

# An introduction to place-based analysis of literary texts: concepts and related work in spatial humanities

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Distant  *Reading*

# A humanistic definition of place

- Place refers to how people are **aware of/attracted to** a certain piece of space. A place can be seen as space that has a **meaning** (Tuan, 1977)
- Henri Lefebvre (1991), in his theory of space production, talks about the absolute and conceived space leading to a certain **lived space** which is associated to how **people experience space**
- In literary studies, Julia Kröger (2021) argues, through a case study, that **authors describe “lived space”** in their fictional works, they appropriate space somehow
- Studying space in fictional narratives enables to investigate the way authors, through the characters, **experience space and thus define place**.

# In geographic information science, places

- are identifiable and these identities are shared
- have locations which can be defined by arbitrary spatial relations, geometrically or linguistically
- belong to spatio-temporal networks
- participate in events

For further details, see **Purves, Winter and Kuhn, 2019**, <https://doi.org/10.1002/asi.24194>

# In geographic information science, places may have several components

- time (snapshot or period)
- location (direct or indirect, spatial relations)
- names (official, vernacular)
- nature (generic terms of place such as “road”, “bridge” are indicators of their function, categories are defined)

# The role of digital gazetteers for sharing knowledge about place

geonames.org

Nature/Function

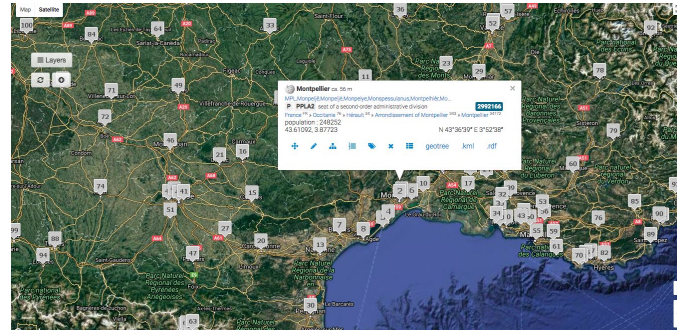
official, vernacular  
names  
alternative names  
names in many  
languages

Hierarchy

Population

Location

identifier



 **Montpellier** ca. 56 m  
MPL, Monpeljè, Monpeljè, Monpelye, Monspeulanus, Montpelhièr, Mo...  
**P PPLA2** seat of a second-order administrative division  
France FR » Occitanie <sup>76</sup> » Hérault <sup>34</sup> » Arrondissement of Montpellier <sup>343</sup> » Montpellier <sup>34172</sup>  
population : 248252  
43.61092, 3.87723  
N 43°36'39" E 3°52'38"

 geotree .kml .rdf

See also, <http://whgazetteer.org/>

# In fictional narratives, places can

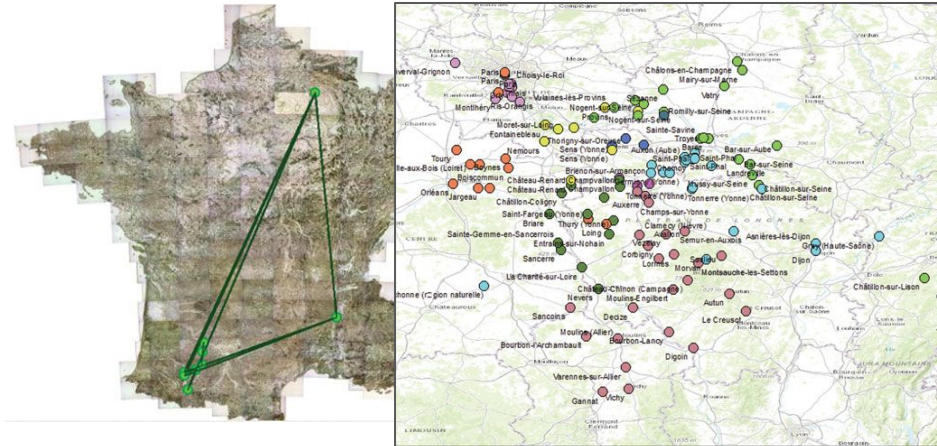
- be :
  - the precise place where the action takes place (a house, a village),
  - an area with several settings (a whole town, a region),
  - the places evoked (in dreams, in memory and according to an aspiration),
  - a spatial itinerary along which the characters move
- include references to real geographical space, as readers and authors are tempted by the possibility of anchoring texts in the real world in some way

# Spatial itinerary in text - role of spatial relations

- spatial relations (topological and cardinal) in language for describing indirect location and motion
- case study, an essay, Georges Lefebvre's *La grande peur de 1789* (1932), containing historical names and locations

## Excerpt from the South West

*“Vers l'Ouest, elle gagna les forêts de Chizé et d'Aulnay, semble-t-il, à moins que celles-ci n'aient constitué un centre d'émotion locale. ... Au Nord, on la trouve à Civray et à Vançais dès le 28, et, le 29, à Lusignan et à Vivonne : elle descendit le Clain, mais expira à Poitiers. ”*



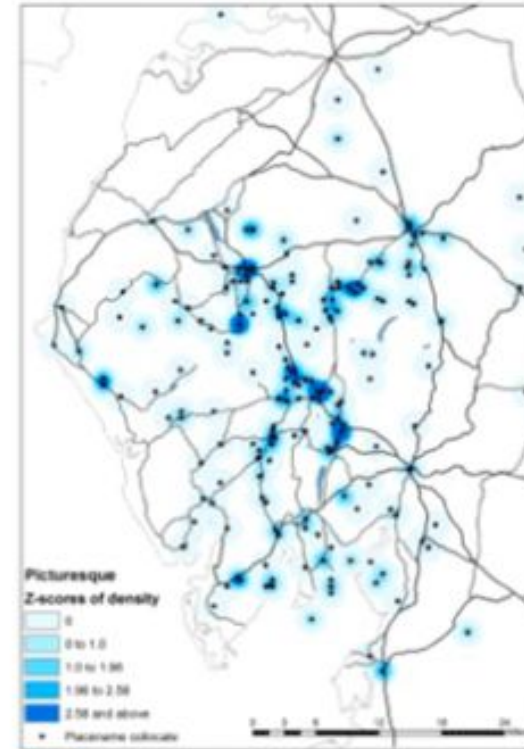
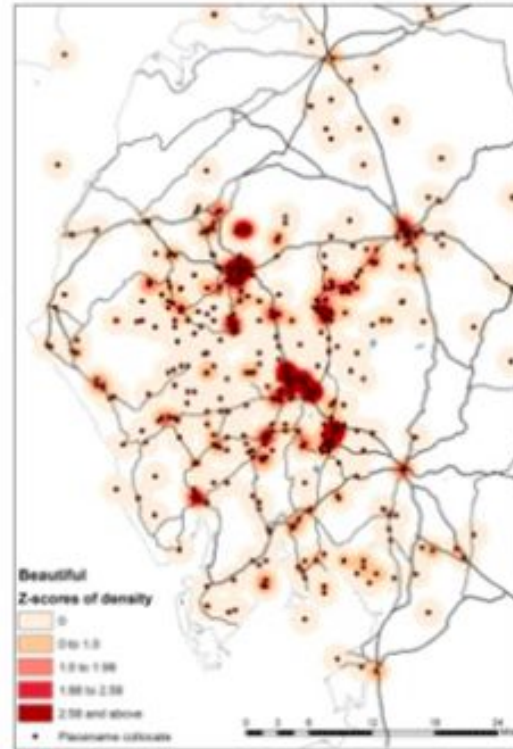
# Place in fictional narratives can also be characterised using chronotopes

- As a complement to the geographical map, Mikhaïl Bakhtin's theory (1978) privileges non-referential and relative cartography, where the places cited in text compose a graph
- In a chronotopical analysis of Suau de Varennes' *Mystères de Bruxelles* (1845-1846), which follows as model Eugène Sue's *Mystères de Paris* (1843), several chronotopes are defined:
  - structural: urban novel, Parisian novel, Brussels novel
  - thematic: posh street, fashionable business, bad neighbourhood to be cleaned up
- The map highlights the opposition between the city, its centre and its periphery, as well as the spatial proximity of social groups in an urban space that is still not very segregated.



## Geographical text analysis : Mapping the English Lake District

- GIS and **corpus linguistics**,
- travelogues of two English poets in 1769 and 1802 through the Lake District, this region as all England are described by qualifying adjectives,
- a concordancer allows for the analysis of context of place name in sentences in order to find terms belonging to a lexicon of qualifying adjectives (beautiful, majestic, ..)
- Heat maps are used to represent this information



*Spatial analysis with heat maps : adjectives  
in the context of place mentions in text*

# References

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# Practical demo

## (using Spacy in Python/Jupyter Notebook)

1. Load an existing NER model for English (other linguistic annotation is included, in particular POS tagging)
2. Read and apply this model to two sample texts: Jane Eyre and Bleak House

For each text:

- a. Display the NE automatically detected as “places names” (LOC, GPE, FAC)
  - b. Count distinct mentions
  - c. Correct some errors using rules and load these into the NER model and verify results
3. Display place names between both texts that are common (same spelling)
  4. Display adjectives automatically detected in texts
  5. Calculate and display concordances of NE in text, adjectives are highlighted
  6. Display place mentions and adjectives in the context of these mentions for both texts.

place mention		Jane Eyre	Bleak House
Paris	[genuine', 'warm', 'tired', 'destitute', 'poor', 'deep', 'sarcastic', 'happy', 'clean', 'wholesome', 'English']	[few', 'previous', 'fashionable', 'few', 'previous', 'cause"—cautious', 'more', 'much', 'particular', 'full', 'hospitable', 'rusty', 'little', 'full', 'gusty', 'little', 'own', 'imperfect', 'last', 'few', 'previous', 'fashionable', 'few', 'previous', 'cause"—cautious', 'more', 'much', 'particular', 'full', 'hospitable', 'rusty', 'little', 'full', 'gusty', 'little', 'own', 'imperfect', 'last']	
India	[hard', 'tough', 'final', 'similar', 'deep', 'relentless', 'premature', 'premature', 'ready', 'short', 'sharp', 'whole', 'void', 'slightest', 'Indian', 'pervious', 'sentient', 'much', 'premature', 'clear', 'free', 'married', 'kinder', 'considerable', 'resolute']	[great', 'many', 'handsome', 'English', 'curious', 'future', 'probable', 'great', 'many', 'handsome', 'English', 'curious', 'future', 'probable']	
Rome	[own', 'cordial', 'Italian', 'old']		[sure', 'young', 'classic', 'sure', 'young', 'classic']
Mediterranean	[whitewashed', 'happy', 'innocent']		[dear', 'old', 'dear', 'old']
Europe	[past', 'fresh', 'right', 'sweet', 'British', 'mannered', 'most', 'distant', 'mad', 'open', 'refreshed', 'glorious', 'sullied', 'filthy', 'peculiar', 'subdued', 'emphatic', 'best', 'ignorant']	[astonishing', 'little', 'second', 'grey', 'identical', 'interesting', 'oldest', 'astonishing', 'little', 'second', 'grey', 'identical', 'interesting', 'oldest']	
Scotland	[]		[military', 'old', 'military', 'old']
Turkey	[large', 'stately', 'purple', 'vast', 'rich', 'stained', 'lofty']		[great', 'last', 'last', 'thick', 'dingy', 'great', 'great', 'last', 'last', 'thick', 'dingy', 'great']
the West Indies	[]		[]
England	[sad', 'certain', 'new', 'splendid', 'West', 'Indian', 'large', 'gay', 'requisite', 'previous', 'unlikely', 'filthy', 'intellectual', 'faithful', 'mere', 'larger', 'free', 'honest', 'breezy', 'healthy', 'own', 'cold', 'dismayed', 'worst', 'true', 'Unchanged', 'unchangeable', 'plain', 'premature', 'main', 'equivalent', 'cold', 'leaves']	[same', 'dear', 'fashionable', 'glad', 'benighted', 'hot', 'motionless', 'little', 'eloquent', 'hopeful', 'greatest', 'National', 'other', 'own', 'marvellous', 'other', 'glad', 'first', 'young', 'beautiful', 'unmarried', 'same', 'dear', 'fashionable', 'glad',	

What we will obtain as result