Gamifying Urban Planning Processes

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Abstract

The majority of algorithmic urban planning and analysis done in the last 20 years is founded on analyzing the spatial structure of the city or statistical data on its usage. Models consider only a handful of parameters, and their choice and weighing is always subjective in nature. We propose an alternative test setup focusing on the planner's decision process itself with the aid of gamification. The method relies on generating a pool of plans by both humans and algorithmic means, and subjecting them to modifications by the planners in an anonymized game environment. The changes to the plans are recorded and saved into the pool, allowing for both the usage of statistical methods and choice-tree type methods to be used in studying whether certain plan types converge towards similar solutions, as well as enabling the use of double-blind trials in comparing algorithmic and human planning decision efficiency.

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