The Kind of Problem a City Is

Presented by Luis Bettencourt

Summary by Josie Mah, 2nd year student

In the past few decades, many cities around the world have grown at unprecedented rates. However, urban growth is inherently accompanied by challenges in areas such as sustainability and resource allocation. To find ways to adapt to the consequences of rapid urban development, Luis Bettencourt, Director of the Mansueto Institute for Urban Innovation at The University of Chicago, studies the issue from the perspective of urban planning and design. Professor Bettencourt's ideas attracted the attention of The University of Chicago Hong Kong Campus, as Hong Kong is famously one of the densest cities in the world. In March 2019, Professor Bettencourt was invited to Hong Kong to speak about how innovative urban planning can help cities adapt to the environmental and societal challenges of metropolitan growth.

On the nature of cities, Professor Bettencourt comments, "Space is very condensed, time is very condensed, and there are many things that can happen. And it's this transformation of the way we live, from a life of subsistence to a life of interdependence, that really is characterized by cities." He then points out the upsides of dense cities, specifically that population density is conducive to economic growth and innovation. "Space is squeezing you and accelerating what is possible," he says regarding why densely populated Asian cities such as Hong Kong, Shanghai, Shenzhen, and Beijing have all recorded tremendous growth in short periods of time. Due to their high demand for space and time, cities promote efficient communication, production, and resource allocation, all of which contribute to their economic fitness.

On the other hand, rapid urban growth is also associated with various problems such as air pollution and traffic congestion. In the instance of Hong Kong, the city's established economic security means more money per square area of space, which results in housing prices rising at double the speed of income due to Hong Kong's limited amount of land. Therefore, the city needs to find new ways to provide housing for inhabitants without requiring more land. This problem explains why one can see hundreds of high-rise apartments sprawled across Hong Kong, as high-rises maximize the number of accommodations per unit of land, offering a solution to the shortage

of habitable land. That being said, Hong Kong is only one of many examples -- by examining the consequences of rapid urban growth around the world, researchers can highlight universal trends that will help cities prepare for their future.

To examine the effects of urban growth on a broader scale, Professor Bettencourt refers to a graph illustrating the "equilibrium between social benefits and costs," which determines how a city functions. For example, if the cost of transportation is high, the city becomes more compact, whereas if transportation costs are low, cities become more sparse. Professor Bettencourt argues that all cities lie somewhere on this graph, but if a city moves too far toward one extreme (that is, too congested or too sparse), the city can no longer function efficiently. This equilibrium underlies many phenomena symbolic of growing cities, such as increased land value, and explains why population density influences how a city operates. Lastly, Professor Bettencourt points out an interesting fact that illustrates the cognitive effects of this equilibrium: although people who live in cities are more unhappy than their suburban or rural counterparts, city-people are often unwilling to live anywhere else. In other words, for many people, the social benefits of living in a city outweigh the costs.

As global metropolises continue to grow, future urban planning and design will require more open-ended and multidisciplinary approaches. Cities are constantly facing new social and environmental challenges, and an understanding of the universal issues that accompany urban growth may help in finding creative solutions on a local scale.