Emerging planning approaches in airport areas: the case of Paris-Charles de Gaulle (CDG)

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The expansion of international airports creates conflicts in their surrounding territories, but also provides opportunities for economic development. This article examines the recent evolution of spatial planning practice for the area of Paris-Charles de Gaulle (CDG) airport in France. It identifies a shift towards airport-centred discourses that prioritize urban development projects. In examining the motivations for and implications of this shift, it demonstrates the benefits of a greater attention to the airport area and the risks of employing normative models.

Keywords: airport areas; airport planning; urban development models; airport-centred models; economic development

Introduction

Over the last four decades, global reliance on aviation for the transport of people and goods has grown exponentially, making international airports gates for global economic flows. Research has highlighted the importance of airports for regional economies (i.e. Brueckner, 2003). Attention has also been drawn to their negative effects, such as CO₂ emissions, air pollution, noise and depreciation of local property values (i.e. Whitelegg & Cambridge, 2004). Notably, the asymmetry between the regional economic benefits of airport operation and the local environmental and social disadvantages has been documented (Cidell & Adams, 2001; Salewski, Boucsein, & Gasco, 2015).

Recent airport-centred models such as the ‘aerotropolis’ (Kasarda, 2000) suggest that this divide can be overcome by harnessing the benefits of global connectivity through urban development. The present study examines the adoption of airport-centred spatial development strategies in the case of the Paris-Charles de Gaulle (CDG) airport area in France. It shows that despite the declared shared interest in localizing the positive economic impacts of the airport, inherent tensions make the success of airport-centred policies questionable. The study relies on publicly available planning documents and studies, complemented by interviews with city and regional planners who participated in or were active during their production.

Airport impacts and spatial policies

Due to their space requirements, airports are traditionally conceived as isolated objects in urban peripheries. Their negative effects are push factors for uses such as housing
and schools. Yet spillover urbanization has gradually reached many airport remote sites. *Pull* factors for businesses settling in airport vicinities, besides those directly supporting airport operations, include immediate access to flows of people and goods, land price and availability, good land transport connections, and agglomeration economies (Freestone, 2009; Van Wijk, 2007).

Few studies provide empirical evidence of land-use patterns around airports. Cidell and Adams’s (2001) comparison of 12 airports in the United States identified that certain uses are common (i.e. hotels, warehouses, large sports facilities), but suggested that their mix is unpredictable and context dependent, and that airports are unlikely to change substantially the character of economic development within their geographic sector. Prosperi (2007) found large differences among business types and employment in three US cases, concluding that aggregation of economic activities does not necessarily imply clustering.

Although the unclear and conflicting nature of urban development around airports suggests a need for coordinated planning, airports have been neglected in urban and regional planning agendas (Freestone & Baker, 2011). In practice, airport priorities have been shown to override local knowledge and needs, and even where consultative and planning bodies for airport areas exist, decision-making remains complicated and biased (Lassen & Galland, 2014; Van Wijk, 2007).

This policy gap has enabled airport-centred development models to gain ground in the early 2000s. The ‘airport city’ (Güller, 2003) and the ‘airport corridor’ concepts (Schaafsma, Amkreutz, & Güller, 2008) suggest that the clustering of commercial activities on and near the airport platform is not only inevitable but also desirable, as it leverages global connectivity for growth. Kasarda, inspired by the rise of high-value air cargo, has advocated the development of ‘aerotropolises’ around international airports: urban forms shaped by multimodal logistics and international headquarters (Kasarda, 2000; Kasarda & Lindsay, 2011).  

The ideological basis of airport-centred development lies in an extrapolation of positive economic impacts, especially regional employment, positively correlated to airport traffic (Brueckner, 2003; Green, 2007). However, this correlation hardly points to idealt-type airport area strategies. Critiques of normative airport-centred development models, for example by Freestone and Baker (2011), point to their problematic applicability at different contexts, top-down approach to planning, overoptimistic ‘build and growth will come’ attitude, and simplistic outlook about economic benefits. Even if accepting the optimistic outlook, the idea that negative and positive effects can be negotiated and counterbalanced is belied in practice by the persistence of power struggles over winning and losing positions (i.e. Oosterlynck & Swyngedouw, 2010).

**Context of Paris-CDG**

Paris-CDG airport was planned by the French government in the 1960s to replace Paris-Orly as the major gateway to Ile-de-France (the Paris region). Its location, 23 km northeast of Paris, in a rather sparsely populated and predominantly agricultural area, was considered ‘ideal’ from a government perspective for anticipating future expansion. Indeed over its four decades of operation the airport grew steadily in traffic and correspondingly in physical size, facilities and runways. It is currently second busiest in terms of passenger traffic and first in cargo traffic in Europe. Further, the airport employs approximately 86,000 people (2012 data), and the area around it has experienced notable growth: in 2009, there were 628,500 inhabitants and 282,600 jobs in the
broader Roissy sector, having grown by 20.5% and 81.6% respectively since 1982 compared with approximately 20% for both population and employment in Ile-de-France. Over the same period, job growth in the sector ‘core’, i.e. the six communities bordering the airport, reached 386%.

Despite this seemingly flourishing reality, several local communities opposed airport expansions through the 1980s and 1990s, engaging in fierce controversies with the state-owned airport operator ADP (Aéroports de Paris). Discontent has revolved around two issues: airplane noise and insufficient community benefits, such as local employment. These issues are interlinked, especially for communities in Plaine de France, the area west and south of Paris-CDG, which has remained among the most low-income, low-education and high-unemployment parts of the agglomeration, further depreciated by airport-induced noise and territorial disruption. Concurrently, the positive economic externalities of the airport were captured in two early large-scale state-planned projects: the business park Paris Nord 2 and the exhibition centre Paris-Nord Villepinte (PIEX). In direct proximity to Paris-CDG and well served by the north–south highway and a suburban train stop, these projects became attractive for air cargo distribution centres, back offices for multinational companies, and international congress and expo events.

Besides companies in Paris Nord 2, there has been little evidence of specifically airport-induced economic activity (Faburel & Barraqué, 2002). Indeed, the localization of warehouses and distribution centres can be attributed to road connections. Yet, the economically challenged situation of Plaine de France explains why many elected officials oscillated between supporting airport-related economic potential and denouncing airport noise under the pressure of local associations. In practice, mayors eagerly exploited opportunities to develop industrial and logistical estates, with the prospect of leveraging taxes and providing employment. This attitude led to the proliferation of large activity

Figure 1. The Paris-CDG airport and the broader Roissy sector, including the Paris-Bourget airport to the Southwest of Paris-CDG.
Source: © IAU île-de-France. Redrawn and edited by the author.
zones, loosely, if at all, related to the airport; lacking any overall spatial vision, and increasing populations subjected to nuisances (Grangé, 2003; Subra, 2004).

By the mid-1990s, the concomitant growth of air traffic and urbanization had saturated road and rail access to the airport, and new developments lacked urban quality and public transport connections. Local actor initiatives for airport-related megaprojects (AREC in 1989, Charlemagne in 1990, Euro Val d’Oise in 1992), or coordination of development (Association of Greater Roissy in 1992) were either too marginal or too narrow in scope and received little support from state planners.

The airport area as project area

In the early 1990s, recognition of problems arose, along with a belief in the potential of the airport to attract functions of higher value, as testified by state and local planners. The preparations for the Regional Plan (SDRIF – Schéma Directeur Régional Ile-de-France) played a key role. The SDRIF, prepared every 15–20 years, defines strategic planning goals for Ile-de-France and identifies priority areas. The 1994 SDRIF designated Paris-CDG as a regional ‘centre of European stature’, destined to accommodate high-value businesses with supra-regional accessibility needs (Préfecture de la Région d’Ile-de-France, 1994, p. 57).

This designation introduced a new perception of the airport as a hub, beyond its role in transportation. To examine this potential further, the state created a commission named Mission Roissy, which consequently documented economic and social discrepancies. This contributed to local awareness and collaboration, thereby enabling joint actions, such as the creation of an employment agency and the improvement of local public transport connections. But it was only in 2002 that airport-related planning was consolidated, with the foundation of the public development agency Etablissement Public d’Aménagement Plaine de France (EPA PdF). EPA PdF was granted strategic goal setting and urban development responsibilities, along with mediating state, region and local government interests.3 Its focus initially rested with the most urbanized zone closer to Paris and the environs of Paris-Le Bourget – a business airport located midway between Paris and Paris-CDG. But the agency became increasingly invested in the Paris-CDG area, as seen in a strategic document published in 2005 highlighting the ‘regional hub’ of Roissy-CDG. The document recognized that Paris-CDG’s effects are unevenly distributed: while economic activities concentrated on the platform and along the highway, noise exposure mostly affected communities to its urbanized west. The implementation of two large-scale urban projects in the airport periphery was advocated: the extension of Paris Nord 2, later called Aerolians, and the partial development of Triangle de Gonesse (TdG), a large farmland reserve south of the airport, close to living areas affected by noise. The latter, envisioned as ‘advanced research hub’ and ‘principal gateway to the agglomeration’ (EPA Plaine de France, 2005, p. 91), was embraced in other planning documents.

The connection between development projects and alleviation from negative externalities is a new theme in airport-related planning discourse. In the case of Paris, the project-oriented approach was in line with the vision of the Nicolas Sarkozy government, elected in 2007, which prioritized economic competitiveness of the metropolitan area via spatial economic ‘clusters’ and infrastructure improvements of international standing. The government’s transportation scheme Grand Paris Express metro (GPE), an automated metro network connecting the major ‘clusters’, including the two
international airports (Paris-CDG and Paris-Orly), was seen by several local actors as a major opportunity to stimulate economic development.

The EPA PdF supported this aspiration by negotiating an adaptation of the initial GPE path to include a stop in TdG. In the reference plan for TdG, the rhetoric revolved around the value of ‘airport corridors’ for metropolitan economic development, and the potential of the CDG–Bourget–TdG corridor to accommodate an economy of knowledge and innovation. This included developed and envisioned projects in the southern and western periphery of the airport: Aerolians, the densification of Paris Nord 2, several business parks, a major shopping centre (Aeroville), and ADP’s ‘airport city’ (Roissypole) (EPA Plaine de France, 2010).

**Plans and visions of ‘Grand Roissy’**

Planning materials of the period 2005–13 popularized airport-centred development discourses among public and private actors, encapsulated by branding the area ‘Grand Roissy’. The concurrent restructuring of planning and regional practice in Ile-de-France that introduced new instruments enabling economic development around future GPE stations (Contrats de Développement Territorial), favoured ‘hardware’ projects, such as transport lines, urban boulevards and large-scale operations, especially in the Roissy sector core. ADP, though not directly profiting from projects outside the platform, has supported new development as it contributes to the social acceptability of airport operation. It has even partnered with economic development agencies for territorial marketing initiatives (Hubstart Paris Region).

General consensus exists that ‘dealing with’ the airport area was long overdue. However, the reliance on urban development projects has raised concerns, mostly from the planning bodies of the region, whose metropolitan vision prioritizes the reduction of territorial inequalities rather than the implementation of projects of supra-regional importance. The TdG project in particular is criticized for being overambitious in scope and scale, disregarding problematic accessibility, and promoting a monofunctional urban model. Doubts are further expressed about the EPA’s ambitious projections for project-related job creation (100,000 jobs until 2025). The project-based model has revealed a divide between the technocratic and the political factions of public administration, with planners questioning the viability of too many projects and the suitability of the airport surroundings for offices and retail centres, and politicians emphasizing economic potential and the need to attract investment.

Reservations are nevertheless downplayed in most official documents. Few studies have attempted to foster integrated planning of the airport area. For example, a 2012 study by the state agency DRIEA generated recommendations about spatial coherence. Yet, they were too broad either to question or to confirm specific urban development choices. Detailed estimations of the airport’s local positive and negative impacts have not been published (DRIEA 2012).

**Conclusions**

In the case of the Paris-CDG airport area, a shift towards greater attention to planning can be observed. The area faces familiar conflicts associated with the negative effects of airport proximity: noise, air pollution, territorial disruption and depreciation. The airport also generates economic development, but not necessarily in the areas incurring its negative effects. Planning rationales attempt to tackle this asymmetry through
airport-centred spatial development projects, envisaged to accommodate businesses
drawn by proximity to the airport, therefore localizing the airport’s positive economic
impacts by generating additional taxes and job opportunities. By supporting such
projects, noise-affected municipalities anticipate boosting local economy; yet they also
indirectly consent to airport growth.

Planning documents, especially after 2008, are informed by normative airport-
centred models: they readily employ terms such as ‘airport corridor’, ‘aerotropolis’ and
‘cluster of exchanges’, indicating a belief in the airport potential to attract high-value
functions. Such discourse is prone to challenge, however, such as Freestone and Baker’s
(2011) critique regarding contextual appropriateness and outlook about economic bene-
fits. With its unqualified workforce, few local transport connections, and poor urban
quality, the CDG area is less attractive for high-value businesses than the established
centres of central Paris or La Défense. Additionally, planned projects rely on heavy
transport infrastructure and large-scale investment, and the implementation of GPE is
planned too far in the future (2025–27).

Though it would seem reasonable that such reservations temper expectations of
project-generated economic benefits, the vision of ‘Grand Roissy’ as an emerging busi-
ness centre of the Paris region brings consensus among most actors, overshadowing
dissonant voices. The reasons for this insistence lie in the desire of state planning
action, through EPA PdF, to satisfy local governments, who are in competition to attract
investment, thus also securing support for continued airport growth. Without excluding
the possibility that airport-related projects are successful, this rationale is nonetheless
vulnerable, as it defers prioritizing measures other than urban development projects to
address the controversial effects of the airport.

The case of Paris-CDG therefore provides evidence of increasing institutionalization
of airport area-specific approaches: in principle, a positive step towards tackling the con-
flicting nature of airport impacts. However, it also testifies to a hegemonic discourse
about the developmental potential of the airport, which tends to overlook the distribu-
tion of benefits and losses, and, further, to a short-sighted reliance on large-scale urban
projects as agents of this economic development. This paper, therefore, calls for rethink-
ing about how planning can enable airports to contribute to local and regional develop-
ment through balanced and context-sensitive strategies, rather than ideal-type models.

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Notes
1. For an overview of airport-centred development models, see Freestone and Baker (2011).
2. All statistics are provided by the Institute of Urbanism of Ile-de-France (IAU IdF) (2014).
3. Local governments in France include, in growing scale: communities (communes),
inter-communal syndicates and departments (départements).
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