Global flows, local conflicts and the challenge of urban governance: Managing the city-airport interface in London, UK

Evan McDonough Doctoral Candidate Institute of Geography and Spatial Planning University of Luxembourg evan.mcdonough@uni.lu

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My research aims to contribute to urban studies with respect to our understanding of the intersections of global flows, urbanisation and governance. Through empirical research and critical analysis of the spatial dynamics of global flows, and with a focus on urban governance and spatial planning, I will explore ways that space is produced in the contemporary global city-region. Ultimately, I intend to develop a better understanding of contemporary politics, development and planning at the city-airport interface. This project considers the airport as a relational socio-spatial process within the greater process of globalised urbanisation. I suspect that the dynamics present here produce externally well connected, yet, perhaps, uneven nodes within global city-regions. Influenced by actors at both the urban-regional and global scales, urban governance here presents a problem for both urban theory and practice: spatially concentrated externalities and much broader economic benefits. This dissertation in geography and spatial planning will highlight the contrast in scales and priorities of urban governance at airports (aircraft noise versus connectivity, social justice versus economic growth) and critically analyse the contested, under-theorised and unresolved rationalities, plans and politics that coconstitute the city-airport interface.

2. Literature

The Spaces and Scales of Global Flows

The existing literature on globalised urbanisation and spatial planning provides an opportunity for original scholarship that connects urban governance in the global city to urban planning and airport development, and conceptually relates such case studies within the greater political economy of the city-region. Oriented at the urban and regional scale, my aim is to advance urban studies concerning the global city and its built form and role in the global economy through the analysis of inter-city infrastructure, which in the existing literature on global cities is often only mentioned briefly (King, 1990; Castells, 1996). Although urban studies acknowledges the

unintended consequences of post-war modernist planning and megaprojects that emphasised circulation and flows, such as inner-city expressways (Jacobs, 1961; Hall, 1980; Dimitriou et al., 2013), and more recently the neoliberal restructuring of cities in recent decades has been well understood (Friedmann, 1986; Sassen, 2012), the challenge of making sense of such divisive global, urban nodes such as airports constitutes a compelling and pending socio-spatial problem with which there is very little consensus in contemporary urbanism or in urban studies literature. Thus, the city-airport interface remains a practical and theoretical problem that demands further fieldwork as well as theorisation.

Narratives such as 'world-class', 'the global city' and 'connectivity' seem to have had a great degree of influence in terms of discourses on urban development. As a critical urban geographer I consider it vital to question these normative ideals, concepts and growth models, especially with respect to which actors employ which narratives, which appeal to an understanding of the position of cities and regions in the global economy, and connect growth and development plans to the inter-city competition. Indeed, "cities and nations continue to exist as territorial units" according to Amin, although "now with different external orientations" (2002, p. 387), and these structural changes have been interpreted as a product and strategy of these "multiple overlapping political-economic processes" (Brenner, 2000, p. 365). Global cities, then, are not solely influenced by globalisation, but are also the places from which the most influential economic and political forces in this process base their international operations and concentrate their capital and influence. In that global cities now exhibit a new "spatial articulation of dominant functions" supported by nodes and hubs within global flows and networks (Castells, 1996, pp. 442-443), research of urban governance in global cities, with, I propose, a focus on their airports has the potential to reveal the complex dynamics between the urban and the global contexts, and the place-based dynamics of "interscalar relations and transformations" (Brenner, 2000, p. 368) there. Airport areas may often be understood as a reflection of their respective cities, and the great degree of internationalisation and their global 'command and control' functions (Sassen, 1991). Clearly, the growth of air travel and international airports has major implications for their immediate surroundings, as well as for the growth of the city-region.

The contemporary airport can be seen as part of the strategic, collective project of urban governance to strategically position cities within a network of global cities through the international commercial aviation system. Likewise, the city-airport interface, herein conceived as both the spatially concentrated, physical place and a socio-political 'quandary' of uneven socio-spatial consequences (Oosterlynck and Swyngedouw, 2010) consists of "two core, contemporary spatial qualities: worldwide connectivity by air and multimodal landside accessibility on local, regional and national scales" (Conventz and Thierstein, 2014, p. 90). From this perspective, debates surrounding airport development and expansion can be seen to exemplify the inter-scalar environment in which urbanism is negotiated in the contemporary global city. As the central nodes in the dominant hub-and-spoke networks of the

airline industry, these major international hub airports have even been likened to nodes in an imperial system, which, perhaps, 'contemporary society increasingly resembles' (Urry, 2014, p. 34). As cities become as "open" and "porous" as ever (Massey, 1998, cited in Amin, 2002, p. 391), unrestricted global circulation through aviation networks has become increasingly important as the places through which these flows of capital and influence can pass through. The city, as well as the airport, then, exemplifies the degree to which globalisation is dependent on both flows and urban agglomerations, an urban condition thought of as the "product of dense interscalar networks linking disputed geographical locations" (Brenner, 2000, p. 366).

International Airports and Globalised Urbanisation

According to Sassen, the increasing importance of international air passenger travel is a reflection of this expanding network and the concentration of corporate services, headquarters and related activities (2012, p. 198). Similarly, former centres of empire and the highest-ranking world financial centres in 1780, such as London, Paris and Amsterdam, for example (Engelen, 2012, p. 253), remain dominant in the sphere of global airport hub operations today. Quantitative research on the connections between globalisation and aeromobility suggests that "the most important cities harbour the most important airports" (Derudder et al., 2014, p. 78), and, just as most global cities today are also port cities - which presents "a uniquely challenging, highstakes paradox in sustainability" between global flows, economic development and coastal ecology (Boschken, 2013, p. 1776), the major airports of Western Europe – situated on the periphery of large, growing urban agglomerations – present a similar quandary of economic growth, connectivity and competition on one hand, and sustainable urban development on the other hand. Likewise, within cities with multiple airports (such as London), it is the airports that are most centrally located that are the most popular with the travelling public, which has problematic implications in terms of social sustainability and the environmental capacity of the area (Upham, et al., 2003), as well as the operation of the airport itself (Bréchet and Picard, 2010). Such socio-spatial consequences of this paradox of airport proximity and conflicting growth trajectories remain a vital issue that requires further research and theorisation.

While a global city-region's inventory of high-quality office space, conference centres, high-end hotels and upmarket housing plays a similar, necessary role to airports as the infrastructure of the competitive business city, airports in particular provide compelling case studies for critical urban research because they function as contested mobility and *connectivity machines*. The study of urban governance, spatial planning and multi-scalar politics at the city-airport interface is especially compelling because airports are places where we can see how the how the market and public agencies collaborate with or oppose each other, often resulting in an uneven geography of between high-profile national 'gateways' and business districts, as well as the necessary infrastructure of airport-related services, such as parking lots and jet fuel storage facilities.

Airport expansion is often revered as "a powerful economic development tool" (Brueckner, p. 1455, 2003), while 'failing' to predict-and-provide sufficient airport capacity is said to, with regards to the current London airport expansion debate, cost the wider economy £30-45 billion (Airports Commission, p. 12, 2013). Still, despite the significance of the airport to the global city-region network, and the wealth of literature on global cities, megaprojects, and the importance of airports for regional economic growth, significant questions remain regarding "the limits of the "urbanism of flows" [that are] closely bound up with globalization" (Roseau, 2012, p. 33). This is certainly worthy of critical urban scholarship, given the degree and pace of changes to both the urban-regional geographies around major airports and political economy of cities in recent decades. For global city-regions especially, the imperatives of connectivity are internalised in the form of normative planning frameworks that highly value 'connected infrastructure' (Floater et al., 2014).

I share Lassen and Galland's call for the advancing of "a more multidisciplinary focus [that] is required to widen the understanding of the existing relations between social, spatial and environmental consequences related to increased flying, airport development and globalization, instead of dealing with such elements individually" (2014, p. 149). Noise pollution is considered one of the most salient external effects of the aviation industry (Bréchet and Picard, 2010), and an extremely polarising characteristic of the city-airport interface (Oosterlynck and Swyngedouw, 2010) that, and along with concerns of air pollution, congestion, and spatial fragmentation, present "wicked" barriers between economic development and airport planning on one hand, and sustainable urban development on the other hand (Griggs and Howarth, 2013). From the perspective of sustainable urban planning, the urban aeroplane – represented by the noise and air quality pollution it inevitably produces, part of the complex global-local socio-spatial process that facilities its route over the city – embodies the paradox of globalised urbanisation, and the tentacles of the global city not only extending around the world, but into communities across the city-region and its periphery as well.

Within this context, the 'aerotropolis' growth model - based on a relatively small number of case studies - has entered into urban debates as another way that city-regions can purportedly profit from global transport flows and thus compete with each other for growth and investment. While much has been written about the economic benefits of prioritising airports as new centres of regional development – and this may seem especially convincing in the general context of the competitive, neoliberal city – there is an emerging scholarship concerning the ways that the planning of transport infrastructure can increase internal fragmentation and uneven development within the city-region (Graham and Marvin, 2001). Airports in particular have been shown to facilitate economic growth at the regional scale, yet concentrate negative externalities at the local, or sub-regional level in airportadjacent areas, contributing to a greater degree of unevenness in city-regions (Cidell, 2014).

Infrastructure can be understood to contribute to a 'highly selective and marginalising' process of social polarisation in global cities (Budd, 2014, p. 9, also see Enright, 2013), characterised by an increasingly uneven, social and spatial pattern, or in other words, a privileged "citadel" and a "ghetto" (Friedmann and Wolff, 1982, p. 325). Graham and Marvin, who contend that, in practice, investment in inter-city, large-scale infrastructures such as airports can have the effect of privileging certain uses and segments of city-region while 'bypassing subordinate territories', reinforcing an 'archipelago economy' and patterns of 'splintering urbanism' (2001, pp. 305-306), offered a needed critical and qualitative approach to the study of urban infrastructures. Likewise, emerging perspectives on airport-oriented urbanism suggest the degree to which development that privileges competitive international airports can be seen as a factor in this uneven urban-regional growth pattern to the extent that "the economic growth which a major airport spurs within a region is more often than not occurring at some distance from the airport, meaning that negative economic and environmental consequences are going uncompensated" (Cidell, 2012) is an important and timely subject for further urban research.

Under these growth pressures, land around the airport – the contested space between the city and the airport – can be understood as the physical interface between the global flows of passengers and cargo, and local milieus that coconstitute the global city-region, a space that begs further research and theorisation. I intend to study the use of land by the wide variety of scales, actors and purposes found at and around airports, and the ways that the planning, expansion and governance of key intercity infrastructures of the global city are reconciled politically, and can be interpreted as actors in the larger process of globalised urbanisation. Whether as anchors of a new form of regional development, or – more commonly – as "vital growth poles for urban and regional economies and centres of a new post-industrial spatial structure" (Conventz and Thierstein, 2014, p. 90) of global city-regions vying to increase their presence and connectedness on larger, global scales, the study of major airports can illuminate the complex governance and planning of global cities.

Research of the urban context of global freight distribution and port-city spatial dynamics suggests a useful template for understanding international airports and globalised urbanisation, providing an instructive conception of the *port-city interface*, exploring how the integration of the port and the city, as well as actors and activities of the contemporary industrial port, are negotiated in urban governance (Daamen and Vries, 2013; Hoyle, 2000). Analysis of the port from this perspective, especially of the spatial strategies emerging from this process (such as providing a greater degree of public access and urban integration with port functions), offers a useful template for research of the city-airport interface, and provides an opportunity to show how various actors and scales are managed through spatial planning and political conflicts, and the challenges of planning in this multi-dimensional context (Witte et al., 2014).

The socio-spatial dynamics of the airport, though, are much more polarising and wide-reaching than urban port issues, given the much larger spectrum of the city that is impacted by aircraft noise, air quality and expansion plan. In fact, movements against airport expansion often prove to be fascinating and unpredictable aspects of local urban politics. This contrast in scales regarding urban governance and spatial planning of airport space has not, however, resulted in a situation where local actors are simply "the helpless pawns of overwhelmingly powerful globalizing forces" (Kesselring, 2009, p. 52). As "critical transactional spaces" (Freestone and Baker, 2011) and "both consequence and driver" of globalisation (Coventz, 2010, p. 57), the development of major international airports - and their relationship with the cityregion and the inter-scalar processes of urban governance - has resulted in a remarkable diversity of built environments and political landscapes, a reflection of the 'mutually dependent relationship between the local and global realms' (Hesse, 2006, p. 591) – and the importance of objectively researching and understanding the potential and the implications for urban development and governance at the globallocal city-airport interface.

3. Research Problem

As cities around the world compete with each other through greater degrees of external connectivity, particular growth pressures are put on urban governance and spatial planning. The city-airport interface – conceived here as both the physical space between airport-oriented development and broader urban land use, as well a social and political realm constituted and occasionally negotiated by various actors on many different scales – presents a theoretical dilemma for urban studies and a challenge for urban governance and spatial planning. Considering the city-region as both a basing point of globalisation and a node for global flows into the nation and throughout society (Friedmann, 1986), I plan to study urban governance in this context, the infrastructures that facilitate this process, and the complex urban geographies that constitute the city-airport interface.

As the tension between sustainable urban development and the need for competition through external accessibility continues to earn greater attention in both scholarly research and mainstream politics alike, I propose that the struggle to make sense of and reconcile the complex spaces and scales of the international airport and its place in the city is an important, unresolved and timely responsibility for urban scholarship. Through urban governance and spatial planning – an inherently political process – local, regional, national and global needs are inevitably balanced against inter-city connectivity and competition. Thus, it is imperative to better understand the rationale, implications and influences currently behind urbanisation in general - and at the city-airport interface in particular.

Drawing again from literature on port-cities, at airports we can see a parallel, 'global-local mismatch' in the priorities of urban development focused on the economic value of global transport flows for their surrounding cities and regions,

and urban governance and spatial planning that attempts to balance social and environmental concerns with such economic growth (Cidell, 2014; Merk, 2013). These complex territorial configurations and priorities of the global city-region can be seen to confront airport-adjacent communities where urbanisation and the needs of the aviation industry intersect or collide. By critically analysing the socio-spatial position of the international airport in terms of its role in the flows of the global city-region and using urban governance (with a focus on spatial planning and the urban politics of existing aircraft noise and airport expansion concerns, as well as spatial fragmentation, congestion and air quality concerns) as a lens through which to analyse the city-airport interface, I will address the airport problem through place-based critical urban research of the airport and the global city-region.

4. Research Questions

Main research question: How do urban governance and spatial planning attempt to reconcile the problem of the city-airport interface?

Question 1) Who are the various actors that co-constitute and produce space at the city-airport interface?

- 1a) How have existing issues of sustainable urban development related to airport and flight path proximity (such as noise pollution and air quality) and urban development issues (such as land use) been mediated?
- 1b) What levels of government and non-government actors are involved in the decision-making process regarding urban-regional airport developments?
- 1c) How do airport expansion plans influence, conform to or override local and regional plans?

Question 2) The city-airport interface as a relational and contested political space: Which *narratives, normative frameworks* or *assumptions* are employed in the debate concerning urban planning and governance of the urban-airport nexus?

- 2a) Which normative frameworks, planning ideals or growth models are behind such governing patterns?
- 2b) How is the airport debate/discourse framed and communicated in the realm of planning and politics, as well as with the general public?
- 2c) In what ways are centralised or de-centralised airport settings (one airport per region versus several competing airports) significant, from an urban-regional planning perspective? What are there distinctive benefits and disadvantages?

5. Activities and Research Methods

Qualitative analysis (Herbert, 2010; Creswell, 2009) of the co-production of these places will be a major component of this work. Work towards this dissertation had begun with a review of literature, organised around the two scholarship poles of global cities, global flows and urbanisation in the global city, and studies of airport development around the world, focusing on the planning and politics of such sites. I plan to connect these two approaches to this topic by connecting place-based research of airport case studies with an understanding of the growth pressures and politics inherent in the planning and development of a such controversial megaprojects.

Upon further development of methods to operationalise the next phase of research, and selection of a particular case study, a next step would be to map the various plans and actors responsible for the development, whether from the top-down or bottom-up. I plan to research connections between the city-region and its airport with respect to urban governance and the different inter-scalar processes and *flows* in which urban space is produced through critical analysis of urban governance and the planning of the global city-region. At a later stage, the analysis of plans and policies (Jensen and Glasmeier, 2010; Dittmer, 2010) as well as the use of expert interviews with actors involved in the planning and operation of major airports could be expected to illuminate the official position on the topic, which could be contrasted with interviews from those opposed to or impacted by such major airports (McDowell, 2010). These actors range from local anti-airport activists and residents, likely politicians at all levels, and up to international developers and architects and global airlines and international passengers whom they transport.

6. Case Study: London, United Kingdom

The current debate surrounding the perceived need to expand the capacity of London's airport system provides an especially compelling and timely case study of a powerful, growing global city-region and its infrastructure, given London's status as the financial capital of Europe, and a central, major international hub in the global aviation network, said to be a reflection of London's rank – along with New York and Tokyo - at the top of indexes of centrality and importance in both systems of economic flows and air travel network numbers (Smith and Timberlake, 1995, p. 297). London's history of urban agglomeration, linked to external links and its former status as a centre of empire also provide many interesting connections to the current airport debate. Likewise, London's six commercial airports (Heathrow, Gatwick, Stansted, City, Luton and Southend) can be geographically connected to powerful political-economic dynamics of the city and the South East, as London's prominence as a global city and subsequent population growth has reinforced its position as a node and destination in flows of passengers and cargo.

The broadening of anti-airport activism here, from opposition to expansion of specific airports to a coalition of 'airport communities' (Griggs and Howarth, 2004) suggests how the city-airport interface in London has consequences across the

region, and across the realms of urban governance, national politics, spatial planning, and far beyond simply the pending Heathrow vs. Gatwick decision by the Airports Commission in 2015. Furthermore, as a multi-airport region without a focused 'aerotropolis' or 'airport city', research at the urban-airport nexus in London may draw parallels with recent research polycentric regions and spatial planning ideals in terms of sustainability (Burger, et al., 2014; Cirilli and Veneri, 2014).

Deferring a decision on expanding runway capacity in the South East to the new Airports Commission to "balance local considerations with national interest" (Airports Commission, p. 8, 2013) and manage this politically toxic but unavoidable issue, as well as the scale and implications of the Thames Estuary proposal to completely replace Heathrow – a megaproject considered by some to be "one of the country's truly great planning catastrophes" (Hall and Hall, p. 2, 2006) – adds an added degree of fascinating complexity to London's airport planning debates and the perpetuation of the London's status as the world's most well connected city.

7. Expected Outcome and Contributions to Research

To reiterate, this research is conceptually focused on the political dilemma of the city-airport interface and socio-spatial dynamics and externalities of global flows through global city-regions, rather than airports *per se*. I propose that by developing a more nuanced way of reading major airports and airport-oriented development, this research will develop ways of understanding contemporary urban agglomeration processes and urban-regional planning and governance in the context of the global city-region. I plan to advance a useful, qualitative critique of global flows and local places, and, through the lens of urban governance that explores how – despite significant negative externalities – city-regions are as globally interconnected as ever, and certainly far more complex than dominant narratives and growth models imply.

Given this large and increasing degree of interconnection, the challenge of planning and governing a socially and spatially cohesive yet globally accessible form of development will remain an important area of research. Critical urban scholarship on airport-oriented development will be a way to add to the debates of global cities and flows to the sustainable cities agenda and the just planning of global city-regions. Both an artefact and actor in the process of globalised urbanisation, airport space may be understood as an infrastructure that is both an actor and a product of the multi-scalar process of contemporary urbanism, rather than the result of a binary of 'local' or 'global' influences. Ultimately, I aim to contribute a novel understanding of the implications and trajectories of globalised urbanisation and the spaces and flows that characterise contemporary urbanism.

As the infrastructure for the global city, the airport is more than simply a large-scale piece of infrastructure on the urban periphery. With regards to urban governance and the institutional framework concerning land use and airport space, this dissertation aims to contribute to urban studies and our understanding of the geography of global city-regions by connecting infrastructure planning and airport

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development to the literature on urbanisation within the context of global cities research.

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