WHO KILLED BARCELONA'S HIGH SPEED STATION PROMISES? INFRASTRUCTURE POLITICAL CAPTURE, SCALING NARRATIVES AND THE URBAN FABRIC

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Abstract

The paper explores the economics and politics of megaproject failure in Spain. Taking Barcelona's high-speed station as a case study, it demonstrates that, rather than a victim of austerity policies, this project was much more the hostage of a struggle between national, regional and city scales, representations and policy narratives. After introducing the debate on the promise and disillusionment around high-speed stations, the discussion highlights three stages in the project timeline. It shows the station's unstable position in high-speed network planning from the early 90s to the 2000s. It describes the competing geostrategic perspectives between Madrid and Catalonia that halted the project during the 2008-2014 crisis. And it recounts how, since 2015, local stakeholders have reaffirmed their commitment to the completion of the station, but have failed to integrate it with new trends and processes of urban renovation.

Keywords: High speed station, megaproject, transport policy, scaling narrative, Barcelona

INTRODUCTION

Why is it that Saragossa, Seville or Valladolid have long possessed high-speed rail stations, whereas Barcelona, though larger in population terms, has been unable to complete such a project? And why is it that Spanish disillusionment with high-speed rail has not prevented the city from continuing to pursue this megaproject, despite the controversies it has provoked? Drawing on the current of research into the crisis of infrastructures, this article explores the paradoxes of megaproject planning in Catalonia in the nexus of geopolitics, transport policies and urban redevelopment models.

The study begins with an observation: big station projects are currently subject to controversy in Spain, and attitudes in Catalonia, with regard to this particular project, are especially critical. When we look at the reasons for this disenchantment, the following hypothesis suggests itself: the project forms part of a nexus of changing and contradictory expectations associated with the economic and geopolitical vagaries of the last two decades. This case study therefore employs two notions: spatialised political imaginaries and the political capture of infrastructure. The demonstration develops in two stages and at two scales. The first shows the failure of the expected ripple effects and invalidates the "city booster" function attributed to the station. It explains how the station provided a medium for "scaling narratives" deployed in support of an entanglement of power struggles, financial negotiations and spatial imaginaries between the Spanish state and Catalonian political and economic lobbies. This, much more than a generic reference to austerity policies, fundamentally explains both the tenacity of the megaproject stakeholders and their incapacity to build this station. The second stage describes the parallel proliferation of initiatives that have modified the real-world conditions of the project's embeddedness in its local context. It thereby reveals the difficulties

of integrating the visions of multiple local stakeholders, of updating the megaproject and of integrating it to Barcelona recent urban renovation processes.

1. HIGH-SPEED STATION PROJECTS AND PROMISES

1.1. High-speed in Spain: promise and disillusionment

Studies on infrastructure projects have shown that they are much less likely to fall victim to a mechanical problem (i.e. a design fault or lack of funding as a result of a public funding shortage) than to a loss of meaning. HS Rail projects are no exception. Spain in particular enjoyed a genuine love affair with high-speed rail (Albalate & Bel 2011). But that perception of a "modern infrastructural ideal" (Dalakoglou 2016) has now given way to a much more critical vision.

Alta Velocidad Española began in 1992 and culminated in the construction of more than 10,000 kilometres of lines, the most extensive network in Europe. Under the *Plan estrategico de infraestructuras y transportes 2005-2020*, HS lines were to radiate out from Madrid to serve the 56 provincial capitals and the 50% of Spain's population living less than 50 km from a high-speed station (Cruz Villalón 2017). Apart from the main lines, the economic effects were uneven as the network extended into areas of low population density. The limits of the booster effect on the economy (Vickerman et al. 1999) and on urban dynamics (Bruinsma et al. 2008, Bellet & Ureña. 2016) became apparent, whereas costs spiralled. Some experts recognised HS to be less a mere transport tool than a combination of technological choices and politics. "HSR in Spain does not reflect a transport policy that seeks to improve productivity and welfare, but is a peculiar case of pure administrative ideology" (Beria et al. 2018 p. 75). Along with the decline of a long-standing fascination with rail technology, traditionally envisioned as a paragon of modernity (Ureña et al. 2012), the debate focused on the role of high-speed rail in a process of centralisation, i.e. the consolidation of Madrid's domination over peripheral cities and regions (Bel i Queral 2010).

The controversy is particularly heated in Barcelona, where a survey of the Sagrera megaproject has been underway since 2013 under a research programme funded at École Nationale des Ponts on railway station development. Beyond the analysis of national, regional and local press coverage of the Sagrera project, 20 semistructured interviews were conducted with representatives of entities in Madrid (the rail operators ADIF and Renfe, Renfe Railway Foundation, central government department responsible for railway projects, FERRMED rail corridor organisation) and in Barcelona (Barcelona Sagrera Alta Velocidad (BSAV), Catalan government, Ferrocarrils de la Generalitat, Barcelona Metropolis and Barcelona Municipality, as well as with university experts and the local Sant Andreu and Sagrera civil society organisations.

1.2. Sagrera megaproject: what it was and how it attracted criticism

Located north-east of Barcelona, the station was to be built over a cluster of railway lines in a trench running through working-class neighbourhoods. The goal of the public agency in charge of the project (BSAV − Barcelona Sagregra Alta Velocida) was that the station would connect a number of rail systems: the high-speed line, the regional lines (*Rodalies*) and two metro lines (Del Val 2003, Guerrero 2010). Sagrera was also a substantial urban megaprojet (an initial €700 million earmarked), forming the heart of a 164 hectare residential and office district. A 40 hectare garden would cover the railway lines and form a green corridor in the city (Alda y Jover 2014, Cumplido 2014). In one of the versions prior to the financial crisis, the end of this garden is marked by a 145 m skyscraper designed by "starchitect" Frank Gehry.

Sagrera gradually came to be seen as an illustration of three classic failings in high-speed station development: overdesign, overinvestment and overquality. Overdesign due to excessively ambitious design parameters, and consequently higher costs with no gain in performance. This is because the Sagrera project was intended to resolve both a transport problem and an urban design problem, i.e. the barrier formed by the sunken rails. Overinvestment due to the excessive size of the building, reflecting an overestimation of potential demand. Yet the initial plans for Sagrera showed volumes set for a ratio of users per square metre much lower than that of other comparable stations (Santos 2013). Overquality is "particularly visible, for example, in station buildings, often conceived more as a "monument" and going beyond the pure function of transport infrastructure". (Beria et al. 2018 p. 73). This is still apparent in the architectural emphasis of Sagrera, the span of the concourse vaults and the iconic gesture of the tower.

Since the end of the 20th century, the Sagrera project has been a source of hope for some of Catalonia's political and economic class, but the delays in its construction and the controversies over the excesses of the programme have divided opinion. Sagrera has sparked disillusionment for some, disappointment for others (Flyvbjerg, Garbuio and Lovallo 2009). For the disillusioned, Sagrera station remains uncompleted because of the financial crisis, which is blamed for having destabilised an initially viable project. They believe that the precrisis calculation based on expected land sales needs to be reformulated, the station should accordingly be reduced in size, but nevertheless finished. For those in the ranks of the disappointed, Sagrera symbolises the waste of public money (Romero et al. 2018) as well as an example of the "political capture of infrastructures" (Bel et al. 2014).

2. 1990s TO 2000s: SAGRERA NARRATIVES AND SPATIAL IMAGINARIES

The secret of the persistence of a controversial attachment to this project lies in its capacity to sustain competing spatial imaginaries. The successive states of this project reflect the constantly changing narratives of the stakeholders and call upon spatialities, scalarities, positionalities and relationalities that are diffuse and contradictory.

2.1. Sagrera's competing scalar narratives

Megastation projects are mediated by ways of reading space (Fachinetti Manonne 2016). These projects draw upon spatial schemata, some of which can be understood as sought-after representations, "desiring images" or, following Sara González, urban and economic scaling narratives (González 2006) which have drawn upon varied paradigms of rail corridors topology (Libourel 2016).

The positioning and interactions of Sagrera station have corresponded over time with four distinct models (Figure 1). First, in the 1980s, when Barcelona was developing projects associated with preparations for the 1992 Olympic Games, the station would be one of the termini on an exclusive corridor starting from Madrid (Buhigas 2013). Then, from the mid-1990s onwards, linking with a French project for a high-speed line stretching from Montpellier in France, the high-speed rail line was envisaged as running between Madrid and the French border. Sagrera thus became a main through station on a cross-border axis undergoing a structural transformation from a tourist route to a metropolitan corridor (Cuadrado-Ciuraneta and Dura-Guimera 2018). However, this second vision was controversial and the project was postponed for a number of reasons.

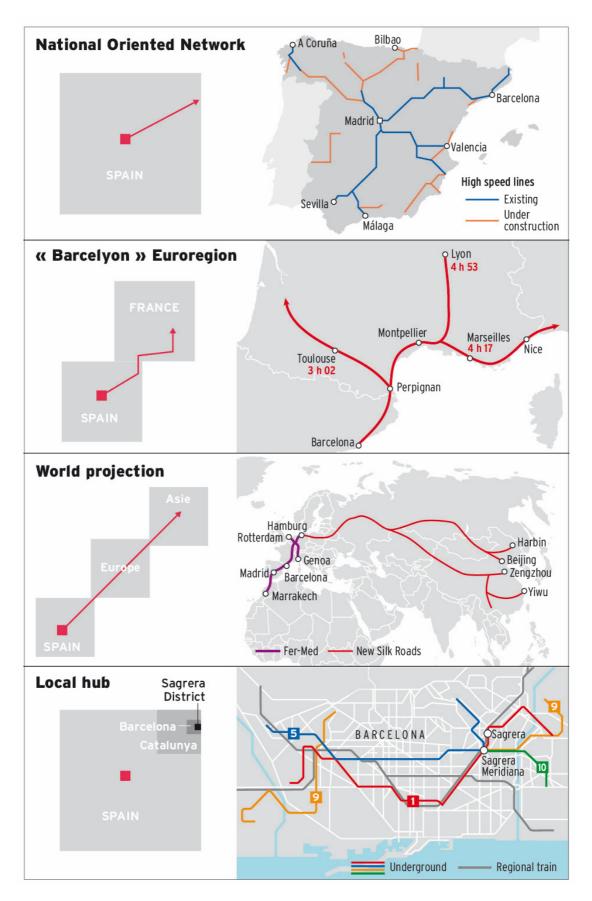


Figure 1. Sagrera conflicting multiscalar railway network projections Sources: PEIT, Ferrmed, Libourel 2016 and personal adaptation.

First, in technical terms, the building of the line under Barcelona would cause land subsidence under Sagrada Familia Cathedral and sparked a "nimby" controversy: should the HS line run through the centre of Barcelona (Rodriguez et al. 2012) or should it reuse a rail axis in the north of the metropolis, thus neutralising the Sagrera project? Since the existing Sants station was ready to handle the Madrid line, already opened in 2008, the Sagrera station project became less urgent and perhaps less necessary. At the same time, the French government announced that the Montpellier-Perpignan HS line would not be built before 2040 because of the crisis, thereby diminishing the prospects for cross-border development. Nonetheless, several stakeholders became even more committed to the completion of Sagrera and introduced a third narrative (Ferrmed 2009). They advanced the idea of Sagrera as an infrastructure that would position Catalonia as a key player in the continental corridor uniting Africa and Northern Europe, running along the Mediterranean coast from Gibraltar to the Rhône Valley (Öberg et al. 2018). Two narratives in fact emerged out of this idea. One was regional in focus: the station would reinforce an urban system forming a cluster from Valencia to Montpellier, guaranteeing Barcelona's preeminence in "Catalan lands". The second narrative advanced a continental perspective of territorial vertebration, in which Barcelona would stand at the apex of a metropolitan triangle (with Lyon and Genoa) in the Eurasian "one belt one road" corridor.

2.2. From corridor geography to vertebration policies

These four spatial configurations illustrate how the Sagrera project embodies perceptions of space that combine geographical concepts (territory, scale, spatiality) and political intentions (centralism, regionalism, sovereignism...). Focusing particularly on the concept of vertebration, Pryterch has shown that specific autonomous communities define "geographical configurations" and employ a "territorial grammar" in their negotiations with the Spanish state in order to justify the need for infrastructure (Pryterch 2010). According to a structuralist reading of the territoriality of transport systems, these communities see the railway as giving a preferential direction, a consistency and a structure to a given territorial substance. In FERRMED and Catalan government claims about Sagrera, vertebration automatically, not to say magically (Hall 2009), generates "transboundary macroregionalism" in Catalan lands, realising and reinforcing pre-existing economic, social and cultural relations. Vertebration helps us to understand how Sagrera is incorporated into an assertion of centrality in the dynamics of Europeanisation and of globalisation. With this future station, as with El Prat airport, the cruiseline terminal and the Freeport, Valencians and Catalans "are looking beyond the traditional political scales to restructure the Mediterranean coast as a relational space through communications, transport and the economy" (Pryterch & Boira 2015, p. 1544). This head-on collision between the Spanish and Catalan narratives caused – with the shock of the 2008 crisis – the shipwreck of this grand project.

3. 2008 - 2014: SAGRERA AND THE CRISIS POLITICAL CAPTURE AND INFRASTRUCTURE RESCALINGS

This part explains how it became very difficult to pursue the Sagrera project during the crisis, in relation to decisions over high-speed rail (Ureña, Beñegas, Mohíno 2017). It forced a reduction in public budgets and at the same time led to an exacerbation of scaling narratives, making this project an excellent prism through which to analyse the political capture of infrastructures and the contradictory intentions of infrastructural rescaling.

3.1. The megaproject, hostage to a succession of political deals

With regard to the financial structure of the Sagrera megaproject, in the early 2000s BSAV was relying on public funding (an initial €700 million earmarked) combined with earnings from the conversion of railway land into real estate programmes (applying a well-tried Japanese model (Tiry Ono 2018)). However, the crisis frightened off expected private investors. In order to obtain the €287 million anticipated from the sale of the building land above the tracks and around the station, a core amount of public money was required, which depended mainly on the Spanish state and the Catalonian *Generalitat*. Bargaining over Sagrera bargaining can be broken down into a series of stages.

The first key moment of this negotiation played out within the Socialist party from 2006 to 2010. At this time, José Luis Rodriguez Zapatero was head of the Socialist government (2004-2011), José Montilla Socialist president of the *Generalitat* (2006-2010) and Jordi Hereu Socialist mayor of Barcelona (2006-2011). There was therefore an alignment of Socialist forces in the highest positions. At this stage, Sagrera can be understood as a gift from the Madrid Socialists (PSOE) to the Catalan Socialists to reinforce the PSC's support for a Zapatero government very much weakened by the attacks of the Popular Party. The central government undertaking on Sagrera was a condition for the Catalan Socialist Party's vote in favour of the 2009 austerity budget (Trullén 2010).

The second key moment came in early 2011 with the arrival of Artur Mas at the Generalitat. Mas founded his political strategy on the notion of the "fiscal deficit" (the difference between the state's tax revenues from Catalonia and state funding to the region). He called for "infrastructure catch-up" for delayed infrastructure investment (Baron & Loyer 2015) and Sagrera was one of the key points in an additional clause added to the Statutes of Catalonia (Adicional Tercera del Estatuto), which refers to Catalonia's right to draw on the national budget for the purpose of infrastructure catch-up. But the government headed by Mariano Rajoy (prime minister from 2012), allied with Aragon, Castilla la Mancha, Castilla Leon and other Popular Party led autonomous communities, stopped the project, in part because of the crisis, in part because they were advocating for a trans-Pyrenean axis to connect Spain with Europe. The government trick to combat the Mediterranean high-speed coastal axis and its associated stations (including Sagrera), was to hold back from modernising a 43 km single-track section between Catalonia and the Community of Valencia, specifically at the city of Vandellos, making it a bottleneck for the Mediterranean rail route. But a few months later, as the political crisis reached a peak between Spain and Catalunya, the government made another proposal to the government and citizens of Catalonia. In the one up to the regional elections (27 September 2015) and general elections (20 December 2015), the Spanish government pulled out all the stops. President Rajoy promised the Generalitat de Catalunya to "finish the station for 2019" if Catalonia would give up its secessionist plan.

3.2. Crisis, public-private collaboration and paradoxical contractions and expansions of the Sagrera programme

The political trial of strength between Madrid and Barcelona coincided with a reduction in the leeway for public action, leading to contradictory directions in the governance of the megaproject during the crisis. From a public policy perspective, overdesign, overinvestment and overquality were evident in the Sagrera project and restoring it to a more reasonable scale was a necessity. However, hardening its position, the *Generalitat* envisaged "disconnection" from Spain by means of infrastructures and sought to develop the project further to embrace new functions and maintain its attraction for investors.

Urban shrinkage is a process that simultaneously presupposes, mediates and is

presented as the result of changing social relations and their concomitant feedback effects, embedded in particular spatial and historical contexts (Haase et al. 2014). Sagrera illustrates this concept, as budget cutting was a necessity after two years of state underinvestment in infrastructures (the Spanish infrastructure budget fell by 30% in 2011, then by 45% in 2012). In 2013, ADIF recognised that the budget allocated to the station was €255 million and that 345 million would have to be found in the private sector, otherwise ... the programme would be cut by half. A new version of the Sagrera megaproject was published, with a smaller concourse, reduced surface cover over the tracks, one less platform, and narrower street access to the station (Figure 2). The effect of this contraction was paradoxical: the project expanded. Since the intended international investors backed off, taking the view that the new project no longer offered a guarantee of increases in land values, Barcelona Municipality gave the programme a neoliberal makeover, extending the retail component to 22,000 m² and converting the public garden over the tracks into a 30-year theme park concession. This attempt also failed and left the megaproject frozen until the emergence of new political and economical conditions in 2015.

4. 2014-2019: SAGRERA, AN ISLAND IN BARCELONA'S URBAN FABRIC?

The potential and pitfalls of the relaunch of the Sagrera megaproject should be understood in the light of two specific postcrisis conditions specific to Barcelona: the economic recovery and the new political cycle initiated by the arrival of Ada Colau as mayor. The establishment of the Barcelona en Comù citizen platform in May 2015 opened a new chapter in the history of Spanish municipalism and marked another attempt at the political capture of Sagrera. "Finish Sagrera" became a political warcry in the city, but the strategic significance of the infrastructure, its alignments with the existing city, its integration into ongoing processes of urban revitalisation, would be redefined.

A number of factors explain the Mayor's involvement in this issue. With the return to growth, developers were already beginning a few real estate operations in the area. The state had also reopened credit lines and the project was slowly getting underway again. The Mayor therefore used the station project to break her political isolation and to insert herself into the confrontation between the central and the Catalan government. Completing Sagrera station would make her a bigger player and position her as a reliable interlocutor with Madrid. Sagrera was also an instrument for leveraging two strategic goals (transport and urban renewal) at two scales (the metropolitan and the municipal), albeit with continuing frictions and contradictions.

41. La Sagrera as a node: Network insularity versus metropolitan connectivity

As Figure 3 shows, Sagrera is neither in the centre nor in the periphery. At a strategic point in the city, set back from the coastal axis, the Sagrera railway site connects Barcelona with the eastern districts of Maresme and the Besos. The completion of the Sagrera megaproject can therefore be seen as a key element of long-term planning for the whole metropolis (Estela Barnet 2018). It can be used as a planning tool and as a means to enhance mobilities, to upgrade housing and public space, and to achieve greater economic diversity in the outer suburbs.

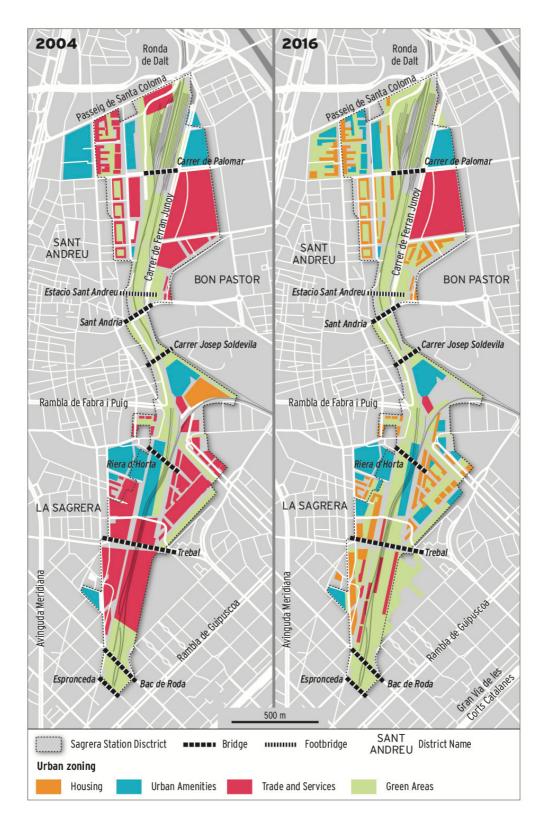


Figure 2 .Urban development program associated to Sagrera Station before / after 2008 crisis
Source : Barcelona Sagrera Alta Velocidad Agency

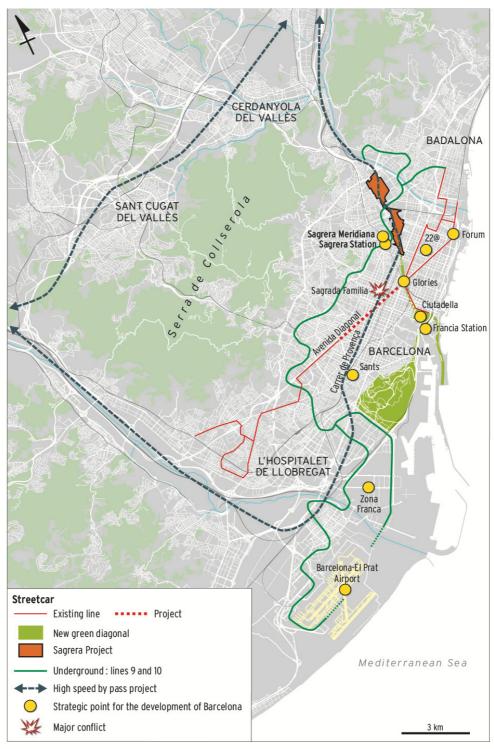


Figure 3. Sagrera in Barcelona transport network and urban tissues
Source: Ferrocarrils de la Generalitat / Transports metropolitans de Barcelona
Legend: The location of high speed line throughout Barcelona metropolitan area, after having evacuated the possibility of a peripheral station, has been subject to controversy in the early 2000's.

On the other hand, the megaproject's integration with recent transport infrastructure is somewhat ambiguous. While the flow of investment into high-speed rail has stopped, investment in metropolitan transport is now a unanimously accepted priority. La Sagrera is becoming an open-air interchange hub, linking several lines and facilitating short- or long-range multimodal mobilities, but still without a clear connection with the future HS station. Metro and regional rail lines and stations are being redeveloped within a radius of one kilometre around the future main station. Street reclamations have facilitated walkability in the districts of La Sagrera (redesign of Calle Garcilaso) and Sant Andreu (remodelling of Gran Carrer de Sant Andreu) (Marquet and Miralles 2015) and a walkway over the tracks now connects the two zones, so open-air connections between the metro and regional lines have been facilitated (a 5 minute walk between Sant Andreu Comtal and Sant Andreu station). The long and difficult completion of metro line 9 made Sagrera Meridiana a primary route into the city and vehicle flows in transit are regulated by "traffic calming" on main arteries (avenida Meridiana). While this has created a district of high mobility, these projects interact poorly with Sagrera's megaproject, which appears superimposed, obsolete and isolated.

42. La Sagrera as a place: contrasts and conflicts between megaproject and urban development trends

The rapid urban regeneration in the two districts adjacent to Sagrera also raises the question of the spatial and functional links between the HS station and the urban fabric (Viana 2017). The answers, once again, reflect the reality of an almost total disconnect at both metropolitan and local scale.

Barcelona is re-initiating its metropolitan plan by redefining the built fabric and the functions of the post-industrial zone along the Besos River (*Plan estrategic metropolità* 2025). The perimeter of this programme is largely contiguous with the station megaproject, and the two projects are rivals in the quest for a long-term increase in land and real estate values (Marfull Pujadas 2017). For example, both the Sagrera and Besos projects envisage significant development of commercial activities, malls and leisure sites. Another example of metropolitan scale rivalry in planning concerns the hotel programmes. ADIF wants to generate value from the railway land it owns, whereas the municipality is very keen to reduce tourist density in the old centre, and has established priority zoning for hotel licences around the station plot.

The disconnect between the urban development of Sagrera and the surrounding urban dynamics is also apparent. The future station is located in suburbs with a strong working-class identity, undeniable residential attractiveness, a highly cosmopolitan ambience and architectural resources that are gaining heritage value. Sant Adreu, especially, has conducted regeneration operations that draw on its cultural dynamism, such as the rescue of a textile factory and its conversion into an arts hub in the 2000s (Balibrea 2001). More recently, Sant Andreu has become one of Barcelona's richest clusters in terms of livability and community life, and it ticks multiple boxes for density, diversity, intensity and proximity. Figure 4 shows the cultural sites located in former industrial premises (Nau Ivanow and more recently Nau Bostik), the recent creation of leisure facilities (a new library, a renovated and enlarged sports centre, a neighbourhood cultural centre), services (a nursery school, a shared intergenerational garden), housing (student residence, senior living facility) all only a few steps from the megaproject but lacking any functional connection.

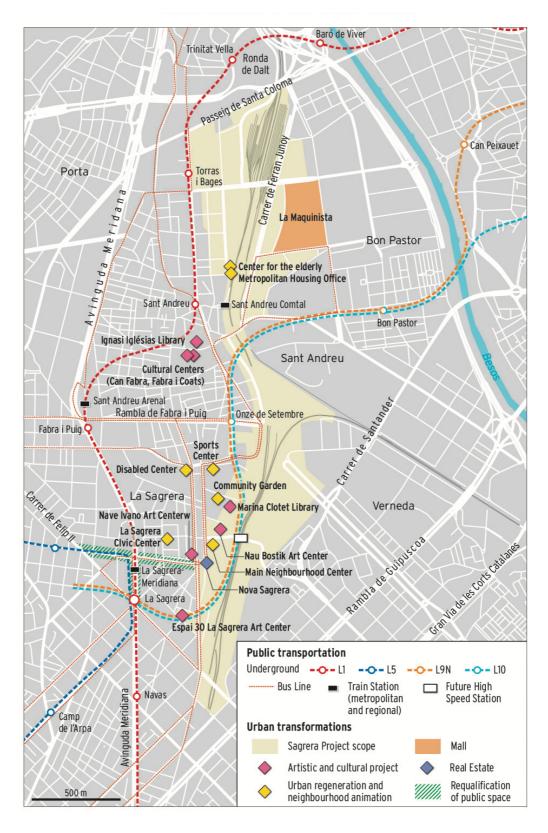


Figure 4. Urban regeneration process in Sagrera and Sant Andreu districts Source : N. Baron Survey

CONCLUSIONS

This article has proposed an interpretation of the incomplete and failed realisation of the Sagrera high-speed station megaproject. It has employed two main concepts – scaling narratives and political capture of infrastructure. It began by describing the changing attitudes to high-speed rail in Spain, showing that the former belief in high-speed stations as territorial boosters had given way to scepticism. Nonetheless, Sagrera project has continued to receive strong support in Catalonia, being used as a geostrategic instrument in the political confrontation with the Spanish state, though yielding poor results from an implementation perspective. The demonstration focused first on the topological variability of high-speed networks and the successive functions attributed to Sagrera. It then explained the geopolitical potential of such scaling narratives in the light of the concept of territorial vertebration through infrastructure. It described how the project has undergone economic ups and downs, government changes and associated stops and starts, public and private-led contractions and expansions, falling hostage to power struggles and consequently never being fixed and agreed.

In the context of municipal change in Barcelona in 2015, the final section focuses on the recent revival of Sagrera and Sant Andreu districts, and it addresses another paradox. On the one hand, for reasons of political self-assertion, the local institutions continue to keep the project alive by maintaining pressure on the public funders, behaving as if the station will ultimately be built and become operational. On the other hand, they encourage and support multiform dynamics of regeneration, but without developing either a specific discourse or a strategy of connection with the megaproject.

It is clear that the urban regeneration processes and the railway megaproject are following different paths because of the poor relations between the institutions involved. Through BSAV, Sagrera is in fact mainly governed by state actors with no commitment to the local area. Conversely, Sagrera and Sant Andreu are leftist districts led by progressive political forces at the municipal and district levels. Sant Andreu's projects are sustained by grassroots community movements that have long experience of citizen opposition to Sagrera project. These movements consciously turn their backs on it. BSAV and the local forces are thus pursuing different goals, reflecting different urban models, which produce different spaces.

This trend is likely to continue. During the campaign for the municipal elections, Ada Colau had a meeting at La Sagrera on 30 April 2019. The majority of her speech was dedicated to everyday questions, social inequalities and housing problems. New facilities and public equipments were promised, reflecting a cumulative approach to urban redevelopment. It is on this point that the article wishes to contribute to the scientific debate on high-speed stations and city dynamics. "High-speed fatigue", along with a shared discourse on failed megaprojects and other white elephants, are not just narratives, but bear witness to a real urban impact, as such projects accentuate the social and spatial fragmentation of urban spaces. In a decade or so, Sagrera runs the risk of forming an island of offices and luxury condominiums parachuted into a "Jane Jacobs" district (Delclos Miralles 2018). The megaproject lacks the booster effect that should come from its urban environment and, reciprocally, the regeneration investment scheduled by the municipality also misses the opportunity to invent a new kind of high-speed station district in southern Europe, an infrastructure that is open to its social and urban environment. This is also an opportunity missed for Barcelona to regain its status as a high-profile model in matters of infrastructure, territorial innovation and place-making. Sagrera lessons should be heard on the other side of the border, as ghost high-speed stations are emerging in Montpellier (in 2018) and in Nîmes (in 2019).

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REFERENCES

- Albalate, D., Bel; G., 2011. Cuando la economía no importa: auge y esplendor de la Alta Velocidad en España, *Revista de Economia Aplicada*. 19, (55): 171–90.
- Alda y Jover Arquitectos, 2014. Parque Lineal de la Sagrera Sant Andreu *Paisea: revista de paisajismo*, 30, 78-81.
- Balibrea, M P. 2001, Urbanism, culture and the post-industrial city: challenging the Barcelona model *Journal of Spanish Cultural Studies*, 2, (2) 188 210.
- Baron N. Loyer B., 2015. *L'Espagne en crises : une géopolitique au 21^e siècle*, Armand Colin, Paris.
- Bel i Queral, G. 2010. España, capital París: origen y apoteosis del Estado radial: del Madrid sede cortesana a la capital total Barcelone, Barcelona, Destino.
- Bel, G., Estache, A., Forcaud, R., 2014. Transport infrastructure failures in Spain: mismanagement and incompetence, or political capture? In Søreide, T., Williams, A. (Eds.), *Corruption, Grabbing and Development. Real World Challenges.* 129 139 Edward Elgar, Cheltenham.
- Bellet, C, Ureña JM, 2016. High Speed rail transport and its implication for different cities and territories, *The Open transportation journal*, 10, 1-6.
- Beria, P., Grimaldi R., Albalate D., Bel G. 2018. Delusions of success: Costs and demand of high-speed rail in Italy and Spain *Transport Policy*, 68, 63–79.
- Bruinsma, F.; Pels, E.; Priemus, H.; Rietveld, P. and Van Wee, B. 2008. *Railway development. Impact on urban dynamics*. Physica-Verlag, Amsterdam.
- Buhigas, M., 2013. Barcelona La Sagrera in Terrin JJ (dir), *Gares et dynamiques urbaines, les enjeux de la grande vitesse*, 30-52, Marseille, Parenthèses.
- Cuadrado-Ciuraneta, S., Dura-Guimera, A., 2018. From tourism to metropolization: analysis of the driving forces of urban transformation along the northern costa brava (Catalonia, Spain) *European Journal of Geography*, 9, 1.
- Cumplido, Valls M. 2014., La Sagrera-conector verde urbano *Paisea: revista de paisajismo*, 30, 76-7.
- Cruz Villalón, J. 2017. La política ferroviaria en España. Balance de su planificación y ejecución de los últimos treinta años *Boletín de la Asociación de Geógrafos Españoles* 74, 333-359.
- Dalakoglou, D., 2016. Infrastructural gap City, vol. 20, n° 6, 822-831
- Delclòs-Alió, X., Miralles-Guasch C. 2018, Looking at Barcelona through Jane Jacobs's eyes: Mapping the basic conditions for urban vitality in a Mediterranean conurbation *Land Use Policy*, 75, 505–517.
- del Val, Y., 2003. La nueva estación multimodal de Sagrera, estrella de la red de transporte p úblico de Barcelona. *Via libre*, 469, 16-18.
- Esteban i Noguera, J. 1994. La Sagrera-Sant Andreu. *Geometria: revista semestral de arquite ctura y urbanismo*, 19, 38-44.

- Estela Barnet, O, 2018. La planificació estratègica metropolitana a Barcelona: cap a una tercera generació de plans *Papers (Review IERB Institut d'Estudis regionals i metropolitans de Barcelona*, 61, 43-51.
- Fachinetti Manonne, V. 2016. *La territorialisation des gares à grande vitesse*, Mémoire d'Ha bilitation à diriger des recherches, Université de Dijon, 2 vol.
- FERRMED, 2009, Ferrmed great axis rail freight network and its area of influence, Brussels , European Union Ten T, 208 p.
- Flyvbjerg, B., Garbuio, M., Lovallo, D., 2009. Delusion and deception in large infrastructure projects: two models for explaining and preventing executive disaster. *California Management Review* 51, (2): 170–93.
- González, S., 2006. Scaling narratives in Bilbao: A Cultural Politics of Scales Approach to the Study of Urban Policy International. *Journal of Urban and Regional Research* 30, (4), 836–57.
- Guerrero, B. 2010. La Sagrera, actuaciones para la Barcelona del futuro. *Via libre*, vol 5, 57-70.
- Haase, A., D. Rink, Grossmann K., Bern M., Mykhnenko V. 2014, . Conceptualizing urban shrinkage. *Environment and Planning A* 2014, 46, 1519 34.
- Hall, P., 2009. Magic Carpets and Seamless Webs: Opportunities and Constraints for High-Speed Trains in Europe, *Built Environment*, 35, (1), 59-69.
- Libourel, E, 2016, *El Corredor Mediterráneo : Desencuentro político y territorial*, Valencia, Publicaciones de la Universidad de Valencia, Valencia.
- Marquet, O., Miralles Guasch C. 2015 The walkable city and the importance of the proximity environments for Barcelona's everyday mobility, *Cities*, 42, 258-66.
- Öberg, M., Nilsson KL, Johannson CM, 2018. Complementary governance for sustainable d evelopment in transport: The European Ten T Core networks corridors", *Case studies o n Transport Policy*, 6, (6): 674-82.
- Pryterch, D., 2010, "Vertebrating the region as networked space of flows: learning from the spatial grammar of Catalanist territoriality", *Environment and Planning A*, vol 42, 1537-1554.
- Prytherch, D., Boira i Maiques, V. 2015. Mediterranean regionalism from territory to trains: Spatial politics and planning of macro-regions and transport networks in Spain *Space and Polity* 19, (2):110-31.
- Rodríguez Escribano, RR, Blanco Zamora A., 2012. Estudio de la interacción entre las obras del templo de la Sagrada Familia y las del túnel de Alta Velocidad entre las estaciones d e Sants y La Sagrera, en Barcelona *Revista de Obras Públicas: Organo profesional de l os ingenieros de caminos, canales y puertos*, 3529, 7-30.
- Romero, J., Brandis, D., Delgado Vinas, C., Garcia Rodriguez, JL, Gomez Romero, ML, Olcina, J., Rullan, O., Vera Rebollo, JF, Vicente Rufi, J., 2018. Aproximación de la geografía del despilfarro en España: balance de las ultimas dos decadas, *Boletín de la Asociación de geografós españoles*, 77, 1-51.
- Santos Ganges, L., 2013, La ville et le système ferroviaire. Spéculation publique dans les grands chantiers urbains, in Coudroy de Lille 1., Vaz C. & Vorms Ch. (eds.), *L'urbanisme espagnol depuis les années 1970. La ville, la démocratie et le marché*, 203-215, Rennes, Presses Universitaires de Rennes.
- Tiry Ono, C. 2018 L'architecture des déplacements, Gares ferroviaires au Japon, Paris, In Folio, Collection Archigraphy Poche.
- Trullén J, Boix R., Galletto V., Fíguls M., Pérez M., Pérez N., Font T., Marull J., Domenec E., 2010, *Consecuencias económicas y territoriales de la estación de La Sagrera*, Ajuntament de Barcelona, 149 p.

- Ureña, J. M. (ed.) 2012. *Territorial Implications of High Speed Rail A Spanish Perspective*. Adershot, Ashgate.
- Ureña JM, Beñegas M., Mohíno I. 2017. High-Speed Rail in Spain: Territorial Management and Sustainable Urban Development in Pérez Henríquez B. L. & Deakin E. *High-Speed Rail and Sustainability: Decision-making and the political economy of investment*, 80-106, Abingdon, Routledge.
- Viana Suberviola, E., 2017. Ferrocarriles y transformación urbana en Barcelona, *Boletín de la Asociación de Geógrafos Españoles*, 74, 35-59.
- Vickerman, R., Spiekermann, K., Wegener, M. 1999. Accessibility and economic development in Europe. *Regional Studies*, 33, (1):1-15.