Geoforum 67 (2015) 36–40

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum

Critical review

Urban sprawl and infrastructural lands: Revamping internal spaces in Santiago de Chile

Cristian Alejandro Silva Lovera

The Bartlett School of Planning, Faculty of the Built Environment, UCL, 14 Upper Woburn Place, WC1H 0NN London, UK

ARTICLE INFO

Article history:
Received 28 September 2015
Accepted 11 October 2015

Keywords:
Urban sprawl
Infrastructural lands
Revamping processes

ABSTRACT

Urban sprawl in South America has for many decades been driven by the housing debate, with major impact on overall urban development. The impact of uncontrolled expansion has been social, economic and environmental degradation to high rates of poverty, poor services and transport. The presence of undeveloped areas within suburban landscapes, such as former infrastructural facilities, obsolete airports, and abandoned train stations, contribute to the impetus to reclaimed and revamped land. These spaces also trigger political aspirations for implementing better practices on "smart" growth, sustainable development and urban regeneration principles. A case in point is the former airport 'Aeropuerto Cerrillos' in Santiago, Chile, which closed in 2001 after years of decay; it intended to replace and host a large-scale urban project called 'Ciudad Parque Bicentenario'. This development is still incomplete and describes a series of pressures on a planning system traditionally adjusted to promote expansion confirming that urban sprawl is still an open agenda triggered by the presence of diverse unexpected urban gaps.

Contents

1. Introduction

Urban sprawl in South America has been posited as a general pattern of development that defines the conditions of city-regions (Aguilar et al., 2003; Inostroza et al., 2013). In this context, new peripheries consisting of differing socio-economic groups have emerged with high rates of poverty concentration and socio-residential segregation (Sabatini and Salcedo, 2007). Environmental degradation is also a major impact, considering increasing air pollution and degradation of agricultural lands. Urban sprawl hence appear as a major issue in the urban sustainability agenda (Romero and Ordenes, 2004; Moreira-Arce et al., 2015). Aside from impacts, the debate is also driven to identify potentials of sprawl, some of them supported by the spatial fragmentation typically found in the peripheries of Rio de Janeiro, Sao Paulo, Bogotá, Buenos Aires and Santiago de Chile (Janoschka, 2002).

In this context, the presence of abandoned lands that previously served infrastructural functions – such as former airports, railway services, power and water treatment plants, restriction areas of security buffers and others – provides a chance for changing trends in planning as these spaces are already well-located and surrounded by built-up areas. Although several initiatives have been defined for recovering infrastructural lands, only few appear as

E-mail address: c.lovera@ucl.ac.uk

http://dx.doi.org/10.1016/j.geoforum.2015.10.004
0016-7185/

successful, as they often rest on housing shortages or for building gated communities with private services (Hidalgo, 2007). In this light, how urban policies are still dealing with uncontrolled sprawl through revamping internal infrastructural lands is worthy of examination, where my focus on Santiago de Chile offers a possible illustration of its potential. Indeed, in the last 20 years public authorities have raised the political illusion of creating better practices in planning based on urban regeneration, sustainability and social integration principles through the potential of underused infrastructural spaces (Ducci, 2014; Tokman, 2006; Zapata and Arias, 2008).

This is the case of the mega urban project 'Ciudad Parque Bicentenario' (CPB): it exposes the tense relationship between private and public sector in a country where the development model is defined by neo-liberal policies, where government nevertheless continues to regulate the free market (Gross, 1991; Vallejo and Pardo, 2008). This initiative – labelled as a pioneer in the implementation of a regeneration policy – was intended to be finished in 2010, fully commanded by the Ministry of Housing and Urbanization (MINVU) aimed to maximise social benefits. After several stages, management issues became extremely complex and the original purposes were reformed to overcome administrative and economic problems. The illusion of changing trends entered into an endless set of administrative, social, economic and political constraints; hence after 12 years, the project is incomplete. This case illustrates how the urban sprawl in South America remains a hegemonic trend of unplanned growth, despite attempts to promote the internal revamping processes.

2. Urban sprawl, the South American region and infrastructural lands

Although some posit that there is no consensus regarding an urban sprawl's definition, traditional descriptions point to a scattered development composed of low-density residential neighbourhoods, single land-uses and open tract as evidence of physical discontinuity (Galster et al., 2001; Gillham, 2002; Jaret et al., 2009). Moreover, urban sprawl has also been recognised as a complex stage of development, illustrating conditions of multifunctionality, polycentricity and functional self-sufficiency (Gallent and Shaw, 2007; Kloosterman and Lambregts, 2001; Phelps and Wood, 2011).

The debate in South America has been part of a topic related to the impacts of housing policies in the region and Southern hemisphere (Murray and Clapham, 2015; Cerón-Palma et al., 2013; Heinrichs et al., 2009). Generally, urban sprawl is understood as an outcome of neoliberal policies, where the planning process follows market trends and applies these to public benefit. Consequently, areas with high rates of segregation, poor housing solutions and slums emerge as part of the suburban landscape, interspersed with random empty or undeveloped areas of economic speculation (Roshan et al., 2013; Sperandelli et al., 2013). In South America, larger cities describe this pattern of sprawl with minor variations. However, the Chilean case is particular due to its successful housing outcomes defined by a long-standing policy of subsidies and eradication of slums (Rodríguez and Sugranyes, 2004). This policy is part of an aggressive capitalist context where the right to a house is another market niche supported by the State and hosted by discontinuous expansions (Sabatini and Salcedo, 2007; Rodríguez and Rodríguez, 2013). Although the Chilean model is highly criticised, developers and policy-makers accept it as an inevitable outcome of increasing housing demands and population growth (Gross, 1991; Echeñique, 2006).

In this context, the presence of physical discontinuity rests on a large set of former infrastructural lands that nowadays are inside the suburban landscape (Salazar, 2010). A study of the Chilean Chamber of Construction detected the presence of several well-located empty areas of over two hectares without physical restrictions and able to host a maximum of 150 inhabitants per hectare, with well provided energy supply, services and consumption power (C.Ch.C., 2012). These spaces are closed environments and yet, because of the nature of their activities, their property regimes are incompatible with co-existing residential surroundings (C.Ch.C., 2012).

3. The case of the Cerrillos Airport as alternative to urban sprawl

Urban sprawl of Santiago de Chile contains several infrastructural lands but only one has been considered for a mega urban project to facilitate improvement of the suburban surrounding: The Cerrillos Airport site is located in the Southern district of Cerrillos just at the boundary of a *peri-urban ring*, demarcated by the presence of the Américo Vespucio ring-road connecting peripheral communes (Fig. 1).

The 'Cerrillos Airport' was created in 1929 with a donation from the Guggenheim Foundation to promote aeronautical studies. It belonged to the Chilean Air Force and then became the national airport. Originally its location was in the outer reaches of Santiago and surrounded by open countryside. However, because of the city's expansion and the incremental demand for civilian flights in 1967 a civilian airport replaced 'Cerrillos', where the latter started to be used by the military. Over years, the area became underused and polluted (noise, oil and fuel smell), while alongside the growth of the city made the land more valuable. After attracting the interest of central authorities, in 2000 the area was to be revamped and authorities announced a 'new way of making city' as alternative to the conventional sprawl (Del Piano, 2010).

4. 'Ciudad Parque Bicentenario' (CPB) project

In 2001 the MINVU prioritised the importance of recovering the area. After several negotiations with the Air Force, the MINVU recognised the potential and positive impacts for its surroundings. The total area would encompass 245 hectares and was proposed to host 50 inhabitants per hectare within it, adding services and transport infrastructure. By 2001 central authorities made an international call for ideas based on specific planning principles: high construction standards, social integration, environmental sustainability, multi-functional land uses and flexible urban design as a strategy for adapting the project to market trends. The idea was to create a diverse and innovative environment in comparison to the suburban tradition (Galilea, 2006). This announcement was settled during a period where several international flagship projects were successful elsewhere, such as the Olympic Stadium and the Biblao Guggenheim in Spain, Puerto Madero in Buenos Aires, and the London-Eye in the UK. As a suitable icon to commemorate the bicentenary anniversary of the independence of Chile the project was named as 'Ciudad Parque Bicentenario' (CPB) and was to be completed by 2010 (Del Piano, 2010). After several studies, in 2002 the MINVU defined a general Master Plan that included the financial and building construction models. The plan was won by an international consortium and coordinated by a Chilean office for completion by 2005. The proposal pointed to the importance of connectivity improvements as the area had only longitudinal roads and also secondary streets for connecting nearby neighbourhoods. It also defined four spatial morphologies aimed to provide social and spatial diversity and considered that the State would make the small scale urbanisations and a central park to attract real estate investments (Fig. 2).