Temporal Urbanisms

Edward Mitchell AIA; Yale University and Edward Mitchell Architects, New Haven CT

EXECUTIVE SUMMARY

The project study of the former manufacturing districts on the Brooklyn waterfront in Williamsburg and Greenpoint used statistical analysis and genetic algorithms to establish a generic web-based tool for future planning exercises. Based on an analysis of Sim City statistics on the ratios between population and public and commercial use informed both a series of graphic tiles and the underlying code base for the genetic algorithms. We demonstrated potential spatial relationships between urban typologies, FAR ratios, and the location of public open spaces using traditional graphic means – plans, building typologies and hybrid combinations of use for functional efficiency – and also established the basis for a library of codes for running urban simulations.

Over fifteen successful genetic codes inform the final demonstration model. Sliding scales allow users to adjust local value preferences in running the simulations.

The general design strategy confirmed by the simulations led us to propose shifting development in proximity to mass transit and the existing commercial streets and public parks rather than at the water's edge. The plan presented at a conference in New York also suggested locating parking garages under McCarren Park to leverage public improvements while expanding the public realm by connecting the open spaces on the high-rise park into the public space network. Our project will be made available on a web site that will be released this January and has been presented publicly at international conferences in Boston, New York, Helsinki, and Salzburg, Austria with considerable enthusiasm. Exhibition of the work was delayed this fall but a date is still pending from the Newman Institute in New York.