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The Urban Grid, the Hippocampus, Savannahs and Real Property

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1. ABSTRACT

Once discarded by many American architects, the urban grid has found favor in the context of The New Urbanism. Nonetheless, skepticism about the relevance of the grid remains among those who see the grid as part of another architectural fad, a form of architectural determinism or another assault on the architect's authority over urban design.

Were the grid placed in the context of neurological research on spatial-visual perception, cognition and movement, its broader social and economic relevance to urban life might be better understood. Particularly alien is a characteristic of urban settlements that has persisted from the earliest times: one so obvious it seems unrecognized. In small hamlets and in large cities since the beginnings of civilization 5000 years ago, the everyday space of settlements has been arranged orthogonally into two primordial elements, uninterrupted or continuous linear spaces we call streets and discrete usually rectangular built forms we call buildings. These public linear spaces and private bordered spaces cells are the equivalent of prospect and refuge (Appleton 1975) which appear to be instrumental in human evolutionary success.

Recent neurological research (Plumert & Spencer 2005, Solstad et al. 2008) gives credence to linking mechanisms in the hippocampus with human evolutionary success and urban form. This paper reviews landscapes of evolution, the development of patterns of sedentary space, relevant neurological knowledge and spatial thought in architecture. It suggests human evolution underlies the urban grid, which, in turn, offers optimal tradeoffs of generality with specificity (Gigerenzer 2000) not only in route selection (wayfinding) but also in structuring the social and economic relationships affected by private and public space and property.

2. AUTHOR BIO

Dr. Brown formed Space Analytics in 1989 and uses spatial network models to analyze dysfunctional buildings and urban designs and in state and federal court testimony on eminent domain access takings, architectural copyright, premises liability, and First Amendment public forum issues. He is a Fellow of the Royal Institution of Chartered Surveyors, was an Academic Fellow of the Urban Land Institute and ALDAR Dean of Business at the Higher Colleges of Technology in the UAE. Before that, he was Head of the Real Estate Management and Development Group at Eindhoven University of Technology in The Netherlands. Earlier, he taught architecture at the University of Colorado where he was Associate Dean, the Illinois Institute of Technology and Arizona State University. Access, Property and American Urban Space, his book on urban regime shifts, published by Routledge/Taylor & Francis, will be available in late 2014.

