Abstracts of Full Papers to be Published in Proceedings

The following papers are available in the full Proceedings of **edra32 2001** *'Old World – New Ideas: Environmental and Cultural Change and Tradition in a Shrinking World'*

Preserving Historic Urban Districts: Issues Of Culture Change, Stress, And Culture-Supportiveness

Kapila, Silva D. (University of Wisconsin, Milwaukee)..

This paper focuses on how preservation activities in historic urban districts can be carried out in most culture-supportive manner. It emphasizes that historic preservation is not only a method of maintaining the historic and cultural space and the identity of a community, but rather as a mechanism in dealing with the culture change and the resultant stress. Since culture is an ever-changing phenomenon, the needs, aspirations and lifestyles of the people living in a preserved space will eventually change and thus evoke the need for change in the preserved environment. Especially in the case of urban areas, the need and pressure for change, growth, and development is high, and thus preservation of historic urban districts faces issues of culture change more than in any other categories of cultural landscapes. There is the need for achieving a balance between preserving the identity while dealing with the need for development. This becomes very stressful for a community, and the preservation activity needs to deal with such stresses. Hence, preserving historic urban districts needs to be stress-responsive and culture-supportive. The paper presents a conceptual framework for culture-supportive preservation and then reviews a range of contemporary preservation practices, strategies, and policies in order to identify successful ways of making preservation a culture-supportive development activity. Six basic strategies are identified as most successful in delivering the better results in culture-supportive preservation. They include having appropriate attitudes, greater community participation, identifying core/peripheral aspects of culture and built-form, incremental development, cultivating financial and institutional support. The emphasis is on how these strategies have addressed the changing socio-economic and behavioral aspects of the people in these settings rather than on the physical and technical aspects of preservation. Historic preservation, culture, stress, behavior change.

Continuity And Change In The Image Of Istanbul.

Aydinli, Semra (Istanbul Technical University, Turkey).

The concept of continuity and change being a paradox is used in the sense of the ability to resist trends yet still respond to change. In this paper, the need for continuity and change in the contemporary world is emphasized in connection with the global issues and local values that constitute the image of Istanbul. In fact, continuity and change can be read as a narrative in terms of architectural codes, which refer to architectonics related to its physical, cultural, and social context and which reveal the dialectics of past and present. Istanbul, as a whole entity, has some aspects that are hidden and waiting to be discovered. This paper deals with a phenomenological inquiry into the continuity and change in the image of Istanbul. It is possible to find out juxtaposed multiple meanings by reading Istanbul as a narrative which reveals ideas that can be transformed into "new". These meanings consist of contrasts in a city like Istanbul belonging to its own space and time. The key question so far is: "How can the local values that require continuity and global issues that refer to change be brought together? And "how can this paradox be read as a narrative?" City image, dialectics, phenomenology, aesthetics/meaning/assessment, culture.

Collective Influence Of Urban Design On Space Use: Towards Meaningful Use Of Urban Spaces In The 21st Century.

Kimaryo, Jacob (Royal Institute of Technology, Stockholm, Sweden).

Although it is understood that the influence of urban design on space use is collective, emanating from its major aspects, urban design endeavors geared towards enhancing meaningful use of urban spaces

often put more emphasis on certain aspects than others. This paper demonstrates the collective influence of urban design on space use through examination of the major aspects of urban design and use of public urban spaces in Dar es Salaam city center, Tanzania. The purpose is to emphasize the importance of the above understanding about the relationship between urban design and space use, to urban design efforts for enhancing meaningful use of urban spaces. In Dar es Salaam city center, implemented urban design has to the largest extent been a deterrent to meaningful use of public urban spaces. It has contributed to a number of serious urban space use problems which include: haphazard occurrence of small scale commercial activities in urban spaces, underutilization of urban spaces, pedestrian movement problems, and occurrence of awkward urban space uses. With the exception of haphazard occurrence of small-scale commercial activities which has been contributed mainly by the planned land use pattern, all other urban space use problems in the city center have been influenced by more than one of the major aspects of urban design. The paper therefore concludes that the influence of urban design on space use is indeed from all its aspects, and that if urban design strategies aimed at enhancing meaningful use of public urban spaces are to be successful, they ought to take into account all the aspects. The paper culminates with a suggestion of some six criteria for such strategies for Dar es Salaam city center and similar urban areas elsewhere. Urban design, urban space, space use, urban form, Tanzania.

New Forms, Old Ways? Understanding Institutional And Architectural Change In Early 20th Century American Synagogues.
Norman, Jon (University of California, Berkeley, CA).

This paper focuses on the relationship between institutional changes and architectural changes in synagogues during the early 20th century. Although there was a dramatic alteration of the role of the synagogue in Jewish society during this period, synagogue architecture did not change in response. The synagogue structures instead shifted stylistically rather than programmatically during the first half of the 20th century. The strongest determinant of architectural form for synagogues was neither the program nor an idea of a distinctly Jewish architectural representation; instead, the aesthetic concerns pervading American culture as a whole dictated the design of the synagogue. The transformation of the synagogue into the synagogue-center, as a particular manifestation of the synagogue as an institution, is used as a case study to examine this phenomenon. Recent studies have claimed that the synagogue-center was a revolution in how the synagogue was conceptualized, constructed, and used. By viewing the history of the synagogue through the lens of architecture, a different story appears. A comparison of published plans of synagogues from three periods during the 20th century serves as evidence of this hypothesis. An attempt was made to compare similar synagogues from each period as well as across periods. Architecture, Judaism, religion, institutions, history.

European Residential Culture As A Basis For Differentiation In Residential Environments: Imitation Or Inspiration?
Smeets, Jos and Teklenburg, Jan A.F. (Eindhoven University of Technology).

Because of an increasing differentiation in lifestyles and as a reaction to the homogeneous residential environments that are so typical for large parts of many cities that were built in the last century, there is an increasing demand for differentiation in residential environments. Often designers and developers look into architectural history to achieve the demanded differentiation. To answer the question whether the use of 'historical' or 'regional' styles are capable of producing such a differentiation, this paper shows a brief overview of the cultural history of the house. It is shown that imitation of these styles does not by itself create differentiated residential environments that meet contemporary standards or comply with contemporary urban culture. From the cultural history of the house it is shown that particular styles and forms are embedded in their time and region, and that strong architectural features exist that can carry the many meanings the house has had over time. Used as a source of inspiration the cultural history of the house may serve as a valuable tool to create viable, pleasant and sufficiently differentiated residential environments. Residential culture, residential differentiation, housing development, architectural history.

Planning for Local Economy and Individual Empowerment: Self-Build Housing and the 'New Vernacular'.
Edge, Martin and Duncan, Peter (Robert Gordon University, Aberdeen, Scotland).

This paper discusses the rise in popularity in the of various forms of 'self-build' as methods of procuring housing in rural areas of the UK and argues that a number of paradoxes in policy act to produce a mode of development in the sector which is inappropriate to broad planning aims. It is suggested that close consideration of this growing procurement route is required to ensure that its development is consistent

with the aims of planning in terms both of visual impact and economic sustainability. It is argued that current planning policy, purporting to favor vernacular forms of architecture and hence, by extension, the self-build procurement route, actually serves to ensure the professionalisation of building and the exclusion of the self-builder. The paper stems from a design research project carried out by the authors and others, which has resulted in several award winning low cost housing schemes being built. Residential, architecture, disabled, ecological issues, low income.

Effects Of Dwelling Type Diversity On Appropriation Of Outdoor Spaces And Community Formation In Housing Schemes.

Lay, Maria Cristina D. (Federal University of Rio Grande do Sul, Brazil).

The study focused on the identification of design factors that might affect the ways residents living in mixed dwelling type housing schemes perceive, evaluate and use outdoor spaces. Taking into consideration the main role of open spaces as back stage to achieve community formation, it is assumed that residential environments should be evaluated in terms of the extent to which environments allow and provide the necessary conditions to encourage involvement between residents. The study deals with the specific site design attributes that affect the manner site layout is experienced by residents living in blocks of flats, detached, semi-detached and terrace houses, their perception of territory definition and its effects on community formation. Multi-method techniques were employed, such as observation of physical traces, observation of behavior, physical measurements, interviews and questionnaires. The results confirmed that communal open spaces are perceived, evaluated and used differently by residents, according to dwelling type, highlighting the actual and potential adverse implication of dwelling type diversity on appropriation and management of outdoor spaces. Residential environments, outdoor spaces, community formation, spatial behavior. (00206)

Housing Appearance, Housing Quality and Sustainable Housing.

Reis, Antonio (Federal University of Rio Grande do Sul, Brazil)

Sustainable housing includes quality housing design providing for adequate human behavior and satisfaction. This paper explores, for low-middle income residents of five housing estates in Brazil, the importance of housing appearance, how these factors affect resident attitudes and behavior, and how they relate to other housing aspects. Data

gathering means such as questionnaires, interviews and physical measurements, were used. Results show, for example, a relationship between territorial definition and control, maintenance of buildings and open spaces and an attractive residential environment. Housing appearance, sustainable housing, resident attitude, resident behavior, social housing.

Predicting Residential Satisfaction: A Comparative Case Study.

Potter, James J., Chicoine, Jean L. & Speicher, Kathryn E. (University of Nebraska - Lincoln, NE, USA).

This is a comparative case study that focuses on resident satisfaction in three buildings renovated for housing. The intent of the study was to compare responses of the residents to see whether there were differences in resident satisfaction between the groups and the buildings. A survey based on environment-behavior factors that can contribute to resident satisfaction was developed and distributed to residents of the buildings. Residents in fifty-two percent (52.5%) of the units of three renovated buildings responded to the survey (N=64). Of ten (10) index variables, six (6) index variables with forty-seven (47) questions were used to determine residents' satisfaction with renovated housing. Cronbach's Alpha was used to test the reliability of the scales that comprise each of the index variables. Index variables that contributed to resident satisfaciton and were used for analysis were: management, perception, wayfinding, safety, comfort, and adequacy; those deleted were: utility, privacy, image, and friendship formation. Based on a frequency distribution of ages across buildings, differences in standard deviations, and research that indicates resident satisfaction may be influenced by age, a Pearson correlation was calcualated between age and resident satisfaction. There was a significant relationship between resident satisfaction and age for one building. Utilizing stepwise multiple linear regression, safety and perception were significant for all buildings. Safety, perception and comfort were significant in different ways for each of the three buildings. Residential, comparative case study, renovated buildings, survey method, regression analysis, predictors of satisfaction.

Expanding Web-Based Map-Survey Applications For Community Participation.

Al-Kodmany, Kheir (University of Illinois at Chicago, IL

As the Internet continues to reshape how the public communicates, planners have the opportunity to use Web-based technologies to widen access to decision

making in community planning and design. This paper describes an interactive web-based survey tool that was used to advance a community planning process in the Chicago area. The project involved collaboration between researchers at the University of Illinois at Chicago and leaders and residents of Pilsen, a nearby community. The team used a process taken from the work of Jack Nasar (The Evaluative Image of the City, 1998) who developed a method of surveying residents to determine which areas they like and dislike in their community, with the goal of creating a single "evaluative image" of the community that could guide future design and development. Researchers employed a Web-based interactive map that was linked through a server to a GIS program, rather than the traditional phone survey used by Nasar. This project builds upon an earlier version of the survey in which the map was limited to only one section of the community. In increasing the complexity and coverage area of the survey, we were able to develop a more comprehensive understanding of community residents' evaluative image of the whole community. The paper ends with a discussion of the obstacles and future implications of using the WWW to further public participation in planning. Community planning and design, citizen participation, urban likeability, Internet applications.

Research Based Design: Participatory Programming For The Cap School At The Federal University Of Rio De Janeiro.
Rio, Vincente del and Iwata, Nara (Federal University of Rio de Janeiro), and Sanoff, Henry (North Carolina State University).

The adoption of participatory methods in the programming design and evaluation of the built environment is of importance to the development of the architectural profession, and for the creation of buildings more responsive to the needs of users. This paper discusses the experience gained in a participatory design workshop at PROARQ - the Graduate Program in Architecture of the Federal University of Rio de Janeiro. The case study - a design intervention strategy in a school managed by the Federal University of Rio de Janeiro for rehabilitating the existing building or relocating the building to a new site - permitted a participatory process in which teachers, parents, students, and staff contributed effectively to the quality of the final proposals. Teachers rated their school environment according to such factors as physical features, outdoor areas, visual appearance, learning environments, social areas, and safety. Results from the rating scales were used in a workshop with teachers and parents to develop a program and alternative spatial arrangements. Participatory design methods in shaping the school environment

were explored, not only for their effectiveness in building evaluation and programming, but also for their contribution to the creative design process. Evaluation, participation, programming, schools.

The Meaning And Perception Of School Buildings.
Pasalar, Celen (North Carolina State University, NC).

This study explores how people interpret and perceive the physical environment. It also demonstrates how specific meanings are attached to buildings and how these meanings influence people's judgments. The focus of this research is school buildings since few research studies have concentrated on issues related to imageability and symbolic meaning. The survey included eight photographic images representing different architectural styles of school buildings, a semantic differential rating scale, and questions related to familiarity, friendliness, and appropriateness for future education systems. The sample group consisted of students from the School of Education. Results were analyzed by using descriptive statistics. Preferred school building images were described as dynamic, complex, attractive, interesting. Disliked images were static, common, boring, simple, and unattractive. In general, high-tech and post-modern school building images, which were not very familiar, were considered more appropriate for providing a variety of spaces to accommodate different programs and facilities than traditional school building types. All subjects disliked modern school buildings. Results from this empirical study in environmental perception can be influential in expanding the people's vision of building images beyond their everyday experiences with school buildings. Perception, meaning, school environments, imageability.

A Study of Difference: Financial Resources and Educational Experiences of Middle-Class Design Studio Students.
Keddy, Karen M. (University of Wisconsin, Milwaukee).

This research challenges two assertions made recently in critical pedagogy discourse. The first assertion is that the majority of architecture students have an upper-class background and the the students without financial means will not pursue a university education. I argue that this is not the case for architecture students in the United States. The second assertion is that a distinction between upper-class, middle-class and lower-class students is sufficient for a discussion of heterogeneity among students. I propose that there are differences in both

financial resources and the student's educational experience in the design studio within one class itself. Semi-structured interviews of 15 design studio students in a Mid-Western state in the United States were examined to determine the heterogeneity between middle-class students. The perceived relationship between the students' finnancial resources and expenses was used to measure the difference between students' educational experiences in the design studio. The findings revealed significant differences between students. The combinations of resources that students have available to them vary and render educational experiences that are not equitable. Furthermore, the students' perceptions of the relationship between their resources and their educational experiences differ and is not necessarily dependent on the financial resources that the student possesses. Design, studio, architecture, pedagogy, qualitative, classism, heterogeneity.

Architecture, Education and the Needs of Disabled People: An Exploration of the Contested Discourse of 'Function'

Milner, Joanne, Kingston University, England and Edge, Martin, Robert Gordon University, Scotland

A recent review of architectural education in the marks a turning point towards the recognition of the need for the discipline of architecture in the UK to address considerable changes impacting on the profession. The review argues that higher education has fallen out of step with two key socio-economic trends. One commentator has suggested that the threat of the current challenge to architecture is so great that it represents a 'pathology' of the architectural profession, which has such a gloomy prognosis, it is now in a state of terminal decline. A two year study of architectural education applied a Habermasian framework to the discourse of 'function' and demonstrated that, in relation to universal design and disability, the system led meaning of 'functional' continues to prevail amongst architecture students.

Serving Communities: Learning in the Real World.

Vlahos, Ekaterini (University of Colorado at Denver).

With the next century approaching it is time to reflect on architecture education. The standard practice of teaching studio is through the development of theoretical projects disconnected from the needs of people and places and the understanding of different cultures. The outcomes of the thoeretical studio projects are strongly developed, controlled, formal solutions with little understanding of the architectural intervention in communities. Considering the impact of the built environment on society, as educators we have the opportunity to develop studio education by connecting our students to communities, cultures, people and places within our cities, and to define the social responsibility and role of the architect and architecture education in the future.

Cultural Production Of Environmental Consciousness: Cases Of Environmental Activism And Design In Taiwan.

Hou, Jeffrey (University of California Berkeley, California)

How do people change their view toward the environment at the local level? What is the relationship between environmental values and cultural identities? Since the mid-1980s, environmental protests in Taiwan have been strongly associated with local customs, traditional social networks and cultural symbols. However, these earlier protests rarely produced long-term change in people's attitudes towards the environment. In recent years, an emerging pattern of environmental actions has successfully integrated environmental values with local cultural identities. This paper examines two recent cases in Taiwan that manifest this new pattern of environmental actions. It argues that the new environmental consciousness in these two cases has been culturally produced. Specifically, cultural production through the construction of cultural identity, use of cultural symbols and reinterpretation of traditional values plays not only an instrumental role in facilitating the movement, but also a transformational role that contributes to the internalization and co-evolution of environmental and cultural values. The new culturally based environmental consciousness in turn provides the basis for sustainable environmental design and planning in the local communities. Culture, ecological issues, participation/political action, Taiwan.

Wind Turbines In The Landscape: An Evaluation Of Local Community Involvement And Other Considerations In UK Wind Farm Development.

Devine-Wright, Patrick (Institute of Energy and Sustainable Development, De Montfort University, Leicester, UK).

Despite public support for renewable energy and excellent natural wind resources, the UK has failed to develop wind farms on a widespread basis during the 1990s. Many proposed schemes have met with controversy, local community opposition and planning refusals. Focusing upon three case studies, this paper seeks to evaluate the quality and quantity of efforts to solicit local community involvement and support by a private sector development organization. This evaluation is presented alongside the developer's own assessment of other key considerations in the planning process: the landscape characteristics of the site, the local political context and the local socio-economic context to provide a multi-dimensional analysis of the proposed schemes. It is concluded that the developer's efforts to solicit local community involvement were of poor quality. Few opportunities for genuine consultation and participation were made available to the local communities affected by the proposed schemes. The case studies suggest the advantages of pursuing a more systematic approach to community involvement in particular and a more flexible approach to the development in general, in order to ensure higher levels of local support and planning success in the future. Community involvement, wind farms, planning.

The Relationship Of A Population With The Riparian Ecosystem.
Bernardo, Fatima (Universidade de Evora, Portugal)

Rivers are vital natural features that are suffering an increasing pressure by anthropogenic uses. In this context this study addresses the understanding of attitudes and behaviors towards a river by a resident population, as it seems to be an important factor to be considered in environmental education programs, which aim to promote the protection and enhancement of rivers. The study was carried out on 162 residents of the Alcacovas River basin (Portugal) which stands for a typical riparian ecosystem in the Mediterranean region. The methodology used, was adapted to this specific social and environmental context, and is based on the combined use of an attitudinal scale and a questionnaire on self-reported behaviors. The research findings allow identifying a wide range of behaviors associated to the river that can be grouped into two classes: activities with economic value and activities with recreational value. Two major results can be pointed out: (a) a better knowledge of the public does support the development environmental education programs, and (b) all the concepts should be equally understood by all the publics. In this specific case, the concept of 'environmental quality' of the riparian system should be worked out in order to improve the success of riparian protection programs.

Ecological Sustainability And The Urban Ecosystem.
Deal, Brian (University of Illinois, Champaign, IL).

Although the current literature includes discussions relating to the sustainability of the built human community, planning professions have focused their attention on continued technological solutions to environmental problems. These interventions attempt to stabilize the problem at hand through further technological infusion increasing the gap between the origination of the problem and ecologically sound solutions. Ecological sustainability, however, involves the identification of ecologically sound alternatives to current practices. This paper focuses on an integrated, ecological and engineering approach to analyzing urban systems. Ecological theories are introduced to provide a baseline for a correlation with planning and principles of community development. Connections between these ideological entities establishes a theoretical framework for the development of a spatial modeling technique for the identification of ecological systems in the domesticated urban environment. This will be presented by theorizing the conceptual origins of the term sustainability, briefly describing some theories of ecological thought and ecological applications to urban environments. A new urban patch model is then introduced that relates the ecological concepts of hierarchical patch dynamics theory to the urban environment. Architecture, regional planning, theory, ecological issues.