

CULTURAL LOOM

A DATA-DRIVEN ANALYSIS
OF ANALYSIS OF CULTURAL
ACCESSIBILITY AND
TERRITORIAL INEQUALITIES
IN FRANCE

Meriem MOUWAFFAK

Ironhack Bootcamp
Data Analytics
January 2026



PROJECT OVERVIEW

Dataset:

88037 cultural infrastructures, across 21331 communes

French Ministry of Culture (2024):

~ 50% go out less than pre-COVID

Crédoc survey (October 2023)

3,000 French residents aged 15+



CHALLENGES AND OPPORTUNITIES



- Identify underserved market
- Inform engagement strategies
- Guide annual cultural funding
- Data makes inequality visible

DATA SOURCES AND INTEGRATION

BASILIC (Ministry of Culture)

+ 88000 infrastructures

Libraries, cinemas, theaters, museums ...

INSEE (National Institute of Statistics)

Geographic boundaries, population demographics,
administrative hierarchies

FILOSOFI (Income Database)

Median income, poverty rates, Gini index (inequality)



DATA ANALYTICS PIPELINE



- 3 government datasets
- SQL Database
- Python EDA
- Statistical analysis
- Additional visualisation

SQL DATABASE

SQL Database

- **Cultural venues (BASILIC):** 88,000 records with venue types, locations, management structures
- **Communes:** 35,000 French municipalities with population data
- **Departments:** 101 administrative divisions
- **Regions:** 18 French regions
- **Income data (FILOSOFI):** disposable income and poverty rates at commune level
 - 'Communes' and 'Iris'



EXPLORATORY DATA ANALYSIS



Approach:

- Statistical testing
- Visualization for pattern identification
- Evidence-based conclusions

KEY FINDING AND INSIGHTS



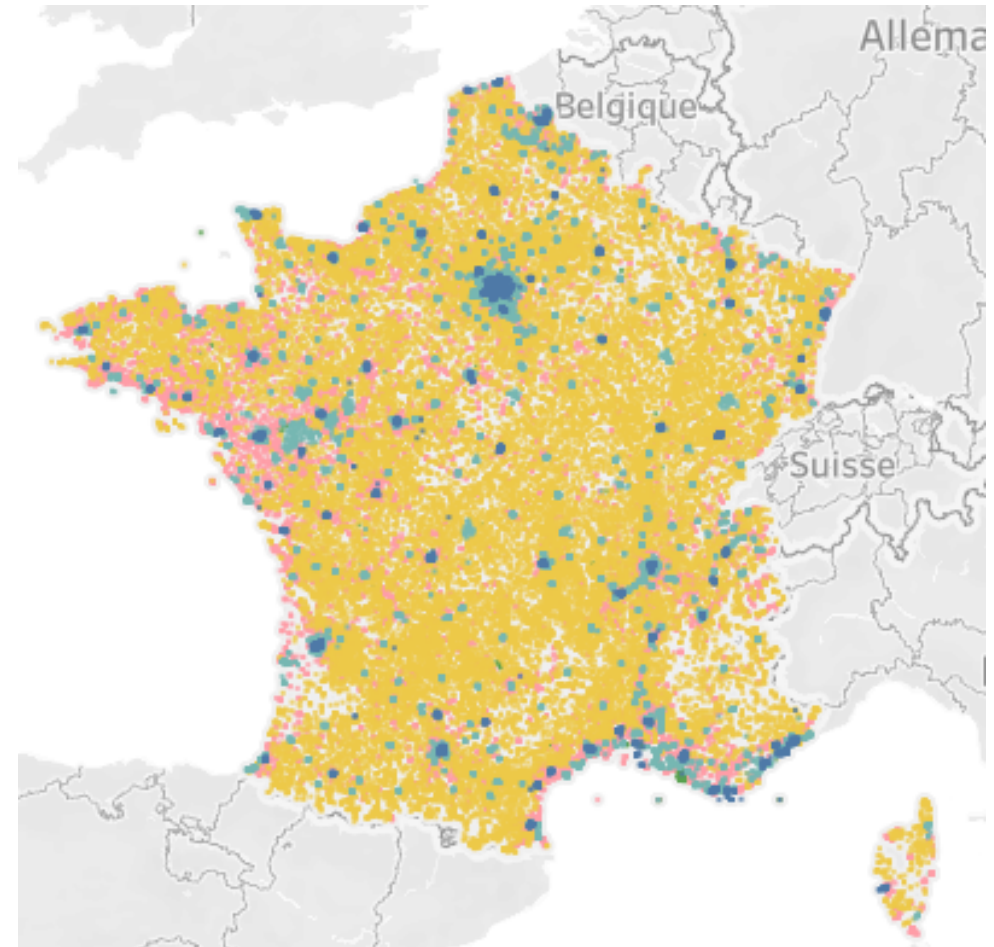
KEY FINDING AND INSIGHTS

Urban/Rural divide

2 - 3x difference in density

Urban Category

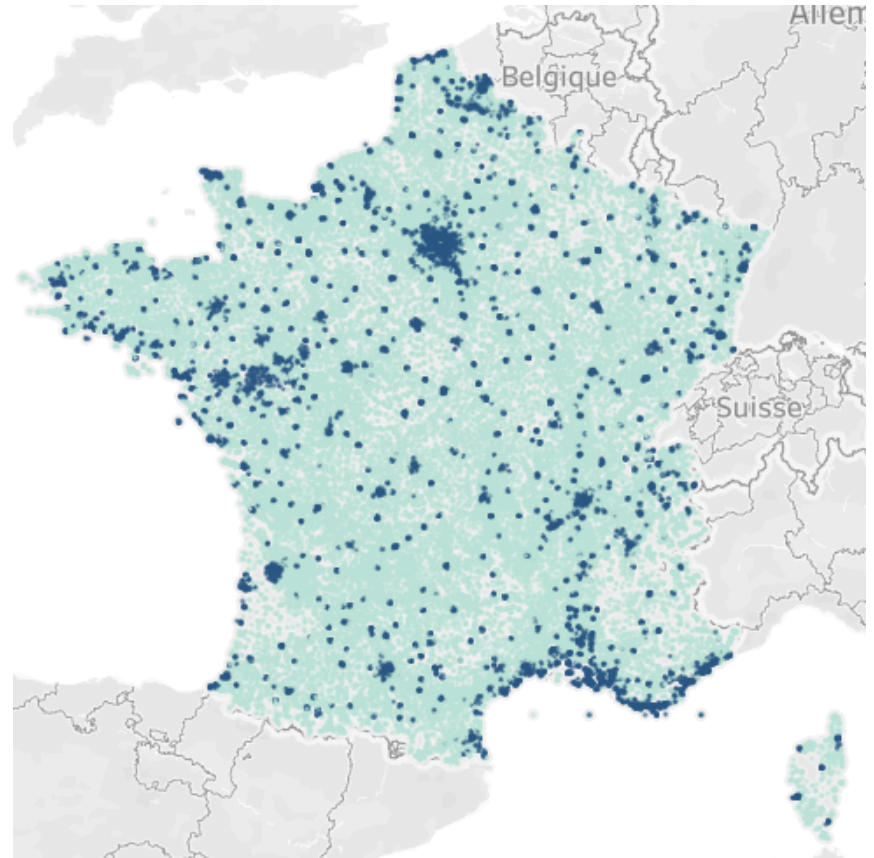
- Large Urban (>50k)
- Medium Urban (10k-50k)
- Rural (<2k)
- Small Urban (2k-10k)
- Unknown



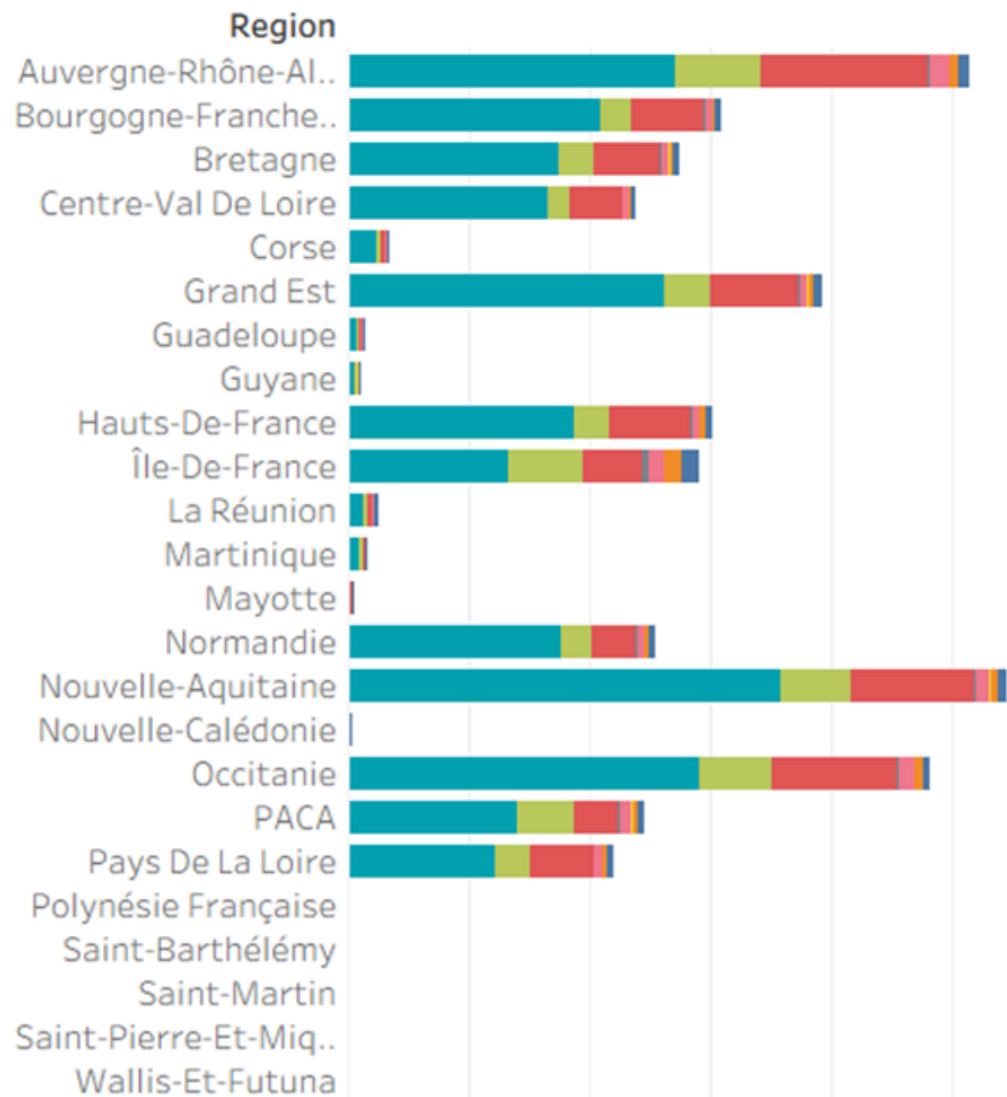
KEY FINDING AND INSIGHTS

Income correlation

Strong correlation between
income and cultural supply
at the commune level



KEY FINDING AND INSIGHTS



Cultural imbalance

Patrimoine :

+ 60% of all venues

(Librairies, museums, historical sites)

Domaine

- Archives
- Arts Du Spectacle
- Arts Visuels
- Cinéma
- Éducation Et Formation
- Lecture Publique
- Livre Et Presse
- Patrimoine

RECOMMENDATIONS AND IMPACT

- Mobile/digital cultural programs
- Target high-gap rural regions
- Address affordability barriers



CHALLENGES AND LEARNINGS

- Many-to-many relationships
- Integrating 3 datasets with different schemas
- Ensuring complete geographic coverage



FUTURE RESEARCH DIRECTION

- Recollection of data on private venues
- Cross-reference with transportation data
- Sociological field research integration
(Surveys, interviews)
- Analyze Ministry of Culture investments





THANK YOU

Project repository:

<https://github.com/mmouwaffak/cultural-infrastructure-index-fr>