International Symposium on High-speed Railway and Regional Development

高鐵與區域發展國際研討會







Session 1 High-Speed Rail and Regional Impacts-Learning from Europe

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The long story of HSR in France: Lessons and future prospects

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Presentation

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Main topics: relationship between transports (railway infrastructures and railway service), territories and regional planning.





Introduction

Plan of the presentation:

Part 1 - The mains characteristics of HSR in France

Part 2 – Geographical aspects

Part 3 – Impact on various socio-economic aspects

Part 4 – Latest elements about French HSR and traditional railway

Part 1 – The mains characteristics of HSR in France

Mains features of French HSR at the beginning of the 1980s (Auphan, 2012):

- A new infrastructure: it enables 250 km/h, then 320 km/h
- A new equipment: The TGV (High Speed Train)
- New methods of train operation





Lettre du cheminot



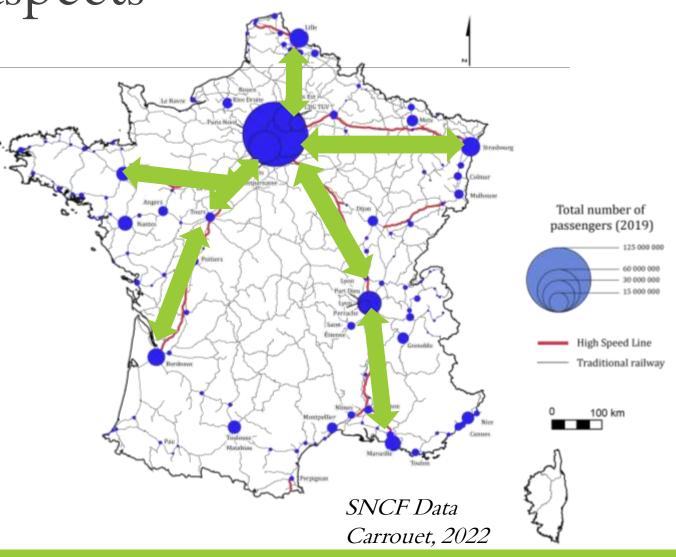
At the beginning, the main objective: building the more profitable lines.

The Paris-Lyon line: 33% of overall railway in France (Auphan, 2012).

The French HSR network: a radial model, in shape of a star (Auphan, 2012; Libourel, Zembri, 2017)

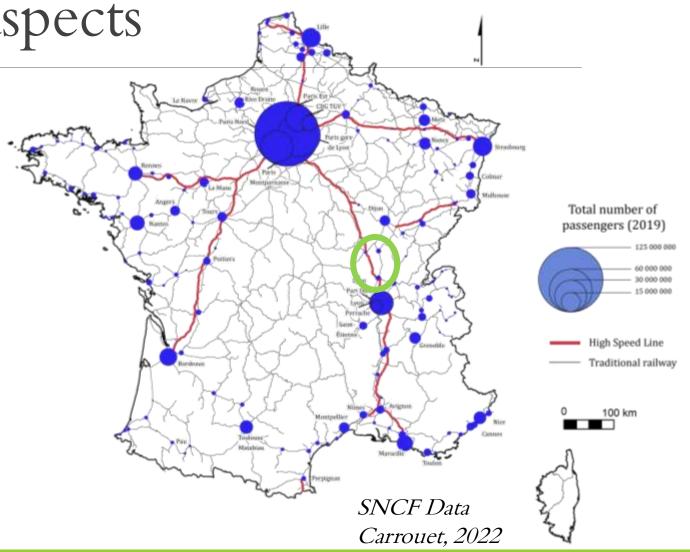
2 kinds of HSR stations (Troin, 1995; Richer, Facchinetti-Mannone, 2011):

- Station on traditional railway
- Station located on HSR



• A station on HSR less impacts travel time

• The French HSR model is based on a compromise between effectiveness (high speed) and regional planning (Carrouet, 2013)



A station on HSR impacts travel time

• The French HSR model is based on a compromise between effectiveness (high speed) and transport planning (Carrouet, 2013)

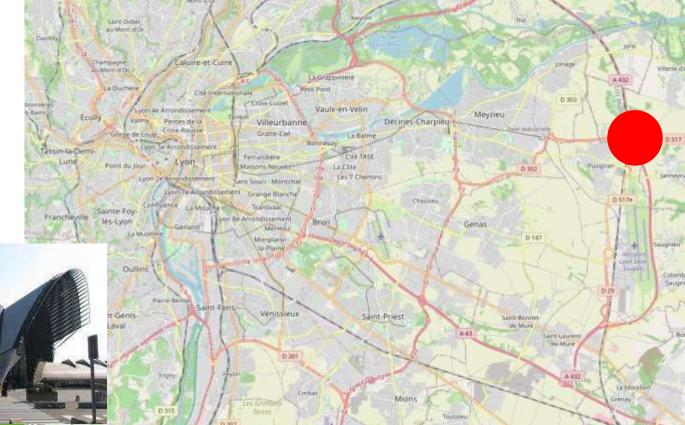
• 3 types of stations according to the location:

Structurae

• Close to a major infrastructure

The railway station Lyon Saint-Exupery TGV (inside the airport)

OpenStreetMap



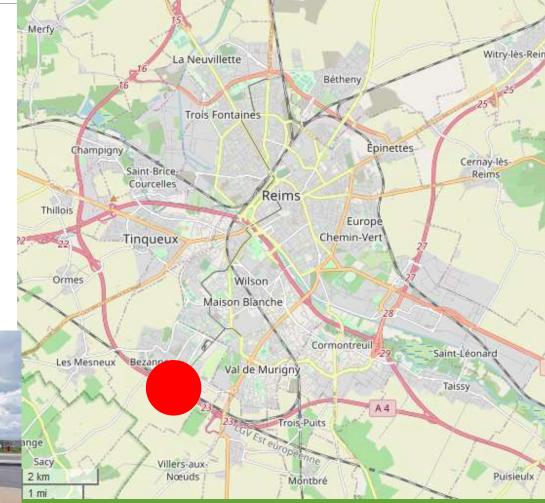
The railway station Champagne-Ardenne TGV

A station on HSR impacts the travel time

The French HSR model is based on a compromise between effectiveness (high speed) and transport planning

• 3 types of stations according to the location:

- Close to a major infrastructure
- Close to urban fabric



A station on HSR impacts the travel time

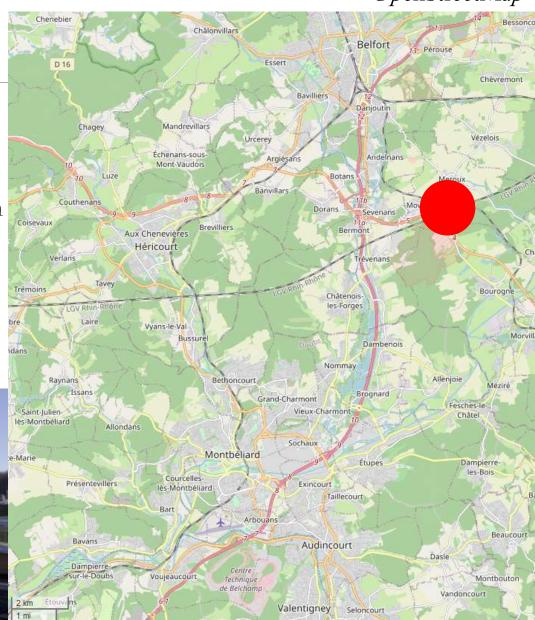
The French HSR model is based on a compromise between effectiveness (high speed) and transport planning

- 3 types of stations according to the location:
 - Close to a major infrastructure
 - Close to urban fabric
 - Between two cities

The railway station Belfort-Montbéliard TGV



OpenStreetMap



Some figures about HSR in France (2019) (ART, 2019):

- 1,88 billion of passengers per kilometers
- 90% of long travels were made by TGV
- At the moment : 2 800 kilometers of HSR (only 10% of French railway)

Various impacts of HSR

• Immediate effects : effects of building on local company (employment and hotel for example)

Medium and long term effects

HSR Bretagne-Pays de la Loire (Le Mans-Rennes)

Funding: 3,3 billions euros with 1,8 billion of public subsidies

(https://www.ere-lgv-bpl.com/projet/financementauthorities)

Some key highlights about French HSR

• Success of land developpement project is weaker than authorities expected (Facchinetti-Mannone, 2003, 2006, 2009, 2010)

- HSR can marginally affects the development of territory
- The success of planned projects depends on territorial context and the strategies of local authorities (Bérion et al, 2007)

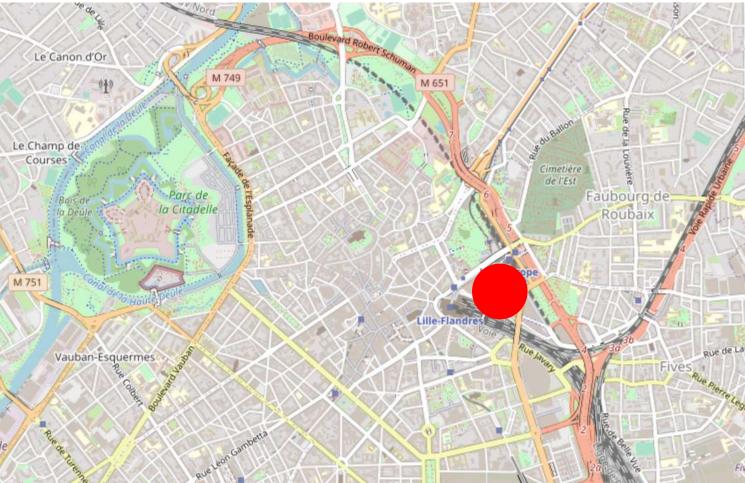
• The case of central rail stations

OpenStreetMap



Les Echos

Euralille quarter station (Lille)



• The case of central rail station

OpenStreetMap



• The case of rail stations located in suburban areas

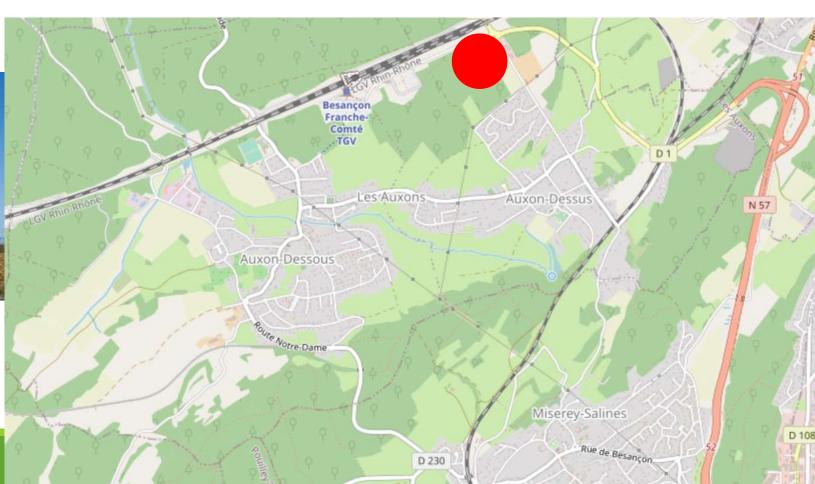


• The case of rail stations located in suburban areas

Besançon Franche-Comté TGV



Arthur-Loyd



• Territorial marketing campaigns

Ad slogan: «The center of the world is in Perpignan»







Ad slogan : « Here too, we are hipsters »

Geoconfluences

passezalouest.bzh

Part 4 – Latest elements about French HSR and traditional railway

• In 2017, the French State decided to stop projects of HSR

3 mains reasons:

- the building of HSL is too expensive,
- the plan of 2007 was based on clientelism (Frémont, 2019),
- the traditional railway had not been maintained during several years. (Zembri, 2020)

• Recently (september 2021), the French President and his government announced a new plan in the post-pandemic context

Part 4 – Latest elements about French HSR and traditional railway

- The main objectives:
 - Continue to invest in traditional railway
 - Keep the debt of railway sector
 - Plan the construction of new HSL

- Examples of new HSL : Bordeaux-Toulouse and first part of Montpellier-Perpignan
- Another significant element of context : the opening of competition in 2023 for French HSR sector



« It's an industrial, Les Echos environmental and regional planning gamble » (President Macron, september 2021)

Key highlights of French HSR

- 40 years later, HSR still represents some expectations about:
 - Accessibility,
 - Land development project
 - And regional planning
- Socio-economics effects depend on territorial context, the involvement of local and territorial authorities and their strategies
- Ambitions are currently lower than in the previous last decades
- In railway domestic transport, France is going to apply a mix of solutions (HSR, night train and the reduction of inland flight)

ATGV in front of Pyrénées (Canigou Massif, near Perpignan)



L'Indépendant

Thank you for your attention