



# Design for Diversity

**EDRA36**

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# **Design for Diversity**

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**Editor**  
**Habib Chaudhury**

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El Kharbawy, A. Sameh (University of North Carolina at Greensboro, NC). **GLOBALISM AND PARTITION: AN AGENDA FOR TWENTY-FIRST CENTURY ARCHITECTURE.**

Despite its relentless pragmatism, and the fervor with which it guards the values of diversity and plurality, architecture is facing a crippling paradox today. The space of architecture today is a hotly contested terrain, one that exists in a state of constant tension produced by deeply entrenched cultural 'oppositions': ideal vs. material, local vs. global, singular vs. universal, right vs. left, east vs. west, etc. And increasingly, modern designers are faced with demands to produce works that evince each of those distinct cultural identities while maintaining the universal applicability of their work. Central to the current debates in architecture discourse has also been a deepening of an unresolved tension as to whether the designer can ever be what is called an "intellectual" or not, and if so, how and in what measure. The difficulty in such tension has been – paradoxically— that the practice of architecture in recent years has expanded so much as to be virtually without borders. And with that came the potential for a wide contribution by designers to culture, in general, and an opportunity for them to learn from such fields as art, engineering, science, philosophy and linguistics (to mention a few.) The interchange between the intellectual and the more or less practical concerns in architecture is a constant one, and today there is a considerable, indeed quite disciplined –perhaps even regulated—traffic between the two. Out of this traffic the idea of this paper was born. I begin with a simple– yet critical premise: that architecture is an inherently human activity; one which allows us to think of our impossibly complex human reality, and of the innumerable histories and the dizzying variety of peoples, languages, artifacts, experiences and cultures that make up that reality. Architecture, however, also expects us to think locally, intimately; it releases our passion to bring to light ideas that are obscured, oppressed, or distorted by dominant canons of thought and action, and gives us a free playing field to experiment with various possibilities. Exposing ourselves to the intricacies of producing a work of design, to its progress from idea to drawing to conclusion, often involves some degree of mediation between those two positions. In this paper, I endeavor to think of design acts whose loyalties reside at the intersection of those two exclusive sets of ambitions. The generative process by which French-Swiss architect Bernard Tschumi produces *Parc de la Villette*, the highly acclaimed project in the north-east side of Paris, helps me navigate the tumultuous fields of contemporary design and architecture, and critically interrogate the cultural biases that (mis)inform them. (theory/criticism, aesthetics/meaning, culture). 05-084

Engineer, Altaf (University of Illinois at Urbana-Champaign, IL). **BRIGHT IDEAS: THE INCREASING IMPORTANCE OF DAYLIGHT IN MUSEUM SETTINGS.**

The introduction of daylight in museums has been a topic of controversy ever since its damaging effects on artwork were discovered early this century. Museums were also becoming places for entertainment in addition to containers for art. The evolving nature of the museum program made it even more difficult to introduce daylight in it. Many architects eliminated it completely from the museum program. Philip Johnson led the way by introducing the neutral "white box" galleries in the Museum of Modern Art, New York in 1951. However, in 1972, Louis Kahn introduced daylight in the Kimbell Art Museum in Fort Worth, Texas. In addition to receiving to positive acclaim, this museum also started a new wave of museum designs which incorporated daylight not only in their lobby spaces, but also in their art galleries. In this study, seven world-renowned museums in Texas were observed, documented and critically analyzed in terms of the spatial quality as well as daylighting techniques used. These museums included: Nasher Sculpture Center, (Dallas); Kimbell Art Museum, Museum of Modern Art, (Fort Worth); Beck Building: Museum of Fine Arts, The Menil Collection, Cy Twombly Gallery and Rothko Chapel, (Houston). An environment-behavior study was done using two methods: (a) A short questionnaire was given to staff officials at each of these museums and (b) A literature review of newspaper articles and environment-behavior journals which voiced public opinion about these museums was also conducted. These studies lead to a detailed understanding of how daylight could be used effectively in museums and particularly, in museum gallery spaces. It was found important to control daylight in order to achieve three conditions: (a) eliminate UV rays so as to prevent damage to artwork (b) eliminate glare and keep light intensity to the recommended levels within conservation standards (c) create optimal viewing conditions for the people. In all the galleries, it was observed that daylight was brought in from the ceiling and not the side walls in order to eliminate glare on vertical surfaces. Certain techniques were used to control light intensity and eliminate UV rays. This involved the use of louvers, screening materials and filters or reflectors which bounced light off different surfaces. Questionnaires revealed that museum staff members felt that the space was livelier and more interesting due to the introduction of daylight. Some staff kept returning to these museums with their families even after leaving their jobs. They felt that daylight created ever-changing and unpredictable conditions inside as opposed to the monotony of walking through a series of artificially lit galleries. According to journalistic accounts, most visitors felt that while walking through these museums they were always in touch with the 'outside'. Previous studies conducted have also shown that daylight makes people keep in touch with their biological rhythms and outer atmosphere which has a positive effect on their psyche, as a result of

which they become more cheerful and lively. Daylight induces social activity and human interaction in spaces. This fact is illuminated by the many daylighting studies already conducted in office spaces. These results have shown that use of daylight is increasing in museum spaces and gaining fast acceptance. The question is not whether daylight can or cannot be used in museums. It is when, where and how. 05-155

Evans, Gary (Cornell University, NY), Ricciuti, Henry (Cornell University, NY), Hazan, Cindy (Cornell University, NY), Bradley, Robert (University of Arkansas, AR) and Colwyn, Robert (University of Arkansas, AR). **CROWDING AND COGNITIVE DEVELOPMENT: THE MEDIATING ROLE OF MATERNAL RESPONSIVENESS AMONG 15- AND 36-MONTH OLD CHILDREN.**

Crowding interferes with cognitive development in children. The evidence for this claim ranges from infancy to adolescence and includes cross-cultural data. The present study replicates these findings but moves beyond prior research by demonstrating the relation in a longitudinal data set and by examining an underlying mechanism, maternal responsiveness, to account for the adverse impacts of residential crowding on cognitive development. Two measures of residential density were obtained, reflecting the child's cumulative experience from birth to 15 months and birth to 36 months. In each case, the density ratio was based on the mean people per month and mean rooms per month since the child's birth, thus taking into account any changes in residence or in number of people. Data were collected in a sample of low- and middle-income households. Residential crowding is inversely related concurrently and prospectively to a standard index of school readiness (Bracken Scale of Basic Concepts) at 36 months of age. Statistical controls are incorporated for income-to-needs, child gender, and maternal age and education. The association between crowding and school readiness appears to be mediated by maternal responsiveness as measured by a standardized index (HOME Scale). Mothers in more crowded homes are less responsive to their children. (crowding/density, children/youth, residential). 05-111

Fisher, Matthew (Iowa State University, Ames, IA). **THE SPACE OF POLITICS AND THE POLITICS OF SPACE.**

In the context of the current political climate in the US, with the factionalization of the US public into Red or Blue, Soccer Moms, Seniors, Jews, Hispanics, African Americans, Catholics, Religious Right, etc., it is easy to forget that we have traditionally structured our political democracy in terms of space, such as the geography of electoral districts and voting precincts. This spatial logic is fundamental to democracy as a political order, and has its roots in the origins of geometry and its application to the socio-political domain.

This paper traces these origins back to antiquity, where it is first identified in the philosophical and political discourses of the Ionians on the coast of Asia Minor in the 7th C. BC, and then in the development of the polis. Given perhaps its clearest formulation in the political/civic reforms of Cleisthenes in 6th C Athens (Vernant, 1983.) this understanding of the spatial geometry of the polis is developed further in examination of the works of Hippodamus in the 5th C., and the implementation of grid planning (Vernant). The implementation of the grid as the geometric order of American democracy is further examined in terms of the Land Ordinance Act of 1785 and the geometric survey and subdivision of the country that followed (Corner, 1996.) The grid is seen to represent the early logic of American democracy as an order extended across the entire country, dividing it in equal portions according to a rational pattern following the lines of latitude and longitude (Cosgrove, 1996.) The grid will be seen to affect the erasure of local geographic specificities, much as the population was given the opportunity to shed origins and lineage and forge a new identity as Americans (Copjec, 1991.) The consistency and homogeneity of the section grid projected over the American landscape, however, has itself been overwritten with boundaries, edges, and ruptures defining and dividing communities according to demographic and socio-economic forces. This new socio-political topography is reflected in the laws of electoral districting, which are increasingly defined less in terms of space than in terms of race and political affiliation. The issue is examined in the Supreme Court judgments in *Shaw v. Reno* (1993) and *Easley v. Comartie* (2001), in which the court ruled on the illegality of drawing electoral districts in terms of race exclusively, but sanctioned the use of other factors, such as socio-economic standing and party affiliation (Pinderhughes, 2001.) This decision effectively overrode the spatial logic of electoral districting. This study will conclude consequently with the suggestion that the spatial order of democracy has given way to the politics of spatial differentiation. In this context, while the order of the grid no longer seems powerful enough to create the equality of relations required for democracy, the reforms of Cleisthenes 2600 years ago may yet offer a radical strategy to redefine the space of American politics. (race/ethnicity, city planning, neighborhood/community, history, theory). 05-296

Fisman, Lianne (MIT, MA). **RESTORING THE LAND AND BUILDING COMMUNITY: A CASE STUDY OF THE NEW HAVEN URBAN RESOURCES INITIATIVE.**

Concern for the quality of the urban environment in city design and planning can be traced back to Hippocrates' treatise *Airs, Waters, Places* from the fifth century B.C. The work and writing of Fredrick Law Olmsted epitomizes belief in the social benefits of urban nature, ranging from the role of parks as social mixing grounds to the benefits of natural processes in managing pollution. Over the past twenty years, literature has emerged that builds upon Olmsted's ideas and