory. However, there appear to be an emerging "world-view" that emphasizes the utility of POE as an organizational intervention and the interrelatedness of behavioral and physical aspects of buildings in a "total building performance" framework. Nonetheless, there is some disagreement about the ability to generalize POE findings. This pattern of consensus and disagreement suggests some important future directions for POE.
Organizer and chair: Dieter Schempp

GREEN SOLAR ARCHITECTURE
(Architecture solaire)

Contributors: J. Frantz; F.W. Grimme; W. Klimesch; M. Krampen; F. Möllring; D. Procos; D. Schempp; G. Steiner.

Introduction

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When we reported at the 1984 IAPS Conference in Berlin on GSA our experience was still confined to applying the principles of sharing space with plants in housing. We were able to report on substantial energy savings, to advance hypotheses on health advantages of residing in a GSA building and to demonstrate that the people living in GSA buildings accepted this new style of life. Four years later we are now able to show that the principles of GSA can be generalized beyond the function of housing. During the last decade glass and solar aperture technology have advanced rapidly since their first applications to architecture. So we are now able to apply GSA principles to such buildings as offices, laboratories and restaurants. We are also able to show, that there are correlations between the positive evaluation of working places in a GSA environment and reports on well being and good mood. We are convinced that the principle of GSA can be extended to other areas of architecture such as industrial buildings, cultural centers and urban renewal. We hope to demonstrate in the future progress in implementing man-plant symbiosis through architecture.

Abstracts of contributors

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INTERIOR GARDENING

'Green solar architecture' is inconceivable without plants. In addition to their decorative effect, they improve the climate of rooms and - according to the season - provide different services. This is, of course, possible only under certain conditions. The correct selection and combination of plant species and
their proper care are indispensable for the functioning of the green solar architectural project. Modern methods of cultivation and carefully selected substrates together with new forms of technology make it easy to take care of the plants and therefore the inhabitants of the living quarters are relatively independent of them.

Friedrich W. Grimme, Project Management for Biology, Ecology, and Energy of the Nuclear Research Center Jülich, P.O.B 1913, D 5170 Jülich, FRG

PROGRESS ACHIEVED IN THE DEVELOPMENT OF THE SOLAR APERTURE

Various transparent and translucent thermal insulation materials are now being investigated or are ready for the market as new products. In combination with other components, they are giving an impetus to the wide field of solar energy utilization. In 1986 the program "Energetic Optimization of the Solar Aperture" sponsored by the Minister for Research and Technology, FRG, was started. This research and development program includes work on materials, components and active and passive systems, for instance daylighting of buildings, low temperature heating for houses and domestic hot water, process heat, for example for drying, absorption cooling and thermosolar water pumping.

Winfried Klimesch, Architect
LOGID. Sindelfinger Str. 85, D7400 Tübingen, FRG

AN ADMINISTRATION BUILDING ACCORDING TO THE PRINCIPLES OF "GREEN SOLAR ARCHITECTURE" (GSA)

In 1985 LOGID designed the extension of an administration building. This GSA project saves energy and provides imaginative offices and work areas, but construction costs did not exceed those of conventional architecture. Forty working places were installed in the glasshouse by staggering two wooden pavilions one on top of the other. The glasshouse contains plants and serves as a conference and recreation area. The plants are subtropic species requiring a temperature of 5° Celsius in winter. They serve not only as decorations, but provide dust-free air containing ample oxygen. Their fruits and scent make for a pleasant working atmosphere.
Differences between Glasshouse Office and Office Landscape

The occupants of a glasshouse office with plants were tested four times (quarterly) against occupants of an 'Office Landscape' for impressions about their entire room, their working place, their subjective health and mood. The strongest difference in favour of the glasshouse concerned the inventiveness, good atmosphere, invitingness, naturalness, aliveness, harmony and colorfulness of the room (p < .001) and the healthiness, good smelling, moisture of air, agreeable temperature, stimulation, and pleasant light of the working place (p < .001). There were significant correlations between healthiness of the working place and good mood, lack of complaints about nervousness, blood circulation troubles and frequent colds.

Fred Möllring, Architect
LOGID, Sindelfinger Str. 85, D7400 Tübingen, FRG

The Transfer of Technology to Solar Architecture

The relationship between architecture and technology is an important part of the creative progress. An example of this was the Russian constructivists' architecture for a cultural revolution: Melnikov's 'solar pavilion' and 'sleeping quarters' for his 'green city'. The following projects represent the present state of the art. The first is at Nimes, France (Nemansus 1, Nouvel & Ibos). The second is located in Stuttgart, West-Germany (Hysolar, Behnisch & Partners). LOG ID in Tübingen designed a public library in Herten, West-Germany promoting further development of solar architecture. The last example describes the special implementation of space research technology by the British group 'Future Systems'.

Dimitri Procos, Canada - Fac. of Architecture, Tech.Univ. of Nova Scotia, P.O. Box 1000, Halifax B3J 2X4

Does Street Orientation Have an Effect on Passive Solar Heating?

Equal numbers of samples of housing units, with known insulation, fenestration and area characteristics, built along east-west and north-south oriented streets respectively, will be compared in the Ottawa, Canada Metropolitan Area.

For each sample, figures on annual space heating expenditure by the owners
of the units will be obtained from a pertinent question in the 1986 Canada Census as a basis for the comparison. The purpose of the research is to determine if the often hypothesized superiority of east-west oriented streets for passive solar heating bears out for a large number of ordinarily built and occupied housing units.

Dieter Schempp, Head of the LOGID ID Planning Team
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FUTURE SCOPE OF GREEN SOLAR ARCHITECTURE (GSA)

Until two years ago, the buildings of "Green Solar Architektur" were - for the most part - private detached houses. They are especially noted for energy-conserving features and a high quality of living. Our first experiences with buildings other than private homes have been with administration buildings, a medical laboratory and with restaurants. We can conceive of further implementation of GSA in other areas of urban infrastructure (we have designed a city cultural center), in the renewal of large residential areas and in industrial buildings. The latter could be upgraded aesthetically as well through the implementation of GSA.

Gerhard Steiner, Architect
LOGID, Sindelfinger Str. 85, D7400 Tübingen, FRG

TECHNOLOGY AND GLASS

Glass as a building material has played an important role in the history of architecture. But it has become popular in the construction of homes only in recent years because of its high cost. Last century architects recognised the capability of glass to climatically close openings while at the same time preserving the appearance of openness. Because of this property, it is possible to construct buildings solely of glass. This glass functionally separates indoors from outdoors, thereby providing the possibility to establish certain climatic conditions indoors. On the other hand the transparency of the material allows the sensation of openness.
Nous partons du constat fait en France, de l'émergence d'une "entreprise publique de logement" produite et gérée par des organisations bureaucratiques. Les constructeurs n'ont plus pour clients des personnes civiles (des Sujets) mais des organisations qui ont de l'espace du logement et de son utilisateur, une vision quantifiée; cette vision laisse peu de place à l'esthétique. La question se pose de savoir si un tel constat peut-être établi dans d'autres champs que celui de l'architecture ou de l'aménagement, dans celui de la création musicale, par exemple.

Depuis quelques temps l'on assiste à un désengagement de l'Etat du secteur du logement social, ainsi qu'à un nouveau rapport entre le global et le local; le glissement du quantitatif au qualitatif manifeste également une réorientation de la compétence technocratique vers celle de l'usager. On parle de la qualité de la vie mais également du cadre de vie. De la même façon on peut constater un regain d'intérêt pour la conservation du patrimoine esthétique qui devient même un enjeu politique important dans certaines Municipalités; d'où l'apparition de nouveaux professionnels, spécialistes de l'esthétique en aménagement du territoire et en urbaniste.

Abstracts of contributors

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LA MUSIQUE CONTEMPORAINE, ARTEFACT ECONOMIQUE ET SOCIO-TECHNIQUE

En France, notamment, mais pas exclusivement, le champ de la création musicale est fermé sur lui-même. Il y a une prééminence du marché des positions professionnelles sur celui des œuvres. Le pouvoir professionnel appartient aujourd'hui à ceux que ont une double formation littéraire ou scientifique et musicale, la première leur servant à justifier leurs œuvres par une problématique théorique: musiciens-chercheurs faisant un effort désespéré pour provoquer une demande pour une offre depuis longtemps excessive. Cette situation a commencé il y a soixante ans avec le système sériel, technique d'écriture dont les productions ne sont pas perceptibles (comme les expérimentations des psychologues l'ont montré) même par des professionnels. D'autres techniques ont suivi, créant d'autres artefacts.
LA QUALITE ARCHITECTURALE EN BELGIQUE : ANCIENNES ET NOUVELLES TENDANCES SOCIALES.

Le retour ou plutôt le renforcement du point de vue qualitatif dans la politique du logement en Belgique et plus largement dans l'intérêt pour l'environnement naturel et construit se situe au point de convergence de diverses tendances. Certaines sont présentes depuis très longtemps déjà, alors que d'autres apparaissent comme des phénomènes contemporains. Et ainsi:

- Le privilège accordé depuis longtemps par la politique publique du logement en Belgique pour la promotion des groupes moyens et de la maison unifamiliale.
- La symbolique de l'habitat rural qui trouve aujourd'hui un regain d'intérêt.
- La marginalisation relative des groupes moyens, leur retour vers l'espace local.
- La crise interne au champ scientifique.

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TECHNOSTRUCTURE ET ARCHITECTURE : L'EXEMPLE CORBUSEEN

A partir de l'exemple de la grande vague d'urbanisation française (1950-70) on établit l'émergence d'une technostructure et les liens privilégiés qu'elle entretient avec l'architecture. Les projets urbanistiques de reconstruction des villes de Saint Dié et de La Rochelle nous serviront à montrer toute l'ambiguïté de l'humanisme de Le Corbusier qui pose la question du rapport de l'architecte avec les "monstres froids" issus de la technostructure.

Marion Segaud, France - Univ. Paris X Nanterre, IPRAUS-CNRS, 6 rue du Mail, 75002, Paris

COMPETENCE ESTHETIQUE ET ARCHITECTURE

C'est à Kant que l'on doit remonter pour une théorisation un peu consistante du jugement de goût qui aboutit à la constitution du public, entendu comme instance active. Nous nous servons de ce repère théorique pour montrer l'existence d'une empirie semblable qui émerge dans le rapport entre les français et l'architecture domestique et publique. Après un oubli sévère, la compétence de l'habitant est ici convoquée. Nous tentons de montrer quelques caractéristiques significatives de cette conscience esthétique commune au populaire français.
URBANISME CONTEMPORAIN EN ANGLETERRE ET AUX ETATS UNIS

Cette communication discutera des changements récents dans les méthodes de planification de ces deux pays. Depuis quelques années les autorités ne pensent plus aux objectifs sociaux mais à la croissance économique. Les méthodes de planification n'essaient plus de contraindre l'innovation industriel. On donnera pour exemples, le cas des Urban Development Action Grants (US) et des Urban Développment Action Grants (UK), qui ont pour but la rénovation des zones industrielles par moyens privés. Les Grants peuvent s'appliquer au logement social qui peut donc subir une transformation de régime foncier, avec des conséquences pour l'esthétique autant que pour la qualité de vie.
Introduction

Andreas, F. van Wagenberg, Eindhoven University of Technology, Eindhoven, P.O. Box 513, 5600 MB Eindhoven, The Netherlands.
Robert, W. Marans, Survey Research Centre/Institute for Social Research, University of Michigan, (Co-Organizer and Co-Chair).

The purpose of this symposium is to share information on previously unpublished research/work dealing with workers response to offices and to selected environmental systems within them. Special emphasis will be given to the future of office design in the different countries and to the theoretical framework underlying the research of the different participants.

One of the possible outcomes of the Symposium could be an international approach to evaluation research in offices, possibly steering pilot studies in the two countries in the near future.

The work of the participants has several characteristics in common. First each team has taken a systematic approach to evaluating office environments including worker responses. Second, questionnaire data and their analysis are common to all work. Third, each study is conducted on the basis of a theoretical framework and considers the office as a dynamic environment to which workers must adapt. Fourth, each has been undertaken for explicitly stated purposes and despite focussing on different aspects of the office, each study is comprehensive in gathering extensive data on the organizational as well as physical environment. Finally, the results of the research are of importance for future office design.

The participants in this symposium will present individual papers. After the presentations they will discuss similarities and differences between their individual approaches to office evaluation research as well as their vision on the future of the office environment in different countries as a place to work. Among the issues to be discussed by the participants are:

1. What are appropriate theoretical models of studying the dynamic nature of office work and environmental change?
2. How is information technology changing the nature of office work and organisation and what are the consequences for the
design and management of office environments?

3. Do patterns of information technological change differ between the two countries? Has this implications for the future of office environments?

4. What are the possible advantages of conducting research in offices on an international scale?

5. What are appropriate uses of findings and/or data produced by the research reported in this symposium?

In order to stimulate discussion, each participant will limit his presentation in time and a discussant will lead the final discussion between the participants.

Abstracts of contributors

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INVESTIGATING THE "SICK BUILDING SYNDROME" IN OFFICES: METHODOLOGICAL AND CONCEPTUAL ISSUES

The "sick building syndrome" is a collection of non-specific symptoms of malaise, such as eye nose and throat irritation, headache, and lethargy, which seem to be associated with the occupancy of air conditioned buildings. A variety of causal factors have been suggested, including indoor air pollution, microbiological contamination, vibration and mass psychogenic illness. In spite of the research conducted to date, no study has satisfactorily demonstrated the cause or causes of this syndrome and none has evaluated the effectiveness of any intervention. Furthermore, differences in research design and methodology and in architectural, engineering and organizational attributes of the settings studied, along with the frequent absence of any conceptual framework make comparisons between research results difficult. In an attempt to better understand this phenomenon, an overview of recent research on the "sick Building syndrome" will be presented. Based on this, a conceptual framework which integrates the role of both physical and non-physical factors in the "sick building syndrome" will be described.
Herbert van Hoogdalem, Netherlands - Research Institute of Urban Planning and Architecture, Delft University of Technology, Faculty of Architecture, Berlageweg 1, 2628 CR Delft

SICK BUILDINGS IN THE NETHERLANDS

An analysis is made of factors, which may interact in producing potential "Sick Buildings". Two case studies will illustrate this. Three as yet broad hypotheses about the causes of the "Sick Building Syndrome" are proposed and held against the evidence of user's complaints and other data. The notion of perceived control over the environment is discussed as a central explanatory concept. Guidelines for future research and design are formulated.

Robert, W. Marans, Survey Research Centre/Institute for Social Research, University of Michigan, Ann Arbor, Michigan 48106-1248 U.S.A.

EFFECTS OF DIFFERENT LIGHTING DESIGNS ON THE OFFICE WORKER'S PERCEPTIONS OF THE VISUAL ENVIRONMENT

Using data from a national study of modern U.S. office buildings, the effects of different lighting designs and glare problems of office workers will be discussed. The study involved 1000 workstations sampled from 13 office buildings. Results for open-plan offices will be presented. These will focus on how factors such as the type of lighting systems and proximity to windows affect workers perceptions of specific lighting attributes and also their perception of overall lighting quality. It will be proposed, among other things that future studies should focus more on measuring the visual quality of the luminous environment rather than simply its lighting qualities.

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ENVIRONMENTAL PSYCHOLOGICAL RESEARCH INTEGRATED IN THE REDESIGN OF AN OFFICE ENVIRONMENT: THE CASE OF A DESIGN OFFICE

A growing number of Computer Aided Architectural Design systems is installed in offices of architects. This study is dealing with the question how the work environment of designers and engineers should be redesigned for CAAD use. The research was conducted in two phases.

First, a diagnostic study of the existing situation considering the traditional work space as well as experimental CAAD work areas which resulted in recommendations for the interior designer.

In the second phase the redesigned office was evaluated using similar concepts and research methods as in the first study.

Five research methods were used; inventory and environmental
description, systematic observation of environment-behavior interactions, interviews, ergonomic measures and physical measurements. Thus results of the studies were presented in annotated floor plans, bridging the gap between researcher and interior designer.


FACILITIES MANAGEMENT BASED UPON ENVIRONMENTAL TECHNOLOGICAL RESEARCH

After the U.S.A. and the U.K. the Netherlands has recognized Facilities Management as a professional strategy, that coordinates and integrates information and expertise for the purpose of developing and managing facilities to support individual and organizational effectiveness.

As part of a F.M. strategy, the planning and design process of office buildings should be based upon the relationships between the work-environment and people's responses to it. Coordination and integration of information requires rating processes of these relationships. Therefore it is necessary to develop appropriate quantitative environmental measures of the impact of the work-environment on the individual performance.

As a contribution to the development of these measures, this study will classify key components of the quality of the work environment. In several organizations individual workers estimated the physical environment, building- and furniture systems, ambient conditions, organizational climate and the interpersonal relationships.

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RECONCEPTUALIZING THE WORKPLACE TO SUPPORT EMERGING MODELS OF ORGANIZATIONAL EFFECTIVENESS

In 1974 Duffy made the argument that environmental planning for offices should concern itself with organizational structure. A number of authors have put forward models of organizational effectiveness. A notable example is the work of Schon (1974). He presents two basic models of corporate communication: Model I is based upon a competitive outlook. Model II represents a much more cooperative situation, involving a high degree of interaction and recognition of the primacy of group goals. He argues that the second model produces a much more effective organizational climate. Schon's work as well as the work of others on this subject will be discussed in this paper. It will be argued that it is useful to return to Duffy's recommendations concerning the
importance of understanding corporate structure and designing to meet the needs implied by this structure. Yet it is also time to rethink the conception of work. Office planners and designers have to long been maneuvering within the limits of a set pelette: the individual workspace and its component parts. The challenge we face is to reconceptualize this idea to fit within the new office model of group problem solving for today’s world of complex problems.
THE ROLE OF THE HISTORICAL ANALYSES IN THEORY, RESEARCH AND PRACTICE TO PEOPLE AND THEIR SURROUNDINGS
(Le rôle de l'analyse historique dans les recherches sur l'homme et son environnement).

Contributors: G. Gröning; J. Horwitz; A.D. King; L.G. Rivlin; M. Wolfe.

Introduction

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In the Sociological Imagination (1959), C. Wright Mills outlined a compelling argument for historical analyses but warned against using history as "ritual", as "dull little padding", with little purpose. Although each of the disciplines which came together to form our field has had some "historical tradition", in most the method or subject matter has been narrowly defined and the purposes vague. Furthermore, the multi-disciplinary field which seeks to understand people environment relationships, itself, has been largely ahistorical in its approaches to theory, research and practice. In recent years, and as part of a larger scholarly movement, some people associated with our field have been using historical analyses as a central component in their work. This symposium, utilizing some of their experiences, will address the question: How can historical analyses inform the present and future development of theory, research and practice related to the understanding of people and their surroundings?

The participants come from different disciplinary backgrounds. All have been working in the field of people environment relationships. Each has utilized historical analysis to inform their approach to problems, issues and practice in this area. Their topics vary as do their methods and the scope of their analyses. Each participant will summarize their work, its development and its implications. They will also suggest ways in which historical analyses can continue to inform the work in our field. The remainder of the symposium will be open to a general discussion of the uses and implications of historical analyses for work in people-environment theory, research, and practice.
RESEARCH IN OPEN SPACE PLANNING—FROM BELIEF TO SOCIAL SCIENCE

At the beginning of the 20th century statements about open space provision in Germany were closer to belief than to science. In the 1930's scientific and social scientific approaches to university education in open space planning were brutally suppressed by deeply anti-scientific, racist, and nationalist National Socialism. After WW II, science and the history of garden styles became part of the curriculum. In the late 1960's social science was added but was considered Threatening to the accepted beliefs. Then ecology emerged and was accepted as 'scientific' because it was free from social science and history and was considered to be free from ideology. Avoiding the cul-de-sac of an ideology-free ecology by identifying the ideology of ecology from a social science point of view could open up a new perspective for garden and landscape architecture in a democratic society.

THE HISTORY OF TECHNOLOGY AND DOMESTIC LIFE

This presentation summarizes how an historical approach informed an environmental analysis of computer home-use. After rejecting the socio-functionalist definition of the household as a private family refuge from work and public life, as well as rejecting the new media image of home as a locus of employment in a computer-based communications society, a review of the history of technology and domestic life provided a framework for conceiving of the household in dynamic relationship to social institutions, including the technology transfer that occurs across them. Historical inquiry informed case study selection, interview protocol and analysis of U.S. households who had purchased microcomputers for home-use. Historical analysis contributed, as well, toward grounding a concept of home as a place that can change over time.

IDEOLOGY AND ENVIRONMENTS: CRITICAL HISTORIES AND HISTORICAL CRITIQUES

As with an earlier "Human Relations Theory" in Management, much of "people-environment" theory and research, in their various guises, has been a product of a particular type of social and economic organization and political control (or mode of production) which developed in particular places,
under particular conditions and at particular times ("Western" market economies of the 1950s and 60s). Similarly, a-historical and often ethnocentric ideologies and formulations concerning "first" and "third worlds", originating in the 1950s, have inhibited the development of an adequate understanding of the interdependent development of societies and built (as well as natural) environments on a global scale. The paper will put forward the case for two inter-related and theoretically-informed histories: the first, drawing on world systems theory and recent work in urban political economy, will construct an agenda for investigating the social production of the built environment on a global scale. The second will develop an outline for a reflexive and critical sociology and history of ideas concerning social knowledge of people and their built environment.

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THE HISTORY OF HOMELESSNESS

The increasing number of homeless persons, especially in the US, has led to a search for explanations along with some attempts at providing assistance. In considering the many faces of homelessness, it becomes clear that both the reasons offered for the loss of home and attitudes toward the homeless have long and complex histories. In order to address these issues I am examining descriptions of homelessness in earlier times, particularly explanations of why people are homeless and public responses to it. One step involves an analysis of articles in the New York Times reporting on homeless children and adults from 1868 to the early 1900s. Other sources are being reviewed as well. This information will be used to present a perspective on homelessness and a critique of the use of historical sources.

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THE HISTORY OF CHANGES IN CHILDREN'S INSTITUTIONS AND ACTION RESEARCH

After twelve years of frustration in attempting to use my research to create positive changes in children's psychiatric hospitals, schools and day care centers, I needed to put my failures into perspective. My research into the history of these institutions allowed me to understand their role in U.S. society and revealed implicit values and goals shaping their philosophy, form and functioning which work against positive change. My research into the history of action-research raised questions about the role of research and the researcher in environmental change - ethical and value based issues which we rarely address. An historical approach provided an understanding of how prevailing ideologies shape research and design questions, methods and professional roles and limit our visions of what could exist. Without such an analysis, and despite our best intentions, places we are helping to create will probably not be an improvement over the ones which exist.
Abstracts of Papers and other presentations/
Résumés des Communications et des autres contributions
Delft, town hall
MAN AND MEASURE, WHY?
Spatial aspects of activities in the home: sleeping

If handicapped people are able to live independently, an architect should ask himself the following questions:
- which actions - and especially which sub-actions - are essential for handicapped people for the execution of their daily activities at home;
- which are the spatial consequences when technical aids (e.g. a wheelchair) are used?

In this study we intend to investigate those aspects of the use of space, that cannot be visualized with the help of drawings, pictures or written documents. For this purpose a more dynamic medium such as video is necessary.

Under the mentorship of two researchers and with the help of two revalidating patients, two students are involved in the preparation and production of various video films. The aim is to investigate the following activities: entering the house, preparations for the night, the use of bathroom facilities and cooking and eating.

The pictures for the films are taken in a "training apartment" and in a laboratory setting. The revalidating patients are involved as "actors".

Next to this a computer program was developed. With this program - by using animation techniques - movements and actions can be analyzed in detail. On IAPS-10 we will present the work on "preparations for the night".

In this film attention is given to:
- moving to and from the bed, getting undressed and dressed, storing and collecting clothing, transfer to and from the bed, doing the bed, moving to and from the bathroom.

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URBAN RESIDENTIAL PREFERENCES: SOME CORRELATES AND TRENDS

In order to establish dominant housing preferences in a Yugoslav city and some of their correlates, two techniques were administered to a number of subjects from the city of Zagreb: a questionnaire related to type, location, and other residential issues, and a trade-off game of various housing features. To determine some trends over time a content analysis of a classified section on real estate in a local newspaper was done. Data on residential experience, SES, and actual housing conditions were gathered in addition to preference responses. Results are discussed within a framework of individual and social determinants of residential preferences in an urban environment.
CHANGING CONCEPTS OF PRIVACY, TERRITORIALITY AND CROWDING IN HOUSES IN CROSS-CULTURAL PERSPECTIVE

The quality of housing stock is changing in modern urban centers of the contemporary world. It is this change that this study focuses on. In particular, the impact of socio-cultural factors on both (1) concepts of privacy, territoriality and crowding and (2) the spatial formations in homes are researched. Among the parameters which mark this change, demographic factors, family compositions and use of leisure time are selected for close examination. In parallel to those, approach of the environmental designers to the contemporary urban life-style has also changed. As another parameter, it is of critical importance to the architects and therefore will be an integral part of the paper.

EXPERIMENTAL METHODS FOR A SYSTEMATIC EVALUATION OF THE VISUAL IMPACT OF THE ARCHITECTURAL ENVIRONMENT

Architects experience difficulty in predicting people's reactions to buildings. To achieve a systematic and objective evaluation of laymen's emotional responses to the built-environment, we are compelled to refer to experimentation based on scientific procedures and research designed accordingly.

While the experimental method is best to accomplish scientific acceptability, the quasi-experimental method appears to be an optimal approach for Architects, for the complexity of the architectural environment do not allow strict control and manipulation of the variables.

Within this context, the confounding factors, experimental population, data-collection and test instrument become of central importance as well as the presentation of the stimuli and the nature and format of responses, and they all affect the validity, reliability and precision of the results. Finally, the convenience of administration of the experimentation is an imperative to meet if Architects are expected to sympathize with scientific research.
ETUDE DE L'EVOLUTION DU PAYSAGE DE L'AVENUE DE GINZA

Les environnements comme des paysages, qui entourent les hommes, doivent évoluer avec le temps. On peut trouver des études qui traitent sur des problèmes d'une tranche du temps, mais il est important d'étudier les problèmes sur l'évolution d'environnement à long terme.

Cette étude porte sur l'avenue de Ginza qui est principale et typique au Japon, et nous avons essayé de saisir l'évolution du paysage et de l'image de l'avenue de Ginza ainsi que les facteurs importants qui donnent l'impression de cette évolution. Ce type d'étude est fondamental pour développer les techniques d'aménagement du paysage qui évolue à long terme.

Carlo Bagnasco (architect), Italy - Rome University 'La Sapienza'
Mirilia Bonnes (psychologist), Italy - Rome University 'La Sapienza'
Maria V. Giuliani (psychologist), Italy - Cons. Naz. di Richerche, Rome
Giuseppina Rullo (psychologist), Italy - Cons. Naz. di Richerche, Rome

OBJECTIVE AND SUBJECTIVE ASPECTS OF THE QUALITY OF URBAN ENVIRONMENT: APPROACH TO AN INTEGRATED STUDY

An integrated method of analysis and evaluation of factors defining the quality of the urban environment and the level of environmental satisfaction, now being applied in the city of Rome, is described. The impact of various factors on the environmental quality is evaluated with respect to given standards with the help of a series of 'indicators'. These evaluations are compared with those given by a sample of the population on its own residential district in order to verify the relations between the objective aspects of the quality of the urban environment and the way they are perceived at subjective level.

Reid Bishop, UK

ENVIRONMENTAL PSYCHOLOGY AND LOCAL HISTORY

One of environmental psychology's conspicuous failures to date has been to come to terms with the changing historical nature of man-environment relations. A possible way forward would be to take advantage of the place-specific wealth of material (pictorial and written) available to local historians, and to trace over several centuries some of the constants - and inconstants - of behaviour in, and perceptions of, that local environment. Considering its ever-growing popularity, the field of local history to date has been curiously unwilling to deviate very far from well-worn formulas all too often overly nostalgic in tone, uni-dimensional in their analysis of change, and above all unimaginative in format. Perceptions of historical time and change are central to the experience and building of place, and it is time to open up local history to these and other applicable elements of environmental psychology and the psychology of time and change. Entitled GUILDFORD TIMESCAPES: A Celebration of Change 1750-1989, it could provide a useful starting point for a wider ranging workshop on temporal aspects of environmental psychology.
CHILDREN AND ROAD SAFETY EDUCATION: A RESEARCH REVIEW AND SUGGESTIONS FOR FURTHER RESEARCH

A new view of children's road-safety education has recently been introduced in Swedish official recommendations. Children should not only develop their traffic abilities as pedestrians and cyclists, but should also be encouraged to critically assess traffic problems from their own point of view and be given the opportunity for co-operating with local authorities in the search for solutions to these problems.

Using a model of the ecology of human development I have made a research review and suggestions for further research in Scandinavia. The model builds upon a view of children's development in which the role of the individual in the society is regarded as interactive. The influence upon the individual can operate indirectly, through factors lying beyond the child's immediate control, such as the attitude of local authorities to road-safety questions in the areas for which they are responsible.

PARENTS' CONCEPTION OF SAFETY IN NEIGHBORHOOD PLAYS SETTINGS

This study investigates parents' conception of children's play safety and danger in an urban setting. The paper proposes that parent's conceptions of neighborhood play safety are multi-dimensional constructs influenced by ethnic background, socio-economic conditions, household composition, sex of the child, and the physical features of the neighborhood. This investigation is divided into four stages: (1) an ethnographic phase; (2) interviews with 18 Caucasian and 18 Black-American families and; (3) case studies with six families. The final stage of the research will involve a critique of the research findings by the study's participants. The findings from this data will be useful for informing social policy on children's outdoor safety and the improvement of urban outdoor play opportunities.

THE POWER OF MENTAL SCHEMATA IN DETERMINING THE VISUAL APPEARANCE OF BUILDINGS

New research has been carried out after the first, presented 2 years ago in West-Berlin (IAPS-8; P. Bonaiuto, M. Miceu Roman, F. Bonaiuto, 1984). The research contributes to show that, when we observe highly irregular and paradoxical buildings, under ambiguous perceptual conditions, because of the influence of mental schemata we attenuate the anomalies. But we increase and emphasize them, if the perceptual conditions are univocal and coerci-
ve. In such opposite phenomena, respectively, assimilation and contrast after-effects are involved. The demonstration of these phenomena has been confirmed by experiments on the perception of three-dimensional models of leaning buildings. The very consistent individual differences have also allowed us to define 5 different cognitive styles. This research paradigm is also successfully applied in predicting and explaining similar phenomena which occur during the perception of architectural facades, with characteristics of disorder (i.e. windows not lined up).

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PERCEPTION OF THE QUALITY OF THE RESIDENTIAL ENVIRONMENT AND TEMPORAL DIMENSION OF THE RESIDENTIAL EXPERIENCE.

The study is part of a wider multidisciplinary research project within the UNESCO-Man and Biosphere (MAB) Programme on the city of Rome. The aim of this part of the study is to investigate the perception the inhabitants have of the quality of their residential environment, in order to find out (i) the principal evaluative dimensions underlying these perceptions and (ii) how these evaluations are affected by the temporal dimensions of the residential experience: i.e. the length of residence and the amount of daily time spent within the quarter of residence. A sample of about 500 subjects all from the same quarter of the city, was considered.

Naomi Carmon (sociologist and urban planner), Israel - Technion Haifa, Faculty of Architecture and Town Planning.

SELF-HELP IMPROVEMENT OF PUBLIC HOUSING: EMPIRICAL EVIDENCE AND POLICY IMPLICATIONS

In numerous public housing neighborhoods in Israel, one can observe a widespread process of user-initiated expansions of small housing units. The residents of these neighborhoods are working-class families with below-average income. These people frequently function as passive users of the welfare state's services, including housing services. A study on their housing-related attitudes and behavior discovered that when they were given a chance, a considerable portion of them turned into active, participating users. When they gained control (ownership) over their housing, when the physical conditions enabled it, and when the administrative institutions did not inhibit it, many of them renovated, expanded the area and greatly improved their living conditions. The improvements included frontages and yards, and thus, not only themselves but also their neighbors and neighborhoods benefited from the housing expansion process. When subsidized loans and on-site technical assistance were provided, the numbers grew, especially from among lower-income families. The conclusions are that old public housing can be made responsive to new needs, and that public-individual partnership can create a positive dynamics in low-status neighborhoods.
LOOKING BACK TO THE FUTURE THROUGH THE LOOKING-GLASS OF THE PRESENT

This paper presents some reflections about the present situation of urban environments and attempts to set out new directions for the future man-environment studies. The paper aims to show that it is possible to look back to the future only through the study or consideration of existing urban environments, from which should be derived all actions to improve the quality of urban life, as well as more compatible and human urban developments.

RESIDENT PARTICIPATION IN NEIGHBORHOOD PROGRAMS: SOME ISSUES TO BE RESOLVED

Resident participation has been a central aspect of neighborhood rehabilitation programs around the world in the last three decades. A number of general issues regarding the principle of participation and its functioning within this context, can be identified. Two such issues are addressed in this paper: (1) Representative vs direct participation. Can anyone represent anyone else? Does one need to participate oneself in order to benefit? (2) Which is more important - the process of participation or its product/outcome? Results of a four year comprehensive evaluation study of Israel's Project Renewal are the main context for discussion of these issues.

THE NEW MUSEUM: NEW ROLES, NEW EXPERIENCES, NEW FORMS

Practices and programs of museums are changing and are vastly different from those of past museums. New approaches to the museum experience include visitor's participation in activities, hands-on experiences, and conducting civic and performing-arts functions in the museum.

These are just a few of the emerging trends which give the museum a more dynamic role in education and recreation. Many new museums are more public than ever before -- places where people gather and participate in a variety of cultural experiences.
The changes in roles and experiences manifest themselves in the form of the museum. This presentation will demonstrate the links between activities and physical form at different levels and scales: from the "interactive core," which responds to new concepts of display at the micro scale, to "common grounds" which provide a place for large gatherings and often make connections to the surrounding urban environment.

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ENVIRONMENT AND BEHAVIOUR RESEARCH ON FALLS AMONG THE ELDERLY

Falls are a major health problem among the elderly, resulting in death and injury as well as negatively affecting quality of life. Most research on falls specific to the elderly has been conducted from a medical and public health perspective, and emphasized health status and other personal factors. Studies which examine the role of environmental and behavioural contributions to falls among the elderly suggest these factors also are important. However, the environment and behaviour research community has shown little interest in falls, except for a small body of stair safety studies. Existing research is examined as a basis for pursuing more situationally-oriented studies of falls in the elderly.

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PINK PALACE TO ROSA PARKS TOWERS: HIGH RISE REHABILITATION USING ENVIRONMENT AND BEHAVIOR RESEARCH

The objective of this paper is to present a case study of the rehabilitation of a high-rise family housing project in San Francisco to provide attractive housing for low-income elderly persons. The author's role was first, as a programming-consultant "translating" existing environment and behavior research on elderly housing for use by the design team. And second, conducting a simple, no-budget post-occupancy evaluation (POE) of the building, three years after the residents moved in. These two phases of work will be described, and some of the POE results briefly presented and analyzed.
PERCEPTION TACTILE DES SOLS

Ce texte tente de démontrer comment au départ d'un relevé de sols d'habitations sur 3 continents et d'une observation phénoménologique, le toucher kinesthésique des pieds est à chaque fois stimulé de la même manière. L'homme pénétrant dans une maison se détend progressivement et l'attention qu'il est obligé de donner nécessairement à ses gestes s'estompe petit à petit pour la transférer à d'autres activités. Le toucher étant le sens du proche, du contact, l'aménagement des sols des maisons favorise précisément la prise de contact et de là, la rencontre avec l'autre.

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A COMPARATIVE STUDY OF PSYCHOLOGICAL AND SOCIAL EFFECTS OF LIVING IN HIGH AND LOW DENSITY HOUSING

In the context of the rapid development of the city of Calcutta, a lot of spontaneous clusters of housing (high-rise, single room) have been constructed. Along with such development a considerable portion have been slums. Calcutta being one of the most populated cities in the world, is experiencing an acute shortage of living space - housing.

About 300 adult subjects and as many children were chosen from the study area to see how the subjects perceived the environment they presently live in, their emotional reaction with reference to the high density and their level of intellectual functioning. Results show that high density living has a marked influence on psychological and social characteristics of the individual, considering their felt need for a particular environment and the quality of the environment they currently live in.

Kimberly Dovey, Australia - University of Melbourne, Faculty of Architecture & Planning, Parkville, Victoria 3052

PLACE,IDEOLOGY AND POSTMODERNISM

The phenomenological approach to environmental meaning is considered in relation to social theory and postmodernism. Phenomenology exhibits a
concern with the experiences and meanings of 'place' while certain recent social theory focuses on the manner in which social structure and ideology constrain and reproduce such meaning in everyday life. It is argued that the phenomenological approach needs to be integrated with such theory for both a rigorous understanding of place experience and for the questioning of ideological constraint and reproduction. Postmodernism, as a pastiche of formal meanings, reduces meanings to references. It appropriates meaning and borrows legitimacy from both phenomenology and social theory without questioning the legitimacy of existing ideologies. The community design framework is proposed as one that permits the restructuring of design practice through an ideologically self-critical place-making process.

Nold Egenter, Switzerland - Zürich, Documentation office for fundamental studies in building theory

LE STYLE A L'ORIGINE DE LA NAISSANCE DES FAÇADES QUADRILÉES

Les façades quadrillées sont-elles une sorte d'effet secondaire et négligeable d'un médicament indispensable? Cela fait quelque chose à certains, la plupart s'en sort; il faut bien s'accoutumer aux ennuis. Ce qui s'exprime d'une façon trop désagréable, il faut le traiter par de nouveaux remèdes, par une décongestion etc. De temps en temps, il faut mettre un signe, un triangle, un cône, un petit drapeau métallique peut-être, comme au-dessous d'une poudrière. Ou bien, cette intrusion gigantesque de monotonie dans nos paysages urbains est-elle basée sur des raisons plus profondes?

La contribution suivante estime avoir trouvé un nouveau complice en ce qui concerne la responsabilité dans la monotonie moderne des façades quadrillées, à savoir le 'style' de l'histoire de l'art! Le style depuis Winckelmann, c'est-à-dire depuis son origine scientifique, aurait-il préparé le terrain sur lequel l'éclectisme du 19e siècle, populièrement appelé "la salade des styles", a pu croître avec une conséquence logique? La comparaison exemplaire des deux méthodes de la description de l'art essaie ensuite de montrer que la méthode différentielle et historiquement individualisante de l'histoire du style a vidé les formes traditionnelles de l'art de leur contenu spirituel, les a dévaluées dans un sens pluraliste et a fondé la base sur laquelle le modernisme a pu se libérer d'un trésor immense de formes ayant sans doute de la valeur sur le plan anthropologique.

Anne Faure* (urbaniste), Inst. Nat. de Recherche sur les Transports et leur sécurité; Yves Trochel (plasticien), Université de Paris - France; Thomas Priestley (urbaniste), USA - Univ. of California, Berkeley

LA CARTOGRAPHIE PERCEPTIVE; UNE METHODE D'EVALUATION QUALITATIVE DES OPERATIONS D'AMENAGEMENT URBAIN: L'EXPERIENCE DE CHEVILLY-LARUE

C'est dans le cadre du programme "Ville plus sûre, quartiers sans accidents", qu'une recherche méthodologique axée sur la perception de l'environnement a été menée, s'appuyant sur l'opération de Chevilly-Larue com-
me étude de cas. Les objectifs poursuivis étaient: 1) renseigner la commune sur l'impact de son aménagement auprès des habitants et 2) trouver une méthode pour traduire la perception des usagers, faire la comparaison avant/après travaux et croiser les informations avec les données objectives, enfin, formaliser une méthodologie généralisable d'autres projets urbains.

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PSYCHOLOGICAL BONDS WITH TYPES OF SETTLEMENTS

Considerable theoretical and empirical research has been conducted on the experience of bonds between people and the tangible surrounds of home place. These bonds have been described as attachment to or rootedness in place as well as home place as an integral aspect of the development and expression of personal and group identity. Yet many of these same scholars have expressed concern over the growing rupture between people and places in American society. This research reports on interviews with residents of the Denver metropolitan area that suggest that mobile Americans may not necessarily consider themselves as rootless; rather, the experience of people-home place bonds may generalize to the experience of psychological bonds with a type of settlement.

Mark Francis, Center for Design Research, Department of Environmental Design, University of California, Davis California, U.S.A.

GARDENS IN THE MIND AND IN THE HEART

This paper reports on the results of a study of peoples relationships with their gardens in California and Norway. This research project has involved ethnographic interviews which explore the meaning of everyday, common gardens. Several categories of garden meaning are identified including garden as a setting for creativity, a retreat from the outside world. A private activity, a social place, a connection to ones personal history, a reflection of ones personality, a productive landscape, a symbol of caring and as a declining landscape. The implications of the research on garden meaning for environmental design and research is discussed.

J. Freixes i Martines - M. Juanaola i Codina - J. Monllevi i Portolo - S. Valera i Pertegas (all psychologists); Spain, University of Barcelona.

THE BARCELONA DISTRICT'S LOOK

This communication collects the results from a survey on how a number of urban functional and symbolic interventions get integrated in the cognitive
schemes, in districts in the city of Barcelona lacking these kinds of elements. We evaluate how these interventions also affect the identification and social life of their inhabitants. A survey has been carried out on a sample of three hundred and forty individuals by means of a questionnaire. The results show that the contributions have had an important incidence in the cognitive schemes of the citizens, although they do not reach an identification with the district. By now they are, however, integrated in the individuals the way the city is intended to show.

Marc Fried (psychologist), USA – Boston College, Departm. of Psychology, Chestnut Hill, MA 02167

PLACE IDENTITY: PSYCHOLOGICAL ORIGINS AND ADAPTIVE CONSEQUENCES

The sense of spatial identity is a concept introduced to provide a spatial context for many human experiences and behaviors (Fried, 1963). The subsequent conceptualization of place identity (Proshansky and Kaminoff, 1982) further delineated numerous functions subserved by this form of self-identity. Much evidence, widely dispersed, confirms the critical significance of place orientations for human development and functioning and as a dominant factor in adaptation to environmental stress. This paper examines the socio-cultural and psychobiological core of place identity and of manifest variations within and across societies. It presents a fundamental theoretical formulation of the sense of place and its psychological integrative functions.

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MOTHER'S COGNITIVE REPRESENTATIONS OF 1, 2, AND 3-YEARS OLD CHILDREN'S ACCIDENT RISKS IN THE HOME

Home interviews were conducted with mothers of 72 children, equally many of each sex in each of three equally large groups consisting of 1, 2, and 3-years olds. Questions were asked about perceived accident risks, need of supervision, and need of safety measures in different rooms. The results showed that kitchen and bathroom were perceived as more dangerous than other rooms. Protective actions also tended to be perceived as more important in these rooms. Furthermore, the younger children the mothers had, the less risk and need of protection they tended to perceive. The age differences were in some cases larger for girls than for boys.
M. Vittoria Giuliani and Giuseppina Rullo, Istituto di Psicologia del C.N.R., Viale Marx 15, 00156 Roma - Italy

TERRITORIAL ORGANIZATION OF DOMESTIC SPACE IN DIFFERENT TYPES OF HOUSEHOLDS

The study is focused on the relationships between household role on the one hand and territorial behaviour and attitude towards one's own home on the other. It is assumed that, in contemporary society, household roles may be different from the traditional family role and that human territoriality is primarily related to the need for privacy, social interaction, and self-expression. All members of thirty households, including traditional families and two different types of alternative households, were interviewed. The results indicate that household role affects territorial behaviour and attitudes, structuring the way people interact with their homes.

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ENVIRONMENTAL ETHICS AND THE NEED FOR A CATEGOREAL SCHEME

I argue that Utilitarianism and Rights Theory, the two schools presently dominating environmental ethics, cannot decide major questions in the field. In their place I offer a categoreal scheme based upon Process Philosophy. Employing the concept of harmony, I develop a systematic scheme that uses both the conditional and essential features of natural entities to secure both individual and relational identity. This focus is then used to show how the environmental norms of stability and variety are not opposed but actually required for the good becoming of everything. Animal rights, for example, can be discussed without recourse to the norm of personhood or the utilitarian maxim. What emerges is a Platonic realism that requires the empirical sciences for the practice of normative thinking. Philosophy, in its original guise, is thus granted a significant place in contemporary discourse.

Francois Grivel et G. Wittersheim, France - Institut National de Recherche et de Sécurité, Strasbourg

LA CHALEUR JUGÉE DANS LE BRUIT, LE BRUIT JUGE A LA CHALEUR: UNE ETUDE DE L’INTERACTION ENTRE LA TEMPERATURE ET LE BRUIT EMBIANTS

72 sujets (36 hommes - 36 femmes), âgés de 20 à 30 ans, ont séjourné individuellement pendant 4 heures dans une chambre climatique en y
effectuant à trois reprises une tâche cognitive complexe, interrompue par de courtes pauses. Chaque sujet a subi l'une des six conditions environnementales définies par la combinaison systématique de deux niveaux de température ambiante (25 et 36°C) et de trois niveaux (37, 75 et 85 dB(A) en niveau équivalent) d'un bruit de paroles mêlé à du bruit de circulation routière urbaine. Avant et après l'exécution de la tâche cognitive, et pendant les pauses, les sujets exprimaient leur perception et leur évaluation affective de la température ambiante d'une part, du bruit d'autre part, au moyen d'échelles sémantiques à 9 échelons. Les résultats portent sur les jugements subjectifs des températures ambiantes en fonction des trois niveaux de bruit, et du bruit en fonction des deux niveaux de température (effets principaux et interaction température x bruit).

Hans-Joachim Harloff, West Germany - Technische Universität Berlin

SMALL NETS AS LEARNING EXPERIENCE

Two surveys were made to study the behavior of the inhabitants of 'small nets' (a union of nearly households, which try to reach self subsistence in some way or other). We wanted to discover those changes of behavior that lead to success both, individually and groupwise. In my first study I reviewed 16 building self help groups, former squatters, who succeeded in getting a contract with the house owner. The second research deals with spiritual groups and other nets.

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FORM AND CONTENT IN CONTEMPORARY ARCHITECTURE - ISSUES OF STYLE AND POWER

Architecture, the craft of making buildings, has been reduced to an alliance of taste and capital, of art and profit, of style and power. Contemporary architectural practice is, we contend, an alienated practice: form torn constantly from content; the aesthetic negated, reduced to looks, dressed up as Art. This, the taken for granted orthodoxy of architectural thought must be opposed, resisted. Such resistance is rooted in the concept and practice of craftsmanship, in the fusion of pleasure and work - an overcoming of alienated labour.

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FUNCTIONAL SAFETY IN (HOSPITAL) BUILDING DESIGN
some observations and considerations

In this paper two major problem fields regarding the functionality of buildings for healthcare are identified as 'high tech' versus 'low tech' and incongruity between intended functions and allocated space. Examples are drawn from post occupancy evaluations performed in buildings of this type.

The dual problem of future operational usage and design specifications that adequately mirror future use will be clarified and discussed from the viewpoint of functional safety of systems. It seems that evaluation of existing facilities as a form of feedback for the design of new facilities has to be accompanied by 'feedforward' design methods which permit the designer to maximise functionality and built-in flexibility.

Liisa Horelli, Finland - Department of Psychology, Helsinki University, Hopeasalmentie 21, Helsinki

THE MEANING AND ROLE OF THE PHYSICAL ENVIRONMENT IN HOUSING

A seven-year long follow-up of a self-planned housing community of 21 families at the outskirts of Helsinki has made it possible to explore the meaning and role of the physical environment in the intrapsychic work of the individuals, in the family dynamics and in the everyday life of the small housing community itself. The results show that there are striking differences in the temporal, spatial and psychosocial dialectics, constantly present in the individual transactions as well as in those of the families. These are due to personal, gender and sociocultural factors influencing the creation, use and expression of a idiosyncratic code system.

Joerg W. Huber (research fellow in psychology), UK - University of Surrey, Guildford

ARTEFACTS AND PERSONAL SYMBOLISM

Artefacts, despite their ubiquitous presence in our lives, are generally a neglected area in mainstream psychology including environmental psychology. Artefacts enter into research only in form of commodities and consumer purchasing decisions. One particular aspect which attracts the attention of
lay people, but unfortunately much less so of psychologists (except those few with a strong interest in psychoanalysis), is the symbolism of personal objects. The view which will be proposed is based on the idea that symbolism develops on the basis of the active involvement of objects into human conduct. Two types of involvement are distinguished: objects are part of concrete human action and of contemplative activities. These different types of activity lead to different types of object symbolism which were identified by Boesch: situational, functional and analogical symbolism. An exploratory study was carried out which applied content analysis to in-depth interview data. The main finding regarding the issue of object symbolism was that the type of symbolism appears to be more closely related to the type of activity involvement of personal objects than to object attributes, thus supporting the importance of active involvement of objects for their symbolic meanings. Implications for the relationship between conceptual representations of objects including their symbolic meanings, activities and object properties will be discussed.

Edward D. Hulsbergen, Netherlands - Technische Universiteit Delft

WHICH SPACES FOR WHOM? PROBLEM DEFINITION, A MAJOR POINT

Architectural and urban design and planning can be part of the solution of social problems, though not necessarily so. The scientific explicitation and testing of hypotheses on the relationship between the professional tools, the (long lasting) products and structures built, and other social phenomena is far from finished, especially in respect of vulnerable groups in our society. These groups can be, and are, defined in great variety. The built environment is one of the available means to accentuate differences between people. Likewise it is easily used for negative (stereo)typing of people. However, environmental solutions also easily give rise to hope, expectation. This capacity of the daily results of our science should not be a manipulative device, but should benefit vulnerable groups.

Imai, Yurika
The University of Tokyo, Japan
Department of Architecture

AN ANALYSIS OF THE DESIGN PROCESS

The purpose of this study is to clarify how the people, both non-professionals and professionals, think or deal with forms and spaces. Visualization and manipulation of forms and spaces in mind and the act of drawing interact with each other. This paper is focused on the development of esquisse drawings and offers an analysis of protocols derived from experimental investigations in which both non-professionals and professional architects were asked to design houses on paper. Through the experimental results, it was concluded that non-professionals' cognitive structure in the design task was chiefly based on the linear and behavioral perceptions, while architecturally-educated group developed the design in pattern approaches as well.
THE SESSION OF THE SWISS NATIONAL COUNCIL ON "DYING FORESTS"

We analysed a special session of the Swiss national council on "Dying forests" which was called for so that swift action to stop the forest deterioration could be taken. According to our theoretical approach we collected data at different time points (calling for the session, during the session, several days after the session) of several actors (parliament, political party, members of national council) and from various perspectives (politicians, media, passers by).

The following data will be presented: from questioning of politicians and passers by prior to the session, their comparison, results of votes in the session and their comparison with the questioning prior the session.

ENVIRONMENTAL PREFERENCES AND PUBLIC PARTICIPATION

The urban visual landscape is often assumed to be a reasonable reflection of the public's preferences. Why else would cities - neighborhoods, shopping malls, street scenes - look as they do? Rarely, however, in the United States at least, does the public have much say in the changed visual landscape. Furthermore, the public's preferences are rarely probed and generally become known only when a major perturbation is proposed. A recent project, to propose a master plan for a major segment of the city, offers some useful insights into these issues, both substantively and procedurally. Results of extensive public participation from diverse elements of the population, suggest that the desire for development may not reflect the majority's views, while the sentiments about natural areas are widely shared.

USES OF THE PAST: ENHANCING COGNITION AND ENVIRONMENT BY INCORPORATING HISTORICAL INFORMATION

Preserving environmental reminders of the past can have important implications for meeting human needs and enhancing human functioning. Not only the physical environment, but the informational environment as well has suffered as informational technologies have overwhelmed the cultural capacity for selection, filtering and focus. Amidst this informational glut, information about past patterns has suffered neglect. Three areas of human concern can be identified in which a coherent, organized perspective on the past could make a significant contribution: Identity and self-reliance, Self-maintenance, and Coping and problem solving.
These mutually-supportive facets of human functioning are offered as a conceptual basis for analyzing the potential contribution of historical information and historical environments.

Hatice Ferhan Kilical, Saudi Arabia - King Saud University, P.O. Box 57448 Riyadh

**HOUSE DESIGN AND SAUDI WOMEN**

Saudi Arabia's change in economic base and rapid transformation into a modern nation affected housing and life styles. Privacy plays a major role in the physical and social structure of the Saudi society. A woman's position in the family is one of influence now more than ever due to the educational attainment of today's women. The activities of women, their needs, desires, and the facts concerning their privacy are major considerations in housing design.

In order to obtain guidelines for villa housing, the socio-cultural structure and the impact of change and modernization is studied. Interviews were conducted with women to provide a reference for understanding and evaluating the existing and the preferred conditions in villa housing.

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**ANALYSIS OF APPROACH DESIGN IN DAITOKU-JI TEMPLE, KYOTO JAPAN**

Approaches of Daitoku-ji Temple, a compound of 23 sub-temples established during the period from 1338 to 1643 successively, were surveyed to explore the meaning of difference and similarity found in their design composition. Public approach connecting sub-temples was articulated and classified by the type of wall design and pavement patterns. Inside approaches of sub-temples were classified by the length, bending forms and the area of temple. Overlaying the results, approaches of similar design composition were extracted. The meaning of the similarities was decoded by referring to the history of expansion of sub-temples.

Martin Koeppl, West-Germany, Assisi Nature Council, Italy

**REPRESENTATION AND THE PHYSICAL ENACTMENT OF SOCIAL IDEALS**

This paper discusses data from an environmental education project that employed audiovisual methods to stimulate participatory change. The study compares a city planner's presentation in class and the acts of two girls making collages, with the intent to examine the relationship between mode of representation and the practice of environmental prescription.
PERSONALIZATION OF NARROW OFFICE ROOM SPACE IN A RESEARCH INSTITU-
TION

Post occupancy evaluation of small office rooms in a research insti-
tution was conducted to initiate an improvement program of the
office environment. Occupants of rooms of virtually the same plan
were requested to answer questionnaires. Question items included:
concept of furniture layout; subjective evaluation of the room en-
vironment; relationship between occupants in the room, etc. Furni-
ture layout in the room was photographed. The result suggests that
the senior occupant of each room gave fairly high ratings on his
choice, while subordinate-occupants seemed to suffer from psycholo-
gical stress of being seen.

ARE THERE SEX-RELATED DIFFERENCES IN HOUSING WHISHES?

Studies in housing satisfaction indicate that housewives see the social envi-
ronment more important, while men tend to use functional criteria for eva-
ulation of home environments.
We wanted to verify whether these differences remain stable if groups in
comparable life situations are tested. The subjects were asked to sketch a
ground plan of an appartment according to their own housing whishes and to
describe it verbally. The portions of functional, communicative, and private
sectors of these plans were compared between woman and men, and with
apartments which were offered in newspapers.
The differences between the housing whishes of women and men were only
small compared to the difference between the housing whishes of our
sample and the offers of the housing market.

EVALUATIVE DIFFERENTIATION OF RIVERSCAPE

On a macroscopic scale, landscape resources along streams in the Kiso Ri-
ver basin are segmented typologically by way of experimental psychological
methods in order to classify their visual quality for preservative and ame-
rialive planning of riverscape.
Riverscapes observed on each viewpoint can be subdivided according to
their compositional appearance. Eight major categories of the confrontal
riverscape are identified by means of Quantification Theory, while the up-
stream and the down-stream riverscapes are categorized into twelve and
ten groups respectively.
Conspicuous elements effective on preference are discerned empirically.
TRANSFORMATIONS IN DOMESTICITY, HOUSEHOLD DEMOGRAPHY AND DWELLING DESIGNS

This paper identifies the interrelations between many factors that have contributed to transformations in household demography, house planning and home life during this century. These factors are discussed and illustrated in terms of a dual historical perspective. This approach shows that there is a growing discordance between housing policies and architectural practice, on the one hand, and socio-demographic and socio-psychological trends, on the other hand. In sum, it is appropriate to look back before looking to the future, if alternative strategies to correct the current situation can be formulated and applied successfully.

Jean-Michel Léger (sociologue), France, IPRAUS, UA CNRS 1246, Paris

"ETES-VOUS SATISFAIT DE VOTRE LOGEMENT ?" (LES DIALOGUES DE SOURDS DE L'ÉVALUATION DE L'HABITAT)

En France, l'évaluation de l'habitat "a posteriori" est organisée essentiellement pour mesurer les effets sociaux de l'architecture nouvelle et de la réhabilitation des grands ensembles. La Palmarès national de l'Habitat est un dispositif d'évaluation qui privilégie parmi d'autres critères celui de la "qualité d'usage". Le risque n'est pas tant dans la méthodologie d'approche (quantitative ou qualitative), ni dans les concepts utilisés, que dans la construction, par les évaluateurs de l'administration, d'une représentation de la satisfaction qui réduit le logement à un objet coupé des autres dimensions du mode de vie.

Krzysztof Lenartowicz, Witold Gawlowski, Jacek Czekai, (with: Janusz Dulhński and Maciej Moszew) (architects), Poland – Technical University of Cracow, Faculty of Architecture

SILESIAN MUSEUM IN KATOWICE (POLAND)

Competition project for the art, ethnographic and history museum in Katowice is presented. The original Silesian Museum (1936-39) had been an advanced modernistic building destroyed by the Nazis because of its Polish contents and International Style architecture. After 50 years the competition was to choose an equally high quality design. A series of patterns was introduced: 1) concerning the museum as institution: - on the hand as "temple of arts", - on the other hand as: "Disneyland"; 2) concerning the specific Silesian character: - typical of the region "small town structure" with its "market square" and "town hall", - "witness of the past" being a building from the 1950s, - coal mining tradition symbolized by "hole in the Earth" and tectonic "crack".
A STUDY OF RESIDENTIAL PREFERENCES AND CHOICES

A model assuming that a person's evaluation of a given housing attribute is determined by a weighted sum of his/her evaluations of its perceived consequences for activities and life values, and that the evaluation of a particular housing alternative is obtained by summing this value-fulfillment across all attributes, was applied to data obtained by interviewing the adult members of 43 Swedish households searching for a new dwelling. The model was quite successful in predicting preferences for housing alternatives. When predicting evaluations of the households' present dwellings and choices among housing alternatives, however, the model was considerably less successful. A number of possible explanations were offered for the latter finding.

STUDYING THE COMMUNICATIONAL MEANING OF THE HOME

Housing, looked at from a communicational perspective, shows a peculiar characteristic: it is an environment, a situs of communication and at another level it is a medium, a vehicle of communication. By themselves each of these two dimensions leads to certain questions; but through their combination a new quality arises and we are challenged to cope with the problem of reflexivity. In this paper I propose a research framework for the study of this double-faced feature of the home. A case study shall help to illustrate the points and to sharpen the instrument.

HOUSING IN THE PACIFIC: PROBLEMS AND OPPORTUNITIES

The paper summarizes the housing approaches pursued and their effects in the Pacific Region in the last two decades. The focus of the study is Papua New Guinea which is regarded as a country having enlightened housing policies. The paper reviews the 1973 "White Paper" on housing and evaluates the different activities of the government in trying to solve the "housing problem" since independence in 1975. The author's survey in two major urban settlements in Papua New Guinea shows that squatter settlements are centres of problems as well as opportunities. It is the "opportunity" side of the squatter housing that largely remains dormant and often ignored and thus housing is seen as a "problem". This view needs to change if we are going to be effective in meeting housing needs of the poor in the years to come.
Evna Mauritzson-Sandberg and Lennart Sandberg, Sweden - Environmental Psychology Research Group, Department of Psychology, University of Umea

CHILDREN'S PSYCHOLOGICAL REACTIONS TO WEARING RESPIRATORY PROTECTIVE DEVICES IN HAZARDOUS ENVIRONMENTS

The modern industrialized society exposes children as well as adults to environmental hazards ranging from solvents in the home to industrial pollution. Civil catastrophes like the Union Carbides gas leakage in India, fires in plastic industries, and accidents when transporting chemical products has much in common with chemical warfare. The effects on humans and protection against these effects are very much the same, namely respiratory protective devices (RPD).

This paper has been submitted for presentation at IAPS-10 Technical University Delft, The Netherlands. The study which it reports was financially supported by grant to the second author from the Civil Defense Department in Sweden.

George G. van der Meulen, Netherlands - University of Technology Eindhoven, P.O. Box 513, 5600 MB Eindhoven

TABLET AN ADAPTED APPROACH FOR ANALYSIS OF THE USE OF LAND AND FLOORSPACE IN URBAN AREAS IN DEVELOPING COUNTRIES

In an era of transfer of high technology to developing countries in general, and in transfer of methodologies in the field of urban and regional planning using computer equipment in particular, attention has to be paid to adapted approaches. Adaptation means that approaches and methodologies introduced in developing countries primarily have to suit under the circumstances of such countries, and that in stead of main focus to high tech transfer, issues concerning mobility have to be considered.

One of MANROP: Urban Management Systems adapted approaches for analysis of land and floorspace in urban areas in developing countries, applied in an area in inner Bangkok city, is the microcomputer program TABLET. That program will be described in three subparts, namely:
1. data collection using a digitizer or graphical tablet
2. analysis and calculation concerning land use and floorspace occupancies
3. drawing of collected spatial data using a plotter.

An application example will be showed and discussed. Finally, some conclusions will be drawn.
BODY IMAGE AND GRAPHIC REPRESENTATION OF THE ENVIRONMENT

The rate of change of one's own body image was studied during the "subjectivization" process of the environment. According to our general hypothesis, thanks to its structure and variety as well as its firm or flexible boundaries, such a rate determines the degree of separation between one's own "Self" and the surrounding space, and influences the evaluation and the awareness of this space. The research was carried out on 169 first year students in Psychology and Architecture, by means of projective tests and graphic representation of private and public spaces, and allowed us to maintain a relation between the body experience, cognitive style and space representation.

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TIME PERCEPTION AND THE PROCESSING OF ENVIRONMENTAL INFORMATION

Experiments are reported in which subjects were asked to indicate when they felt 15 minutes had passed while observing each of two model environments of similar design but differing spatial scale. Three types of model environment were used: scale model railways, sitting room models, and abstract, non-representational environments. Subject's judgments of duration were significantly shorter in the smaller of the two model environments in every case except where comparisons were made with the smallest scale models of room interiors. It is suggested that the effect of spatial scale on duration judgments is related to differences in the density of the information to be processed in environments of different scale. It is further suggested that there may be an optimum value for information density related both to the scale and to the type of environment being modelled.

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GEOPOLITICAL ART: THE AESTHETICS OF NETWORKS

The "Line of the Horizon" art-science-technology project took place in November '86. The facsimile network (27 participant nodes) was spread over Mediterranean cities, but also extended beyond, to two boats (Atlantic, Indian oceans), and reached New York. This program provided us with: a) Observations related to the use of communications technology, and the proposed Together/Separate unit, useful for tackling interactivity -- a parameter
not readily measurable, and b) The opportunity to check on proposed aesthetic criteria as they relate to communications in contemporary human and built environments. This geopolitical art network was activated from Thessaloniki, Greece, for a 6½ hours live exchange of respective horizon lines.

Rosalyn Moran (psychologist), Ireland - EKOS-Architectural psychology and Environmental Services, Garden Hill, 1, James's Street, Dublin-8

DISTANCE WORKING AND ELECTRONIC HOME WORK: IMPLICATIONS FOR ENVIRONMENTAL PLANNING AND HOUSE DESIGN

This paper will examine the impact of new forms of work arrangements made possible by developments in NIT and by changing social values, on environmental planning and house design. The results of a survey of Electronic Home Workers (EHW) carried out in 5 European countries will be discussed. Changes in EHW workers cognitions and activities in relation to their homes, neighbourhoods and the macro environment since taking up EHW will be reported on. The implications of changes in transport behaviour, activity patterns, use of the home, neighbourhood involvement etc. for the planning and design of environments will be discussed. Within this context, transport policy, residential amenity, land use zoning, neighbourhood planning and the design of houses which accommodate workspaces will be examined. The impact of these findings for the disabled will be considered.

Robert Mugerauer (phenomenologist), USA - University of Texas, School of architecture and department of philosophy, Austin, Texas

HOUSING, COMMUNITY AND LANDSCAPE IN THE AMERICAN SUBURB

A recent research project, "Reassessing the American Suburb" documented that both in cases of suburbs with distinctively good architecture (for example, Riverside, Illinois) and with very ordinary buildings (as in Park Forest, Illinois) satisfaction with one's home and community life were not significantly dependent on the architectural quality of individual buildings, but on the communal coherence, public spaces, and aesthetics resulting from the planned and cultivated landscape. This paper presents these two case studies of the successful subordination of suburban architecture to the landscape as a key design feature in articulating a suburban pattern language.

Yoshio Nakamura, Shin-ichi Kitamura et al, Japan, Tokyo inst. of Technology

LANDSCAPE DESIGN AND IMPLEMENTATION FOR THE RIVER BANKS AT HIROSHIMA

A powerful amenity movement has been raised from the citizens of
Hiroshima. So the government decided to launch a landscape improvement scheme along the rivers in the city. And the planmaking and the design were left in charge of us. Based on our survey around the rivers, we set up the design principles as follows:

a) conservation of traditional bank images
b) encouragement of water front events as possible
c) application of local materials
d) landscape expression of tidal movement
e) assurance of flood control function.

Andrzej Niezabitowski, Poland, Silesian Techn. University - Gliwice

ARCHITECTURE AND THE NEED FOR SECURITY

The need for security is the basic psychological need that man experiences. The spatial organisation of an artificial environment may favour the satisfying of this need, or on the contrary - arouse emotions of anxiety. A group of specific psychological hazards is distinguished which can be related to the spatial organization of an artificial environment and can become the source of anxiety states. These are hazards associated with: 1) loss of spatial orientation, 2) large scale and dimensions of buildings and complexes, 3) the complexity and differentiation of spatial systems, 4) the open and closed nature of spatial form, 5) the geometrical type and plastic nature of the forms employed, 6) the symbolical significance of these forms. An understanding of these hazards may contribute to reducing anxiety states and the elimination of unnecessary psychological tension.

Toomas Niit, USSR - Department of Sociology, Institute of History, Mündi 3, Tallinn 200 001, Estonia

A METHODOLOGICAL FRAMEWORK FOR STUDYING FAMILIES IN DWELLING ENVIRONMENTS

A framework for studying the transactions between people and their socio-physical environment is proposed which tries to avoid the determinism or reductionism of socio-psychological and architectural theories. The socio-physical system is described as a unity of place, activity and relations, and we cannot understand none of these without considering them in relation to the others. This 'triad' functions in the broader context of sociocultural norms. As relations are part of the system, analysis on the level of individual will not be sufficient - we have to ascend to the level of social unit as well. Place and relations seem to be relatively stable parts of this system, and activity - the dynamic one. Nevertheless, we can speak about 'behavioral lifestyles' of different social units. The necessity of longitudinal analysis of social units in order to understand their functioning is emphasized.
FORMES ARCHITECTURALES ET GROUPES SOCIAUX: Y-a-t-il un compromis qui arrive ?

A l'occasion d'une intervention précédente (IAPS-8), notre préoccupation fut la formulation d'un système théorique concernant les rapports intrinsèques entre la pratique architecturale et la pratique sociale. L'élaboration théorique du problème nous a conduit à la conclusion que la pratique architecturale produit un compromis entre les attitudes sociales au moment qu'elles apparaissent contradictoires à propos des formes urbaines. Notre intervention courante (IAPS-10) concerne la vérification de nos hypothèses théoriques à travers des analyses et des questionnaires effectués dans le centre historique d'une ville grecque. Là, l'historicité et l'innovation offrent le champ à la pratique architecturale d'entreprendre une série des compromis.

Erminieda Mainardi Peron*, Maria Rosa Baroni, Gesualdo Zucco (psychologistes), Italy - Università di Padova

THE EFFECTS OF THE SALIENCE AND TYPICALITY OF OBJECTS IN NATURAL SETTINGS UPON THEIR RECOLLECTION

Possible effects on memory of typicality and salience of the objects present in two natural places were investigated upon. In Experiment I three ratings of typicality and salience obtained with modalities more or less strictly connected with the environmental settings were compared. In Experiment II incidental and intentional memory for the objects were tested. Results showed that typicality of items favours their free recall but hinders their recognition, while salience of items favours their recognition. It is argues that these findings could cast some light on divergent data reported in literature about schemata effects on memory for natural places.

Patrick Péruch and Marie-Dominique Giraudo (psychologists), France, - Université d'Aix-Marseille II, Cognition et Mouvement, UA CNRS 1166, 5 rue des Géraniums, 13014 Marseille

COMPUTERIZATION AND PLANNING OF DISPLACEMENT IN A PARISIAN RADIO TAXI RESERVATION SYSTEM

The introduction of new technologies into the field of transportation reformulates the question of the link between field studies and laboratory studies. With the use of computers, it has become possible to simulate the operator's behaviour, and to work out dynamic aids for displacement. The planning of taxi journeys is one of the many applications in which computers are contributing to the organization of displacements. At the same time, this approach has opened up new theoretical lines of research concerning the investigation of the cognitive processes involved in displacement planning.
SHINSUIKOEN, DES EGOUTS AU PARC DE LOISIR

Les parcs shinsuíkoen, "parc de familiarisation avec l'eau" naissent en 1974 à Tokyo. Le principe général consiste à reconvertir un canal ou une rivière, pollué et unutile en un jardin linéaire qui exploite l'eau sous différentes formes, jeux, baignade, canotage, pêche, promenade...

Ces nouveaux espaces ont permis aux habitants, en se réappropriant les lieux, d'y transférer des activités traditionnelles liées à l'eau. Ces parcs, s'ils sont créés dans des styles parfois très différents, n'en impliquent pas moins dans tous les cas une nouvelle perception du milieu, un nouveau comportement des utilisateurs. Ils introduisent un nouveau rapport à la nature dans la vie.

Wolfgang Plöger and Marco Lalli, West-Germany - Psychologisches Institut der Universität Heidelberg, Institut für Psychologie der TH Darmstadt

URBAN SELF-PRESENTATION AND RESIDENTS IDENTIFICATION WITH THE URBAN ENVIRONMENT

The relationship between the self-presentation of the town, her perceived identity and residents' identification with the urban environment was investigated in Heidelberg, FRG. This relation has relevance for the increasing efforts of local administrations to improve residents' attachment with the town through specific impression management measures. In the present study the method of content analysis was used to classify the themes of communal self presentation in the local gazette. Therefore a categorization system was developed using the following three dimensions: temporal orientation, spatial level and functional aspects. In a subsequently conducted telephone survey (N=130) the perception of these thematic contents by the town residents was investigated and related with the urban identification scores measured with the "Urban Identity Scale" (Lalli, in press). The results indicate that highly indentifying subjects appreciate the functional aspects of the town more. Their thematic perception of the urban environment coincides with the self-presentation offered by the community. An important mediator of this relation is the attributed responsibility for the urban quality perceived (personal vs. communal). This may be of relevance for further public relation campaigns by local administrations. The study exemplifies that identity measures may prove valuable as mediating variables in many areas of Environment Psychology.

Enric Pol (Psychologist) Univ. de Barcelona Dep. Psicologia Social Adolf Florensa, s/n. 08028 BARCELONA

ENVIRONMENTAL PSYCHOLOGY IN EUROPE. A SOCIO HISTORICAL STUDY THROUGH ANALYSIS OF IAPS CONFERENCES AND THEIR CONTEXT

In the framework that has been known as Sociology of Science, we have
studied the evolution of Environmental Psychology in Europe, how has been influenced by several factors: cultural and linguistic background marking developmental styles, different theoretical approaches, power relationships that have developed in the scientific community bath in social and intellectual aspects, and how these constitute two "Invisible Colleges". Two nuclei centers in Surrey and in Central Europe, are defined as power structures within the organization that shape the scientific community and that express themselves through the IAPS conferences, with two theoretical differentiated perspectives. Finally, we ask the question does a European Environmental Psychology exist? We find that the different characteristics give to it a certain entity, but the intellectual influence of USA drown this possible identity.

This paper presents some results of a broader publication that has already been completed. A preliminary study of this type was presented in Berlin in 1984.

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Thomas Priestley (urban and environmental planner), USA - Uinv. of California, Berkeley

STUDY OF THE EFFECTS OF AN ELECTRIC TRANSMISSION LINE ON PERCEIVED NEIGHBORHOOD QUALITY

To provide a basis for assessing the effects of large infrastructure projects on perceived environmental quality, a study was carried out in two neighborhoods adjacent to a recently built transmission line in California. Through use of a mail survey employing multiple choice, photo, and map-response questions, resident perceptions of neighborhood quality and transmission line visibility and effects were determined. Analysis of the responses allowed generalization about the impacts and the factors affecting them, including line distance, visibility, and mitigation measures, and whether the respondent moved to the neighborhood before or after the line's construction.

Jussi Rautsi (sociologist), Finland - Ministry of the Environment, Helsinki

ALVAR AALTO'S URBAN PLANS 1940-1970. THE ABANDONED POST-WAR ALTERNATIVE

The principles of Aalto's (unimplemented) regional and city plans are still more viable today than the executed plans: river valleys as cultural and industrial entities; plans as "genetic codes" for changes in size and quality of settlements; protecting local communities against the consequences of rapid industrialization; terrestrial, organic patterns instead of grids.
INSTITUTION AND HOME: LINKING PHYSICAL CHARACTERISTICS TO PERCEIVED QUALITIES OF HOUSING

A polarity between institution and home was hypothesized and 236 physical variables were proposed as descriptive measures for the two poles. It was predicted that housing would be evaluated as falling along a continuum between the two poles.

In a study of 29 house settings, the applicability of the terms used to characterize the poles as well as their oppositional nature is explored, as is the assumed polarity of the terms. Also investigated is the validity of the proposed descriptive measure. Environment is the independent variable.

ARTIFICIAL LIGHTING INTERPRETED AS A SYSTEM OF SYMBOLS

By a historical analysis, I tried to find a system that enables us to understand symbolic meanings in artificial lighting and gives us a higher standard of discernment of the designings of light.

In my view such a system is to be divided into the following two sections:

a. The substitution of daylight as a symbol of uniformity and selfcontrol expressed by an always available and constant lighting;

b. the differentiating lighting as a symbol of power expressed by beams of light and shining things, as a symbol of individuality and of social esteem expressed by selected sources of light and as a symbol of the positive exception and of starting new.

SUMMER HOUSE ON THE ISLAND OF KYTHNOS, GREECE

The nine-hectare site is an isolated cove on this arid, treeless, hot (in the summer) island. The owners, husband and wife are both university professors. The setting and the island suggested a combination of the cerebral with the vernacular (Plato/Zorba). The adoption of a regular geometry (that of the small rhombicumboctahedron) that is deliberately violated in response to the topography and the program seemed appropriate. The massing addresses the human scale and high level of complexity that are
integral aspects of the Cycladic vernacular. A ferrocement/styrofoam construction technique was adopted for its economy, limited thermomass, earthquake resistance and visual plasticity.

De Chirico's early treatment of form and light guided some of the formal decisions. The immediate grounds are walled-in, separating the paved and planted sacred space from the profane space beyond. The topography dictates the irregular shape and variable elevation of several outdoor spaces, at least one of which is in shade at any given time of the day.

Ranvinder Singh Sandhu, India - GR School of Planning & Archit., Guru Nanak Dev University, Amritsar

HOUSING - CASTE, INCOME AND HOUSING AMONG THE SLUM DWELLERS

In the present paper, an attempt has been made to understand the income and housing in relation to the caste among the slum dwellers. Two broad categories of the castes have been used to draw generalization i.e. Scheduled Castes and Non Scheduled Castes. It is found that caste is associated with income and both caste and income are associated with the type of house, size of house, covered area, number of rooms and attached facilities and utilities in the house. The data was collected from January to May 1982, from the slums of a medium sized city. Total 300 respondents were interviewed with the help of structured interview schedule. The analyses of data was done with the help of computer and the chi square test was applied to learn the association among caste, income and housing.

Jon A. Sanford and Ted Finlay, Zoo Atlanta, 800 Cherokee Ave., Atlanta, Georgia, 30312

THE EFFECTS OF EXHIBIT SIGNAGE ON VISITOR BEHAVIOUR

To enhance the educational and recreational experiences of zoo visitors, Zoo Atlanta has developed a research program to inform the design of effective exhibit signage. The research design entails a parallel study, multi-method approach to be used throughout the Zoo. The first study utilizes a "before and after" design to evaluate the impact of sign performance on exhibit performance (attractiveness). The second study utilizes a product evaluation model to determine the impact of three sign characteristics on sign performance (learning). This paper reviews the purpose and procedures of the research program and reports the results of the initial exhibit performance study.
Housing in developing countries has reached a stage where the crisis can be alleviated as there is a shift from a socio-economic to a socio-political phenomenon. The stage has been reached where housing needs to be implemented as a social art and not merely building construction. Consequently, the broad objective is to provide homes rather than houses to foster community belonging and participation. The introduction of new approaches is a logical development of increasing social awareness of the role of housing as a need to provide shelter for many families. This paper proposes to identity key social & behavioral strategies that could impact on South Africa's housing future.

The teaching of child care workers has prompted technical colleges to integrate their training with an on-campus child development facility. This project describes a collaborative process where the architect and user group exchange their different areas of expertise to the facility development process. Beginning with a goal setting process, the staff members and the architect embarked on a series of iterative stages that included children's classroom flow patterns, activity relationships, and activity requirements. Specific gaming techniques were developed to permit a dialogue between all project participants throughout the facility development process.

Par "milieux artificiels", nous entendons ces milieux ou environnements spécifiquement conçus à partir des études faites sur la perception de l'environnement. De nombreux exemples de ces environnements se trouvent aux Etats-Unis: le projet de la NASA pour la station spatiale, les laboratoires arctiques, les habitacles des sous-marins (que nous appelons "milieux totalement artificiels"), mais également les prisons, hopitaux, bureaux, super-

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marchés.... ('"milieux partiellement artificiels"'). Une classification et une analyse approfondie de ces milieux pourrait contribuer à la formulation d'une technique de conception scientifique permettant de créer des milieux positivement adaptés aux besoins de la vie contemporaine.

Tetsuo Seguchi, Associate Professor, Department of Regional Planning, Toyohashi University of Technology, 1-1, Tempaku, Toyohashi, 440, Japan

HOMELESSNESS AND ASSISTANCE MEASURES IN JAPAN

The homelessness in Nagoya, Japan is analyzed in this paper. The homelessness becomes a new housing problem in Japan. Most of homeless persons are single with no relation with their relatives and be forced to sleep on the streets. Voluntary groups give their hands to homeless persons. Japanese social welfare system can not save all of them. The reason is most of homeless persons are not eligible for the present systems. The present systems should be modified. Most of homeless persons belong to the class of day labores. So Japanese homelessness are not only a housing problem but also an employment problem.

Hiroshi Shinobe et al, Japan - National College of Technology, Hiroshima

A STUDY ON THE ADJUSTMENT OF THE DISTRICT WITH THE CHANGE OF INDUSTRY STRUCTURE. The housing policy of the enterprise and the housing problem arisen with a depression

The purpose of this is to throw light upon the housing policy of enterprise and the housing problems arisen with depression. The enterprise mainly pushed the owned housing policy to form one body with it and raise the fixation rate. But its policy caused a serious strain on almost all the young retired employees in their thirties with their owned houses, and owned houses restrict retired employees' life. Therefore, they are suppressed for the occasion of the employment and economic burden by their owned houses.

Jules-Gérard Simon (psychologue), Belgium - Université Catholique de Louvain, Unité Architecture

L'ARCHITECTURE COMME SYSTEME DE SIGNIFICATIONS

Dans une conférence récente faite à Louvain-la-neuve, le Professeur J. Ladrière définissait l'architecture comme la transformation d'un ensemble de volumes en un système de signifiants. La communication présentée tente de donner un contenu à cette définition. Elle présente la signification en architecture comme une structure hiérarchique englobant une série de six niveaux, les niveaux inférieurs se trouvant sous la dépendance des niveaux supérieurs.
Les six niveaux sont les suivants: anthropométrique, fonctionnel, environnemental, social, culturel et cosmique. Cette conception hiérarchique d'un système de significations est inspirée par l'idée de "niveaux d'organisation" développée par H. Laborit dans plusieurs de ses ouvrages dont le dernier: "Dieu ne joue pas aux dés".

Andrew J. Sixsmith, U.K. - University of Liverpool, Dept. of Psychiatry

REMEMBERING-IN-THE-WORLD: AN EXPERIENTIAL ANALYSIS OF THE RELATIONSHIP BETWEEN MEMORIES AND HOME

The intention of the research is to explore the relationship between remembering and the home environment. Specifically, attention is given to how memories contribute to the attachment that many elderly people feel for their homes. Recent work on memory has emphasised processes of remembering in natural contexts and provide useful concepts for the present analysis. In particular, the processes of reminiscence and "spontaneous" remembering are essential to understanding the emotional and symbolic ties between person and home. Case studies are used to illustrate the role place-memories play in the wider context of changing life situations in old age.

Judith A. Sixsmith - U.K., University of Surrey, Dept. of Psychology - Guildford

UNEMPLOYED AT HOME: PRISON OR REFUGE

Once the workplace is lost through unemployment, a person spends a high proportion of their time at home. In this context, the home is experientially altered. Actions become transformed, socially, psychologically and behaviourally, as the person copes with being unemployed. This paper investigates the dynamic and complex relationship between the unemployed person's emerging lifestyle and their home lifespace. Through in-depth interviews, attention is focused on the home as a restorative, supportive and/or worrisome environment, which acts as a system of constraints and opportunities for action.

Henk J. Staats (psych.), Netherlands - Leiden University, Research center for housing en regional development

LANDSCAPE EVALUATION: EXPLAINING THE PSYCHOLOGICAL PROCESS

Based on Daniel Berlyne's theory on perception and motivation and especially on the categories of stimulation he distinguishes, part of a large research project was devoted to an attempt to explain the process of landscape evaluation. The Kaplan's Landscape Preference Model was interpreted as an application of Berlyne's category of collative simulation. Taking also in account the effects of Berlyne's category of ecological stimulation,
a causal model was hypothesized to explain the process of landscape perception and evaluation. The results look promising and are in line with the theory used. The process was studied for people extremely familiar with certain parts of their environment as well as for people unfamiliar with landscapes that were shown by slides.

Nobuhiro Suzuki, Yoshihiro Kondo, Toshio Tsushima, Japan - Science University of Tokyo, Department of Architecture

A SURVEY OF WATER IMAGERY WITH RESPECT TO THE ENVIRONMENT OF LAKE UNION IN SEATTLE

We asked water imagery of Lake Union by a questionnaire to 64 houseboaters and 37 uplanders. The result showed that houseboaters recognized more clearly various water characteristics and feelings about Lake Union than uplanders. Houseboaters gave higher evaluation to attractiveness and value of the lake. Comparing imageries obtained by the questionnaire, results of interview, and observation of the environment, we obtained physical characteristics of the environment which explained the causes of houseboaters' water imageries. They were 1) a lake and houseboats, 2) nature adjacent to a houseboat—visiting wild animals and four seasons, 3) a floating deck close to the water, and 4) a small lake. Majority of uplanders who could see a part or all of the lake rated it very attractive, whereas less than half of those who could not do likewise.

Martin S. Symes, UK - University College London, Bartlett School of Architecture and planning, 22 Gordon Street, London WCIH OQB

EXPERIMENTS IN ARCHITECTURAL EDUCATION

The paper discusses some of the lessons to be learnt from the transfer of British Architectural education into University-level institutions. The first part of the paper describes the background discussions to this move, including the conference held in Oxford in 1958, it explains the continuing criticisms from practice of attempts to give architectural design a basis in theory and it explores two key but conflicting assumptions about the nature of architectural design which were developed in British Universities in the 1960s and 1970s. The second part of the paper introduces two modifications to the traditional teaching method which were developed in the 1980s and argues that these experimental pedagogies may give rise to further insights into practice. For this result alone, the teaching of architecture in Universities should be maintained and developed.

Valerie J. Symes, UK (urb.econ.), University of London, Goldsmiths' Coll.

REHABILITATION OF POST-WAR PUBLIC HOUSING

The large high-density inner city housing projects of the 1950s and 1960s are no longer perceived as ideal homes. This housing has become vandalised
and neglected, many units are hard to let and some abandoned, resulting in a loss of useable housing stock for local authorities. Normal maintenance programmes have proved inadequate in solving the problem. This paper will examine the methods used to rehabilitate certain estates in London, including user-participation in the decision process, the varying use of resources, and the costs involved. An assessment will be made of the results obtained in terms of tenant satisfaction and long-term viability of the housing.

Vana Tentokali* (architect), Greece - Aristote University of Thessaloniki, department of Architecture
Sandra C. Howell (psychologist), USA - Massachusetts Inst. of Technology, department of Architecture

A CROSS-CULTURAL ANALYSIS OF THE DOMESTIC PRIVACY: FROM A GENDER POINT

Studies of domestic space allocations across different societies strongly suggest that applications of the concept of privacy, as formulated for western industrialized populations, may be irrelevant, nonsalient or ambiguous to non-western household groups and to populations functioning according to pre-industrial rules of social organization. On particular interest is the current determinant feminist literature on privacy constraints on the woman in household configurations. Depending upon whether privacy is defined as "the ability to control information about one's self" or "the ability to create physical boundaries that exclude others", the situation in many non-western extended family settings may be ambiguous. Control of information is not necessarily related to physical boundary delineation nor is the class of information to be controlled at all consistent cross culturally. Further, the absence of boundary labels for woman's individual space could be related to the more salient need for individuals to bond with gender, in order better to access and control information relevant to themselves and the multiage, cross-gender family with whom they reside and participate in collective economic activities. This paper is based on the case study of a muslim village in Greece.

G.V. Trieschmann, USA - School of Architecture, Tulane University
P.O. Box 5073, New Orleans, Louisiana

ENVIRONMENT? BEHAVIOR?

"Environment-Behavior" effort for a thousand years in China, a hundred years in Europe, and thirty years in North America has led to conversation and composition but no clear design relevant definitions for "environment" or "behavior".

This presentation addresses the question: Can finishing design students from an architecture school influenced by recent "Environment-Behavior" definitions evaluate design and design to meet behavioral goals?
Fifteen fourth and fifth-year architecture students at Tulane University were given a five-week problem to design a day-care center to bring children and elderly citizens helpfully together through interaction with pets. 35mm color slides of resulting student design solutions will be shown and brief comments made.

David L. Uzzell, U.K. - (psychologist), University of Surrey, Guildford

**PSYCHOLOGICAL DIMENSIONS OF PLANNED AND TRADITIONAL SHOPPING CENTRES**

This study sought to explore the underlying psychological dimensions used by people to structure their thinking about a planned shopping mall and a traditional English market town High Street. The results, using multi-dimensional scaling analysis, demonstrated that personal comfort and space assumed more importance than the quality of the shopping facilities. Furthermore, the planned shopping mall was not perceived simply as an undercover extension of the High Street, but construed as a fundamentally different sort of environment.

Gilles Verpraet, France, Université Paris X, I.P.R.A.U.S.

**HOUSING TOWARDS A MODEL OF NEIGHBOURHOOD RELATIONS**

A sociological anthropological approach to the neighbourhood relations in a housing estate shows how interpretations of the relation outside-inside of the home differ between the various social and cultural groups. The study of social relations and the processes of socialization brings the shared facilities in the semi-public spaces in sharper focus. This reconstruction of the modalities of public space allows us to refine the social and cultural content of the concept of home.

William Voelker, USA - University of Illinois, School of Architecture, 608 Lorado Taft Drive, Champaign, IL 61820, USA

**OPEN OFFICE PLANNING & DESIGN REFLECTING ORGANIZATIONAL AND TECHNOLOGICAL CHANGES IN THE WORKPLACE**

This paper presents an argument for hexagonal workstations in the context of open-office systems furniture. It draws conclusions and explains the implications of "radical" workstation ideas vis a vis the manner in which work may be carried out one or two decades hence. In the process of arriving at conclusions, the paper delineates:

1. The advantage of the hexagonal workstation over rectangular stations.
2. New design and construction ideas for system furniture elements and
3. Proposed configurations which are amenable to specific office work tasks.
INTENTIONS OF ARCHITECTS, APPROPRIATION, AND WELL-BEING IN INNOVATIVE SINGLE-FAMILY HOUSING PROJECTS

Well-being and satisfaction of residents are generally accepted as important criteria for successful housing design. On the other hand, it has often been pointed out that such concepts are quite complex and multi-layered. It should, therefore, be worthwhile to identify and investigate those design elements and appropriations that actually make a difference for the well-being of occupants.

- Using a multivariate facet approach, architects and owners of innovative single-family housing projects are questioned just before moving in, and again six months later, with respect to 48 aspects of living in the new home. Presumed and actual significance of residents' goals and activities, as associated with dwelling, will be compared. The importance of dwelling relative to several other areas of life-quality serves as an "anchor".

BIBLIOGRAPHY OF ARCHITECTURAL SOCIOLOGY

The evaluation of literature contents books, journals, publications of congresses, dissertations and publications of universities of German speaking countries. The material is divided into 7 parts which depends on their contents.

1. Balance of power in the process of architecture.
2. Sociological research of the use of buildings.
3. Sociological research of the profession of architects.
5. Social-psychological aspects of architecture.
6. Social questions of political research in architecture.
7. Investigations about social behaviour in the dwelling places.

The theoretical part also contains those 7 parts and discusses the methods and the cognitions of the research.
Abstracts of outdoor workshops/
Résumés des visites d'étude hors ville
Rotterdam, detail of the "cubicle houses" (see cover photo)
Outdoor workshop on Thursday (JULY 7)

Post-war housing estate in trouble:
"GILLISWIJK DELFT"

This estate was designed and built 1969 - 1971 as a counterexample to the high rise estates that had been going up only a few years earlier and which had come in for a lot of criticism. The 7 blocks of 4 floors were situated on the perimeter of a large rectangular green area. This "common" was specifically designed for use by the tenants: it contained play areas for little children, small football fields for teenagers and a number of public walkways.

Another green belt ran on the outside of the estate.

The flats had 5 rooms, which made them for the time the only large flats in the public housing sector on the Delft housing market. Consequently they were allocated to large families with many children from slum clearance areas. At the same time, no provision was made to keep these children from the streets, apart from the equipment mentioned above.

It soon became a problem estate. Litter and vandalism made it difficult to let. Tenants dropped refuse in the extensive green areas around the estate. Play equipment was regularly set on fire. The storage areas in the basements (one for each family), difficult to supervise and easy to get into, were used by teenage gangs. Cars, storage spaces, and (less frequently) flats were broken into. Many tenants no longer dared to cross the green area in the middle as they considered it unsafe.

Various remedies were tried, but originally rather halfheartedly, as city funding would often be reduced when the rehabilitation program was midway. Recently a more systematic and consistent rehabilitation program was started. Flats have been subdivided, and so have been the semi-public areas in the basement which caused so much trouble. An entrance has been relocated for better supervisability.

A number of local, block-based managers have been appointed to reduce petty crime, to increase supervision and to execute minor repairs.

1 bus of max. 40 people
17.00 hrs departure from the Aula

Description of problems and rehabilitation scheme in the bus by Frans van der Zon, who has studied the area in depth.

17.30 hrs begin of visit to estate

19.15 end of visit and return by bus to Delft Central Station.
Outdoor workshop on Thursday (JULY 7)

Developments in form and function of the inner city of
ROTTERDAM

17.00 Departure by bus to Rotterdam.

17.45 Reception by the department of Urban Development City of Rot­
terdam.

Short historical review of the rebuilding of the inner city after its
complete destruction in World War II: "The changing ideas about
functions and forms of the city centre during the sixties, seventies
and eighties".

18.15 Bus ride and walk through the centre. Visits to areas and buildings
illustrating the historical changes. The walk will end at the so
called "Paalwoningen" by architect Piet Blom, a 'forest' of cubical
houses, balancing with one point on a 'pole' above one of the main
traffic arteries of Rotterdam.

20.30 Return by bus to Delft, or individual dinner in Rotterdam and indi­
vidual return.

Outdoor Workshop on Thursday (JULY 7)

Large scale office development:
AMSTERDAM SOUTH-EAST

Number of participants: 45

16.15 Departure by bus to Amsterdam
17.00 Reception by the AMRO Bank.

This second largest bank of the Netherlands has recently moved to
their new headquarters. Mr. Zuidgeest, the building coordinator,
give an introduction of developments in office work, the influ­
ence of automatization, telematics and user requirements on the
design of this new building.

17.30 Walk through the building.
18.30 Bus ride through the housing and office estates of the Bijlmermeer
(Amsterdam S.E.).
Walk through the new shopping centre "Amsterdamse Poort".

20.15 Return by bus to Delft/Rotterdam or individual dinner in the city
of Amsterdam and individual return.
Outdoor workshop on Thursday (JULY 7)

THE HAGUE AND ITS NORTH SEA COST - MATRIMONY, AFFAIR OR LAT?

The Hague is one of the few bigger cities in western Europe that is located along the north sea coast. Its inhabitants, amongst whom people from many nationalities, working in the embassies or one of the multinational offices in town, as well as its more than 9 million yearly visitors from Holland and abroad can enjoy city life in the historic inner city of the Hague one moment and the beach, the sea and the dunes the next.

The Hague, never a town with city rights in historic times, but since centuries the seat of the Dutch government, and the old fishing village of Scheveningen, have seen their relationship change over the years. Once separate settlements with their own character connected by a road through the "Scheveningen woods", they now form together one of the three major cities in the Randstad Holland, with Scheveningen attracting millions of visitors each year to its beaches, to its "Pier" and to other recreational facilities. In the last decade under supervision of the late architect professor Bakema, a redevelopment plan for Scheveningen was made. The famous Kurhaus hotel, centre of the beach resort in the 19th century has been restored again, other hotels, shops, and residences have been added, making Scheveningen a year round recreational centre. Plans for the last open areas of the town are now in the making, adding more housing and a theatre/congress facility as well. Scheveningen harbour, still important for the fishing industry and providing a direct sea link to Great Britain, may become a great recreational port and tourist centre in itself; several projects are being discussed at present and decision by the municipal council are expected soon.

The growth of the Hague in this century has of course for a large part taken place at the cost of the dune area - the town's best residential areas have developed there. Discussions about the value of the unique dune landscape with its ecological assets and its recreational potential have been going on since long, but have become increasingly important with the growing need for additional space of the city on the one hand and the heightened awareness of the importance of the dune area as part of the north sea coast. Several housing schemes bordering the dunes or using parts of it are now subject to much debate in planners and governmental circles, such as the Zwolsestraat Housing Scheme (including 2000 covered parking spaces for visitors) by the British architect Neave Brown or the Savornin Lohmann Plein Scheme of the Spanish architect Ricardo Bofill.

The outdoor workshop, organized by the Department of Planning and Land Management and the Parks Department together will take you from the bustling seaside resort of Scheveningen, with the Pier, the Zwolsestraat scheme and the many other plans via the Harbour, the West Dunes and the Savornin Lohman Plein scheme to the "family beach resort of Kijkduin, where Europe's largest camping is located. There will be expert explanations and plenty of time to discuss the particulars of the relationship between the Hague and its seacoast. A walk along the beach should not be forgotten.

The Hague and its north sea coast - matrimony, affair or LAT relation?
Come, see and decide for yourself.
Outdoor Workshop on Thursday (JULY 7)

Urban renewal in a 1000-year old city:
LEIDEN, THE CASE OF PANCRAS-EAST

Throughout the history of Holland the city of Leiden has played an important role, as a major centre of trade, industry (woollen fabrics) science, having the oldest and most renowned university of the Netherlands within its boundaries.

Its ever expanding activities and population were always severely restricted spatially by its surrounding defense systems: the medieval walls and later, the still visible, bulwarks.

Leiden developed into a very density built, sometimes overcrowded city, when the only open spaces were formed by the canals and the two branches of the Rhine River. In Pancras-East remnants of all phases of the turbulent history of working and living conditions can still be seen. During the last ten years an extensive program of research, planning, restoration and renovation has brought new life into a city quarter which was destined to make place for a major traffic break-through and other planning concepts of the sixties.

Program:

17.00 Departure from T.U. Delft by bus

17.45 Arrival at the Neighbourhood centre 'Pancras', drinks.

18.00 Lecture and slide presentation about the Urban Renewal Process by Mr. Leo Meyer: Past, Present, Future

18.45 Walk through Pancras guided by officials who have been involved in the renewal process, visits to restored buildings, courts, etc.

20.15 Individual dinner + discussion in Restaurant de Zaailing, where a variety of dishes, vegetarian and non-vegetarian, can be ordered.

During the excursion the yearly procession of extravagantly decorated boats through the canals will take place.
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IAPS is an international association of social scientists, architects and planners engaged in research on relations between people and their physical surroundings. Bi-annual international conferences have been held in Europe since 1969; IAPS was formally constituted in 1981. Topics in these conferences have been: housing (privacy, safety, special groups, gentrification); workspaces (organizational and technological changes, comfort, ergonomics, stress, social control, health facilities); public spaces (territorial behaviour, crowding, vandalism, traffic); recreational spaces (time-budgets, ecological aspects); perception (information processing, preferences, aesthetics, perceptual impact and defense, orientation) and methodology of research and education (comparative floorplan analysis, post occupancy evaluation, phenomenological approaches). In July 1988 the 10th conference has been organized in Delft (Netherlands). The central theme is "Looking back to the future".

The past forty years have seen tremendous changes in society and the environment. IAPS-10 seems an ideal opportunity to take stock: How do present analyses of man-environment relations compare with those of the early fifties, the critical sixties and seventies? Why did so many hopes remain unfulfilled? Can we learn from costly mistakes and set out a future course for man-environment studies?

This Volume I includes the programme and abstracts of papers and symposia.