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URBAN ECONOMY

Aerotropolis: The Way We'll Live Next?

Interview with John D. Kasarda

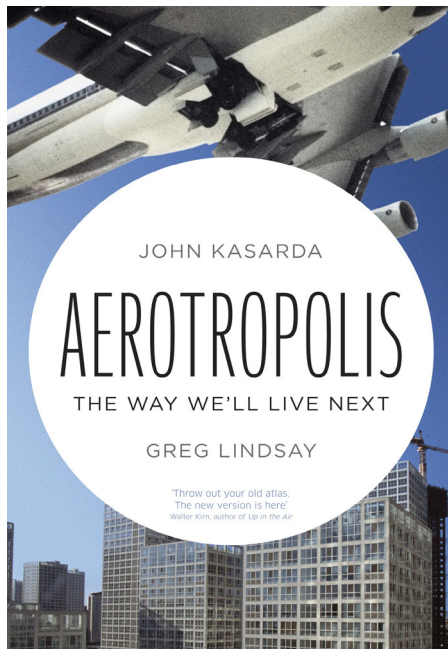
John D. Kasarda is co-author of the new book *Aerotropolis*, an astonishing treatise on the metropolis of the future and the integral role of the airport. Kasarda argues “Look for yesterday’s busiest train terminals and you will find today’s great urban centers. Look for today’s busiest airports and you will find the great urban centers of tomorrow.” In his career he has consulted with four White House administrations and advised companies such as Boeing, FedEx and Bank of America. He is a professor at the University of North Carolina’s Kenan-Flagler Business School. For a rare moment when he is not in the air, Atlantis asks him about the future of the airport, the city and the implications for the Netherlands.

What is your definition of an aerotropolis?

“An aerotropolis is an urban complex whose layout, infrastructure and economy are centered on an airport. Analogous in shape to the traditional metropolis made up of a central city and its rings of commuter-heavy suburbs, the aerotropolis consists of an airport city core and outlying corridors and clusters of aviation-linked businesses and associated residential developments.”

The underlying statement of your book seems to be that the most successful cities have always been characterised and shaped by trade. After dock cities, railway cities, car cities and now airport cities, why do you anticipate the success of the globalised, networked city over the local, self-sustaining city? Is there room for both models to succeed?

“We live in an increasingly globalized world that impacts almost everyone’s daily lives in some manner: the products we purchase, the



food we eat, the medications we take, the entertainment we view, and the cultural diversity we absorb. The idea of a local, self-sustaining city (even if feasible much beyond a commune) would likely attract only a tiny fracture of people since most desire and seek the benefits globalization brings to them.

This is not to say that there are not costs to globalization or that moving toward a more sustainable urban environment is not a critically important goal. It is to say, though, that globalization and local well-being are not mutually exclusive and, for the most part, have progressed together over time.

The aerotropolis planning model seeks to reinforce the benefits of both global and local by bringing together airport planning, urban planning, and business site planning in a synergistic manner so that the airport region

is more economically efficient, attractive, and sustainable. For example, a basic aerotropolis planning principle is that businesses should be steered to locate in proximity to the airport based on frequency of their use of the airport, reducing highway travel and congestion. Another is that form-based codes should establish design standards for airport area structures, travel lanes, and public spaces. And a third is that mixed-use residential communities housing airport area workers should be located outside aircraft noise contours but offering short commutes and be designed to provide a sense of community along with basic institutional and consumer services.”

To what extent do you think that local forces and global forces characterize cities? Do they support each other?

“A city, first and foremost, is a confluence of enterprises without which the jobs, incomes, and tax resources which sustain it and its residents could not exist. These enterprises, in turn, are shaped by flows of people, goods, information and capital that are both local

and global in nature. Virtually all positive city attributes sought such as gainfully employed residents, quality public schools, modern infrastructure, fine restaurants, shopping, and artistic venues, and safe, clean streets rest ultimately on resources created by a city's enterprises, large and small. These resources are not always distributed fairly in the eyes of many, but without them the city would collapse economically with severe social and environmental consequences.

Bringing local and global forces in reinforcing sync is the most effective path to city well-being. This involves acknowledging the irreversibility of globalization and leveraging it to the city's advantage by facilitating the connectivity of its people, firms, and institutions to broader experiences and opportunities, preparing its young people for the global world they will inherit by enhancing their education, technical skills and cultural understanding often engendered through air travel, and by creating a local business climate that encourages innovation, private sector investment, and job creation."

"Schiphol is an exemplary aerotropolis."

You describe the aerotropolis as "the logic of globalization made concrete" — what will the aerotropolis look like? Does it have a specific urban form? Will it be a pleasant place to live and work? How will it differ from living in "traditional" cities?

"The aerotropolis has both spatial and functional forms. Its spatial form consists of aviation-oriented businesses and their associated residential developments which cluster around airports and outward along connecting transport corridors generating observable physical features. The functional form consists of a more diffuse airport-integrated economic region whose businesses are as closely linked to distant suppliers, custom-

ers, and enterprise partners as they are to those in their own region.

Like any economic region, whether or not the aerotropolis will be a pleasant place to live and work will depend on appropriate planning which guides development. To date, most aerotropolis development has been organic, often resulting in haphazard, unsightly, economically inefficient, and unsustainable growth. The aerotropolis planning model offers an antidote to spontaneous, haphazard airport area development and its negative consequences."

Is the aerotropolis a blueprint that can be rolled out anywhere or do local factors play a significant role?

"Though its basic planning principles can be applied most places, the aerotropolis cannot be rolled out everywhere. In situations where numerous prior decades of development have surrounded the airport, implementation will be extremely difficult compared to what can be done at a new "greenfield" site which offers a blank canvas to plan and implement the model. In addition to available land, the opportunities or constraints to aerotropolis roll-out are determined by natural ecological factors, surface transportation infrastructure, ownership of land parcels, labor force characteristics, and local governance structures."

You argue that the ambition of the aerotropolis is to create a "frictionless" business environment, maximizing the efficiency of flows of people, goods and communication. When this is coupled with the generic qualities associated with airports and their surrounding developments, won't the aerotropolis model lead to soulless, inhospitable cities? Where does the public realm come into play?

"The aerotropolis does not have to be 'soulless and inhospitable'. This is where urban

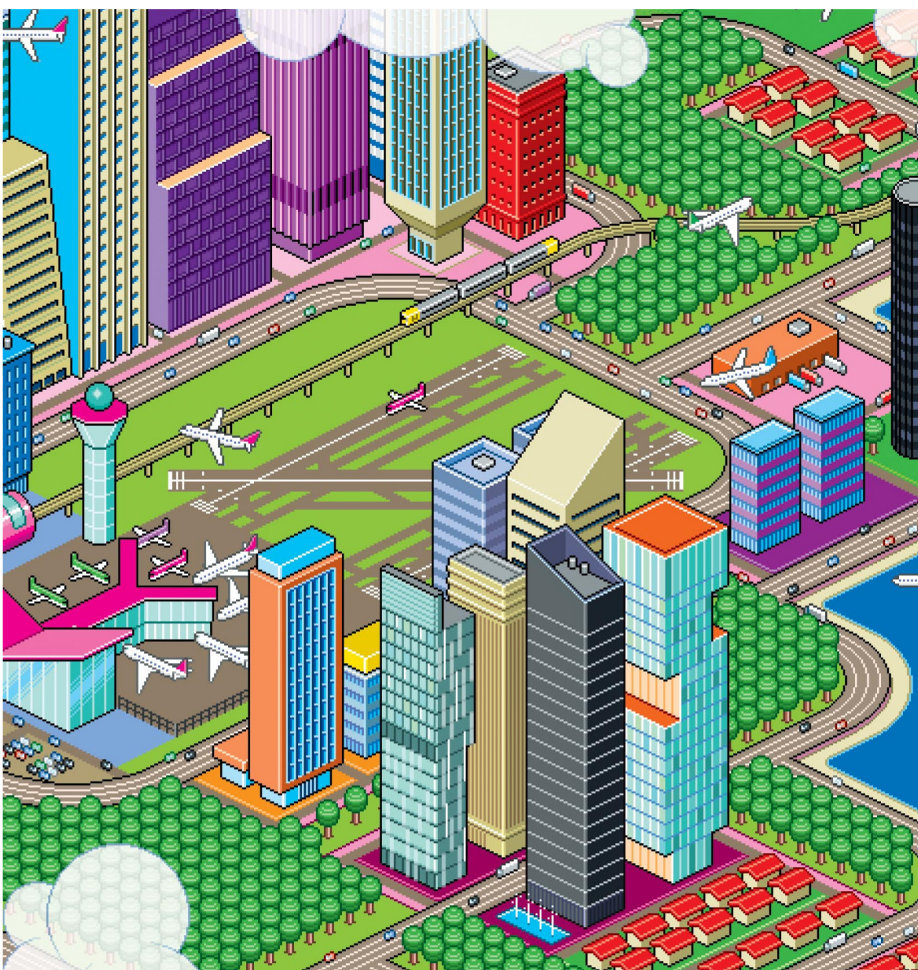


Figure 1. New urban form placing airports in the center with cities growing around them (Kasarda)

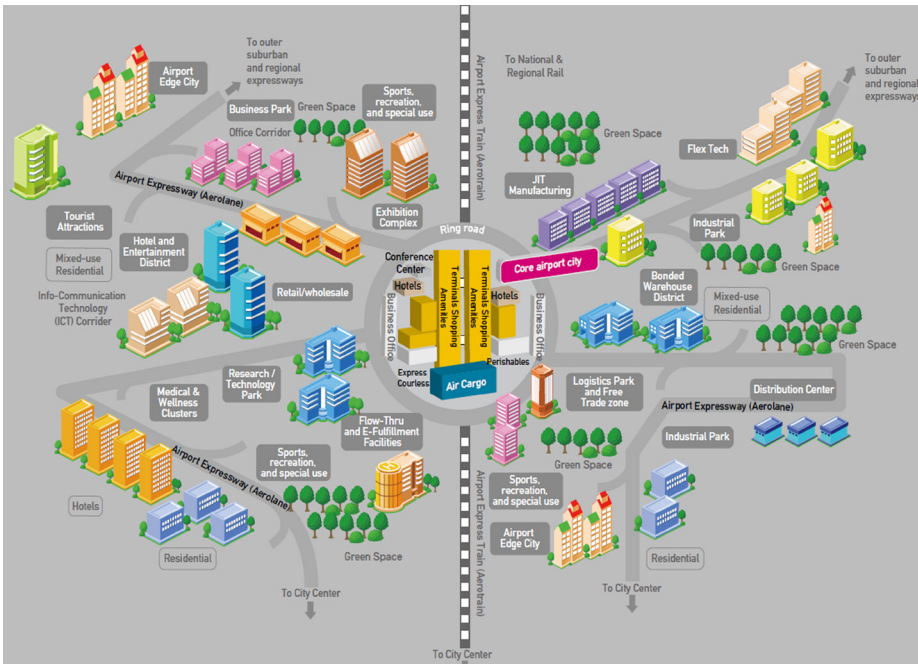


Figure 2. Taoyuan Taiwan version of Airport City Schematic (Kasarda and Taotuan Aerotropolis)

“Bringing local and global forces in reinforcing sync is the most effective path to city well-being.”

planning and design come in. Since the aerotropolis can extend outward up to 25 kilometers from the airport, many vibrant, livable communities can be planned and built within it. Aerotropolis planning is urban planning, including the provision of appropriate public space that encourages social interaction. You do not want to locate new communities at the end of the airport runways or in dense areas of trucking, warehousing, and industry but they can be developed within relatively easy commuting times of the airport and the aerotropolis business clusters where many of their residents are employed.”

To what extent is Schiphol an aerotropolis? What would you change? How should it develop?

“Schiphol is an exemplary aerotropolis. It exhibits all aerotropolis characteristics from an observable multimodal airport city commercial core to the corridors and clusters of aviation-linked development that stretch outward from its boundaries.

The Schiphol Group and Dutch planners have been cognizant of changing local and global conditions and the need to adapt to those changes. Their plans have thus evolved from original ideas of Mainport to a more contemporary triple bottom line approach fostering mutually reinforcing airport, environmental, and community outcomes. I worry, though, that pressures to focus on minimizing airline costs and short-term airport profits will distract the Schiphol Group from its highly successful airport city and aerotropolis development perspectives that have brought it its international distinction.”

In an age of airport cities, what is the relevance of Rotterdam, one of the biggest harbour cities in the world?

“Rotterdam complements the Amsterdam Schiphol Aerotropolis by providing important global connectivity for Dutch products (and those of other nations) that are not appropriate to move (economically or otherwise) by air. The Netherlands is blessed to have the impressive dual trade infrastructure with Schiphol Airport and Rotterdam’s harbor that cornerstoned its original Mainport strategy.”

In Asia it seems possible to build an aerotropolis from scratch such as Songdo in South Korea. But how can an existing big airport in a small city grow out to become a real metropolis? Could it simply grow and be its own entity or should it merge with the existing city?

“The airport and the city it serves are in most cases complementary in scale. So it will be only under exceptional circumstances that a small city will have a big airport. Research at the University of North Carolina’s Kenan Institute shows that where cities exist of at least moderate size and their airports are growing, aerotropolis development occurs in three ways. First, as air traffic expands, the demand for commercial land spills over airport boundaries to adjoining open areas. Second, cities themselves typically spawn satellites. Improved highways developed to the airport area to facilitate passenger and cargo movements frequently become a magnet for these satellite cities by providing them with greater accessibility to regional markets. Third, airport-linked business development (hotels, offices, trade and exhibition complexes) is often most pronounced along the main highway corridor connecting the airport to the city. Dual development from airport to city and from city to airport eventually fuses the city and the airport into a greater aerotropolis.” EDWIN HANS & MIKE YIN