Hybrid SORS: City Science informing sustainable Urban Design and Economic Development

Objectives

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Abstract: Aretian is a Harvard-based UrbanTech startup working with both public administration agencies and private clients to envision, shape, and conceive sustainable urban design and economic development projects supported by city science principles. Ramon Gras will present early insights of an up-and-coming City Science book, showcasing the progress achieved by the Aretian team, based on their proprietary urban science software designed out of the Harvard Innovation Lab. The Aretian team has digitally modeled cities and metropolitan areas from all over the world in order to evaluate the relationship between City From features (2D topological street patterns, 3D architectural morphology features, urban entropy, scale, and fractality) and space programming patterns, in relation to their structural impact on urban performance measures, such as the knowledge economy, the 15-minute city quality standards (accessibility to urban services and amenities), and urbanization and architectural efficiency, among others. The results of the analysis reveal complex systems patterns that are extremely useful when it comes to shaping a successful urban development vision aiming to raise the standards of life of citizens. Every city's typology and architectural design is based upon a specific worldview, cosmovision or Weltanschauung, and such a vision tends to have a lasting, structural impact on the quality of life of citizens and the dynamics of the economy. The city typologies modeled include the Small World City, the Garden City, the Monumental City, Linear Cities, Radial Cities, and Fractal Cities, among others. Ramon will present some case studies and learnings derived from the research and boutique design projects led by Aretian around the world.

Short Bio:

Ramon Gras is an Urban Designer and Civil Engineer trained at Harvard'18, MIT'15, and BarcelonaTech'10. Ramon combines his role as CoFounder at Aretian Urban Analytics and Design with leading City Science research at Harvard University. Ramon is originally from Barcelona, and has lived in Boston and London in recent years. Aretian comes from the Ancient Greek concept of Areté ????? or excellence, since we aim to help cities excel at their duty.

Speakers

Speaker: Ramon Gras, Urban Innovation Researcher at Harvard University and Co-Founder at Aretian
Host: Mercè Crosas, Head Of Computational Social Sciences Programme, BSC

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