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## Smart Metromountain: urban and mountain interdependence and physical-digital infrastructures as a tool for a new climate-resilient liveability

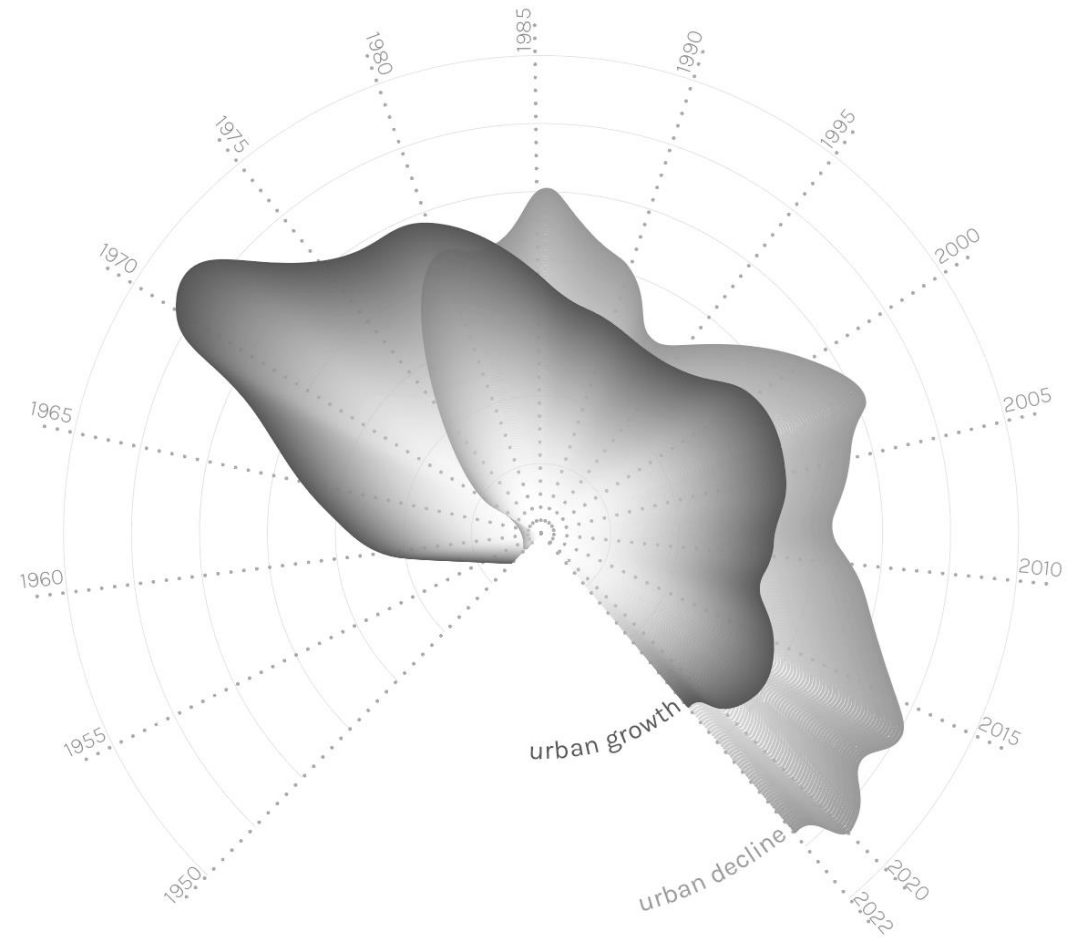
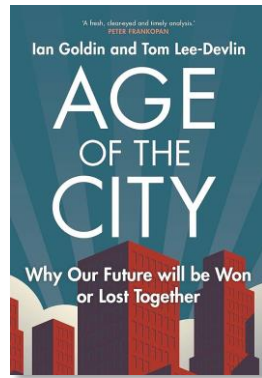
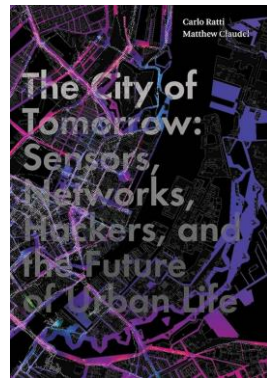
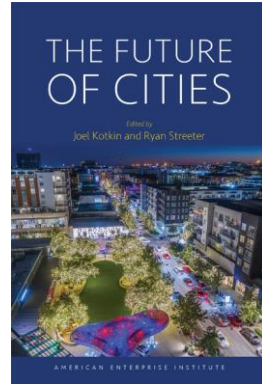
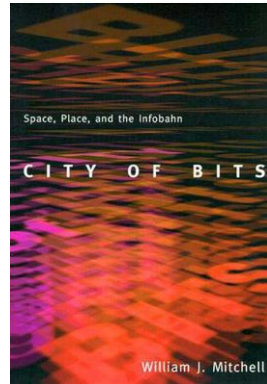
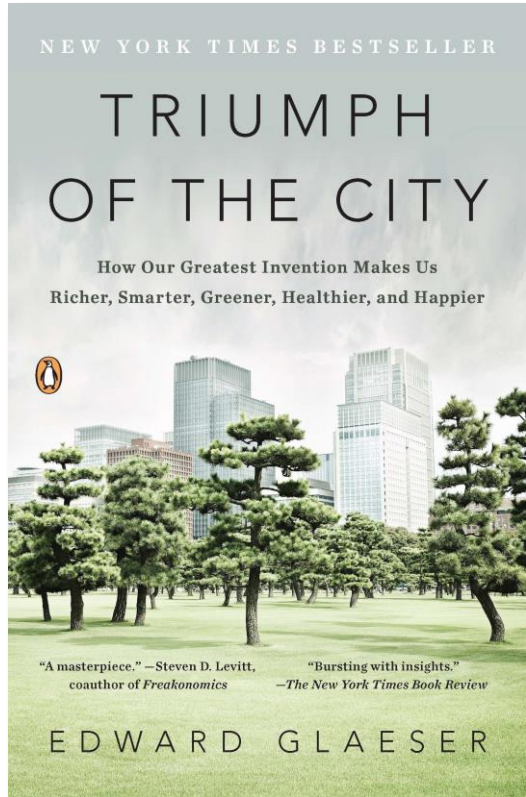


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# Smart Metromountain: urban and mountain interdependence and physical-digital infrastructures as a tool for a new climate-resilient liveability.

## Which triumph for the city?



Graph made by Mauro Fontana based on Google Ngram.

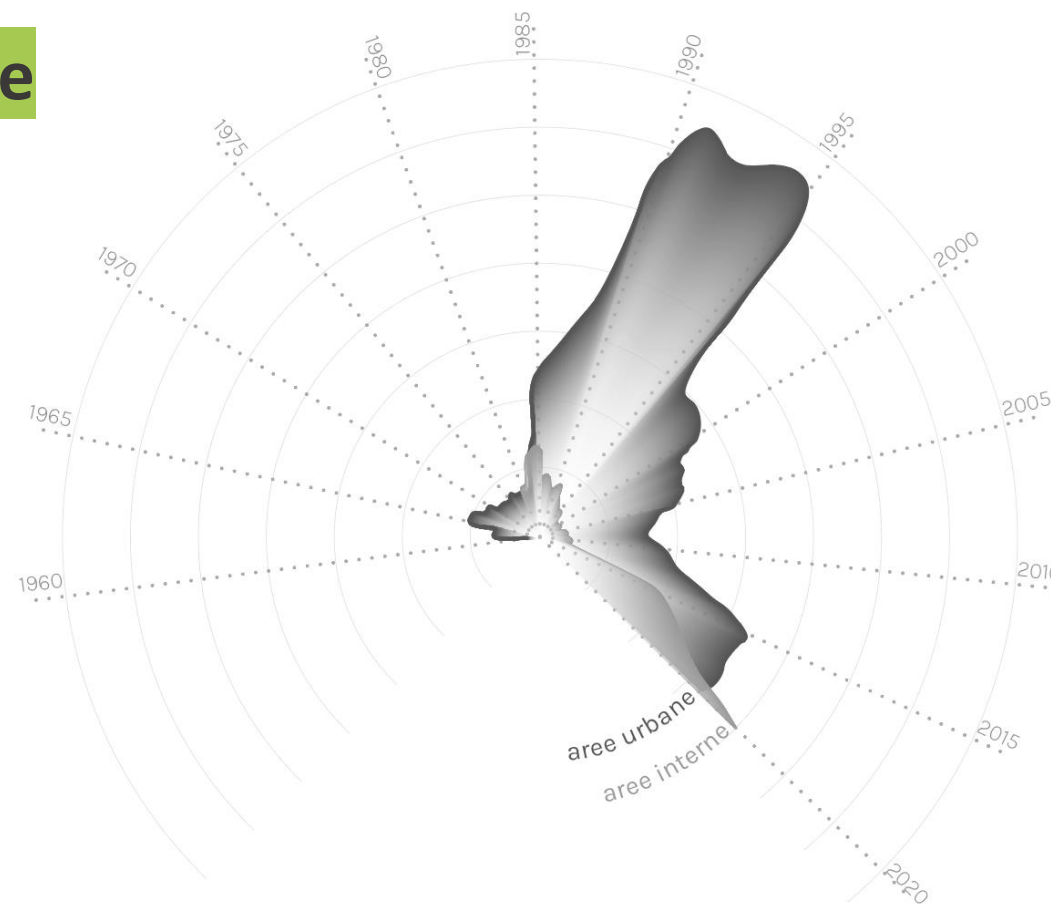
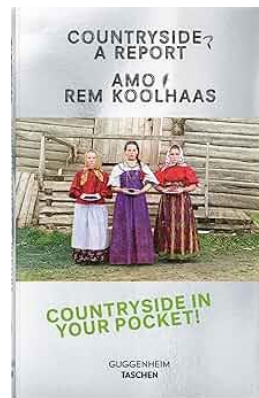
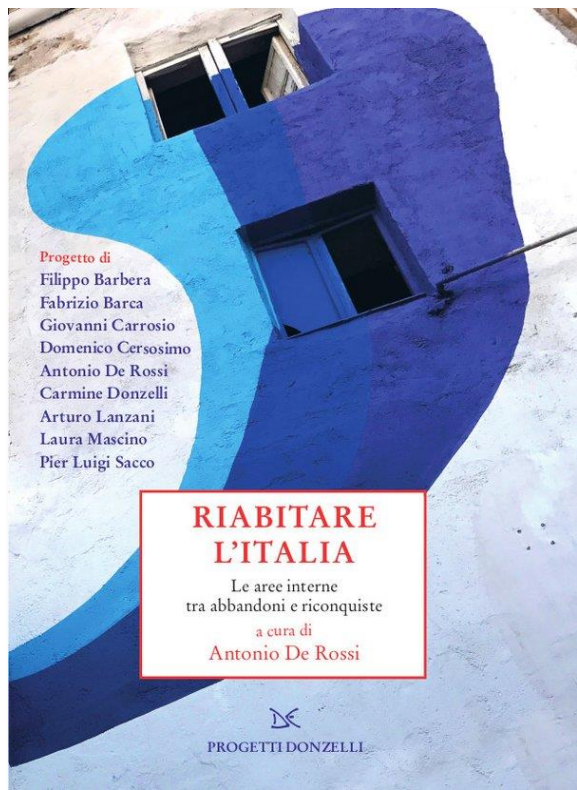


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## Left Behind Places: A new cultural debate



Graph made by Mauro Fontana based on Google Ngram.

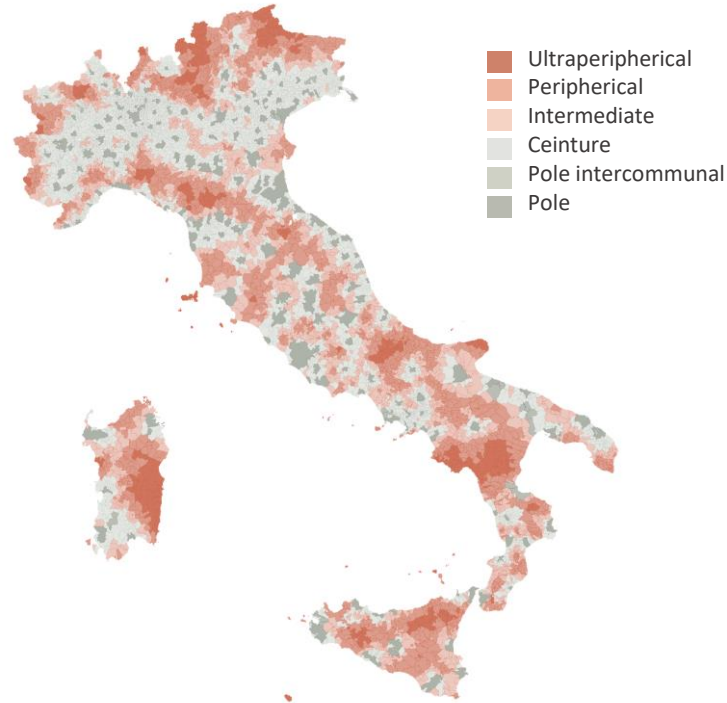


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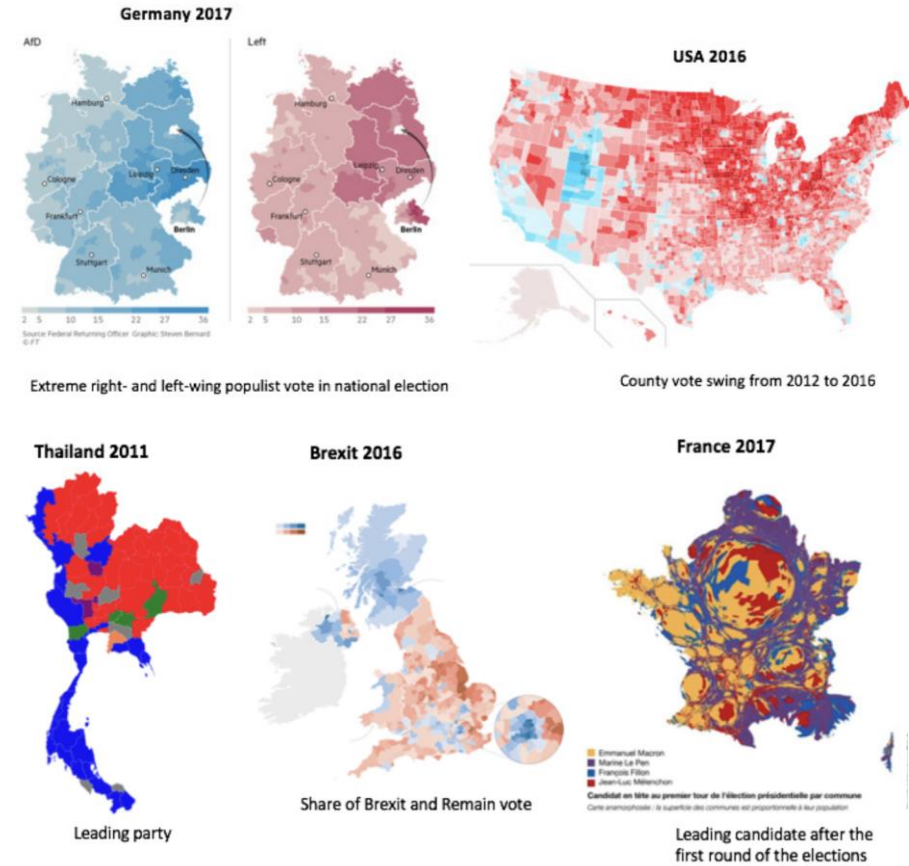


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## Political consequences



Map of the peripherality for the Strategy for the Inner Areas



The impact of left-behind places on political decisions



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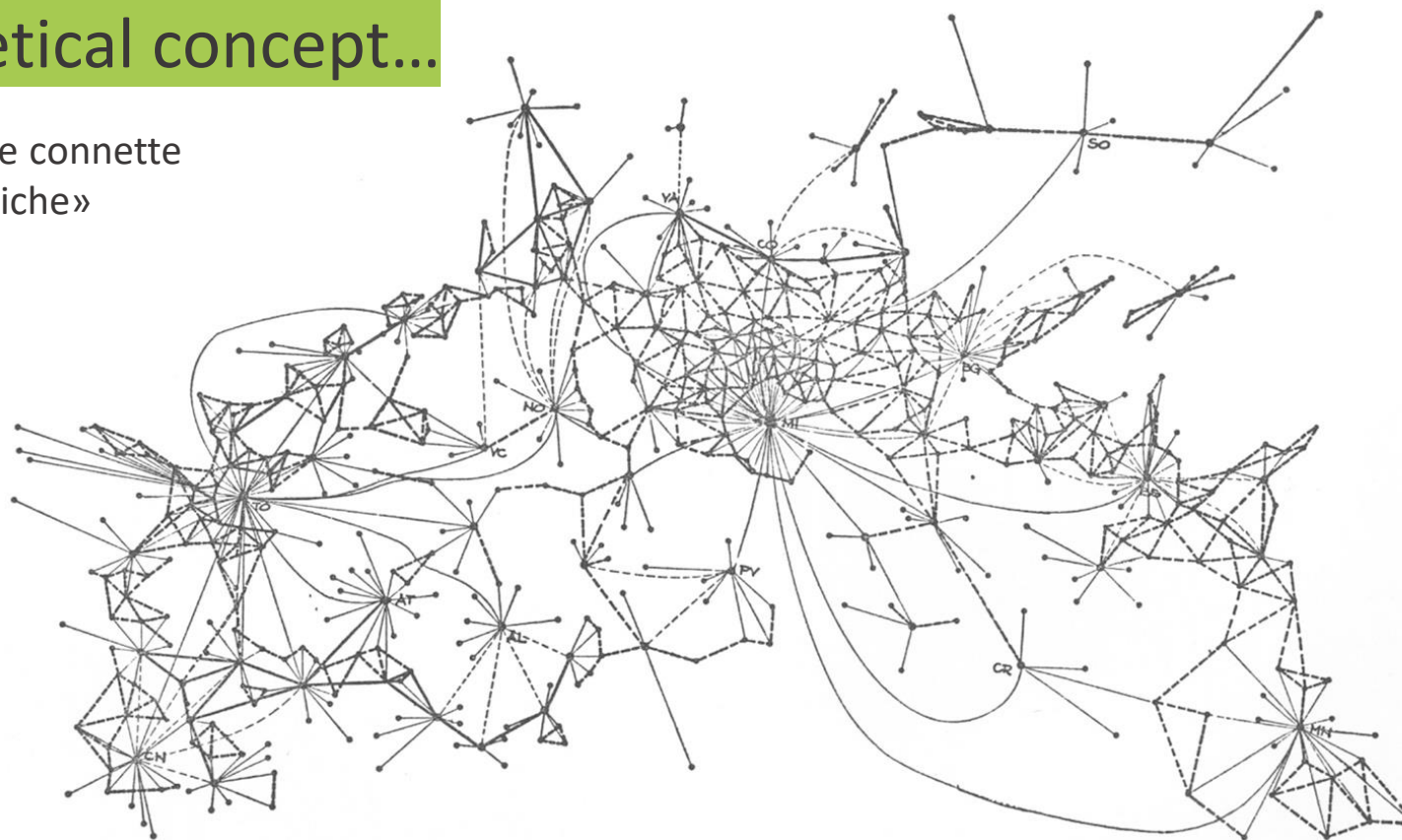
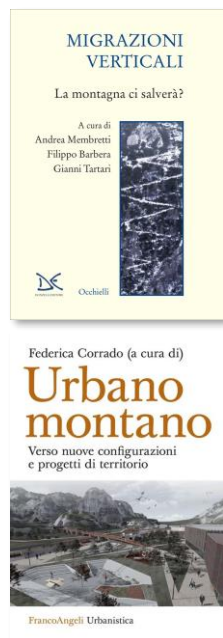


# Smart Metromountain: urban and mountain interdependence and physical-digital infrastructures as a tool for a new climate-resilient liveability.

## Metromountain: from a theoretical concept...

«Metromontagna è un quasi-concetto: un ibrido che connette e sovrappone finalità conoscitive, prescrittive e pratiche»

**Barbera, De Rossi (2021)**



“Strutture urbane reticolari in Piemonte e Lombardia, relazioni di interdipendenza”  
from Dematteis, G. (1989) “Regioni geografiche, articolazione territoriale degli interessi e regioni istituzionali” in Stato e mercato



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## Metromountain: ...to institutional and strategical level

### Institutional figures

#### City of Cuneo

*Assessorato alla  
Metromontagna*  
Sara Tomatis

#### City of Torino

*Assessorato Politiche per l'Area  
Metropolitana e  
metromontana*  
Gianna Pentenero  
(now under the mayor  
Stefano Lo Russo)

### Strategical projects

#### Metropolitan City of Firenze

*Firenze città metro-montana. Indicazioni  
strategiche per le politiche pubbliche locali*

#### Metropolitan City of Torino

*Piano Strategico Metropolitano 2024-2026 della  
Città di Torino – Metro(poli)montana*

#### Municipality of Saluzzo (with Politecnico di Torino)

*Piano Strategico delle Terre del Monviso*



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## Bottom-up metromountain experiences: a hypothesis of classification

A long-term vision for the EU's rural areas: towards stronger, connected, resilient, and prosperous rural areas by 2040.

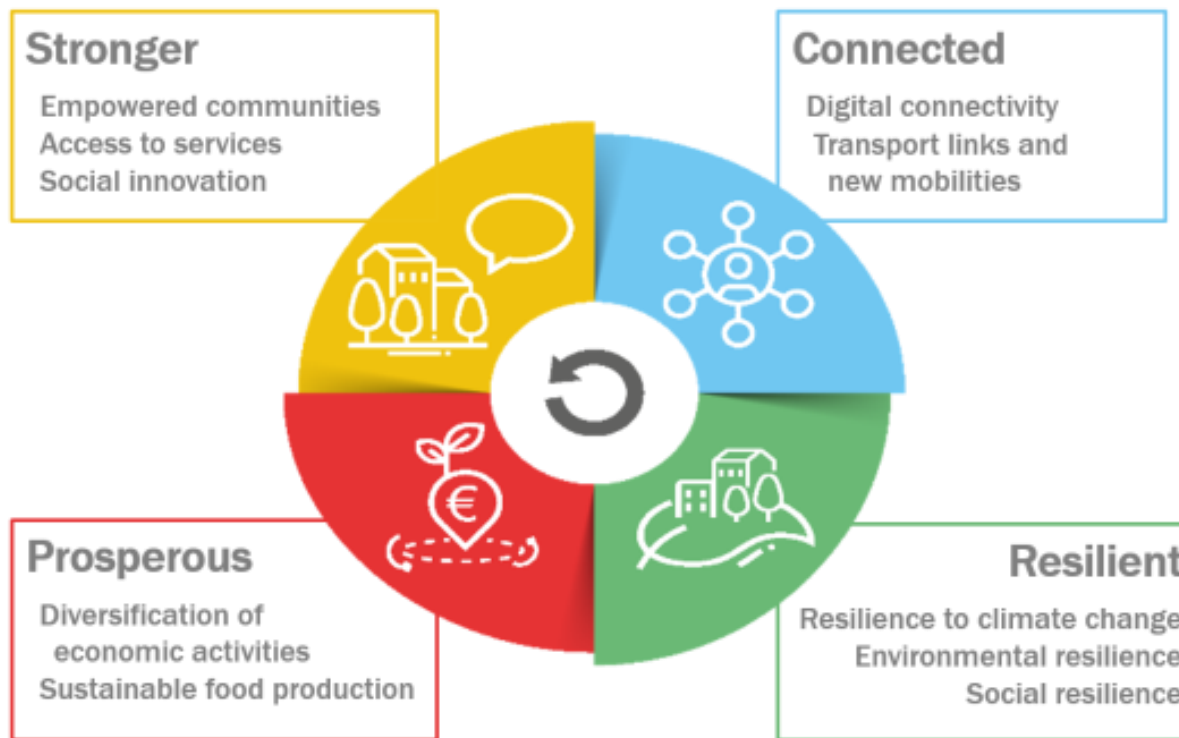
European Commission (2021)



European Union

### 4 BLOCK OF ACTIONS

stronger, connected, prosperous, resilient rural areas



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## Stronger Rural Areas

Under this action area, rural areas benefit from support to **empower communities** and have **access to services** to facilitate **social innovation, spatial planning** and **youth involvement**.



### Metromountain and climate-resilient actions

- e-medicine and e-assistance  
**reduce of emissions and act on climate change cause**
- climate migrations  
**are conditioned by climate change effects**
- models and practices transfer (ex. cohousing)  
**reduce of emissions and act on climate change cause**





Smart Metromountain: urban and mountain interdependence and physical-digital infrastructures as a tool for a new climate-resilient liveability.

## Connected Rural Areas

Under this action area, rural areas benefit from actions to boost **sustainable transport links** and **digitalisation** through investments in infrastructure, technology development and skills enhancement activities.



### Metromountain and climate-resilient actions

- innovative and sustainable mobility services  
**reduce of emissions and act on climate change cause**
- smart working (no transport need)  
**reduce of emissions and act on climate change cause**
- new inhabitants and amenity migration  
**are conditioned by climate change effects**



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## Resilient Rural Areas

Under this action area, rural areas benefit from actions to increase **environmental, climatic** and **social resilience** by storing carbon in peatlands and wetlands, enhancing **soil health** and improving prospects for **women and vulnerable groups**.



### Metromountain and climate-resilient actions

- uses of renewable energy resources
  - reduce of emissions and act on climate change cause limit climate change effects
- development of short supply chains
  - reduce of emissions and act on climate change cause limit climate change effects
- new resettlement and monitoring policies
  - limit climate change effects



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## Prosperous Rural Areas

Under this action area, rural areas benefit from actions supporting **social economy**, addressing the needs of young people, promoting **bioeconomy** and supporting **producer organisations** and **producer groups**.



### Metromountain and climate-resilient actions

- changes of touristic practices paradigms (sustainable and de-seasonal choices)  
**are conditioned by climate change effects**
- Sustainable production of goods (increase in production altitude) and development of urban seller groups  
**reduce of emissions and act on climate change cause limit climate change effects**
- skills transfer - mountains as experimental fields  
**limit climate change effects**



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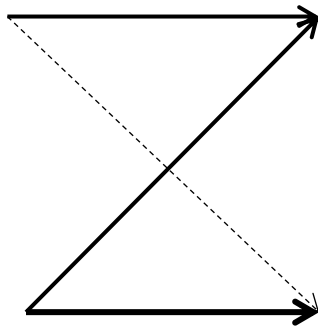


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## Bottom-up metromountain experiences: a spatial classification

### Typology of space

Digital spaces  
**Web, telephone**

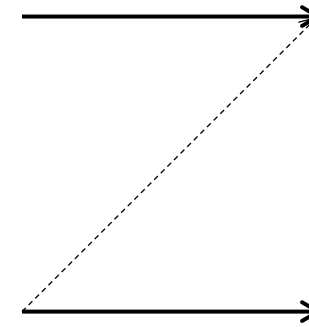


Physical spaces  
**Street, buildings, infrastructures**

### Extension of spaces

Long infrastructures (net)  
**Street, infrastructure, web**

Performative punctual spaces  
**Building, online single spaces**



### Exchanges

Economic  
**Goods, energetical resources, tourists, data**

Social and welfare  
**Services, skills, help**



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# Smart Metromountain: urban and mountain interdependence and physical-digital infrastructures as a tool for a new climate-resilient liveability.

## Metromountain welfare: which spaces?

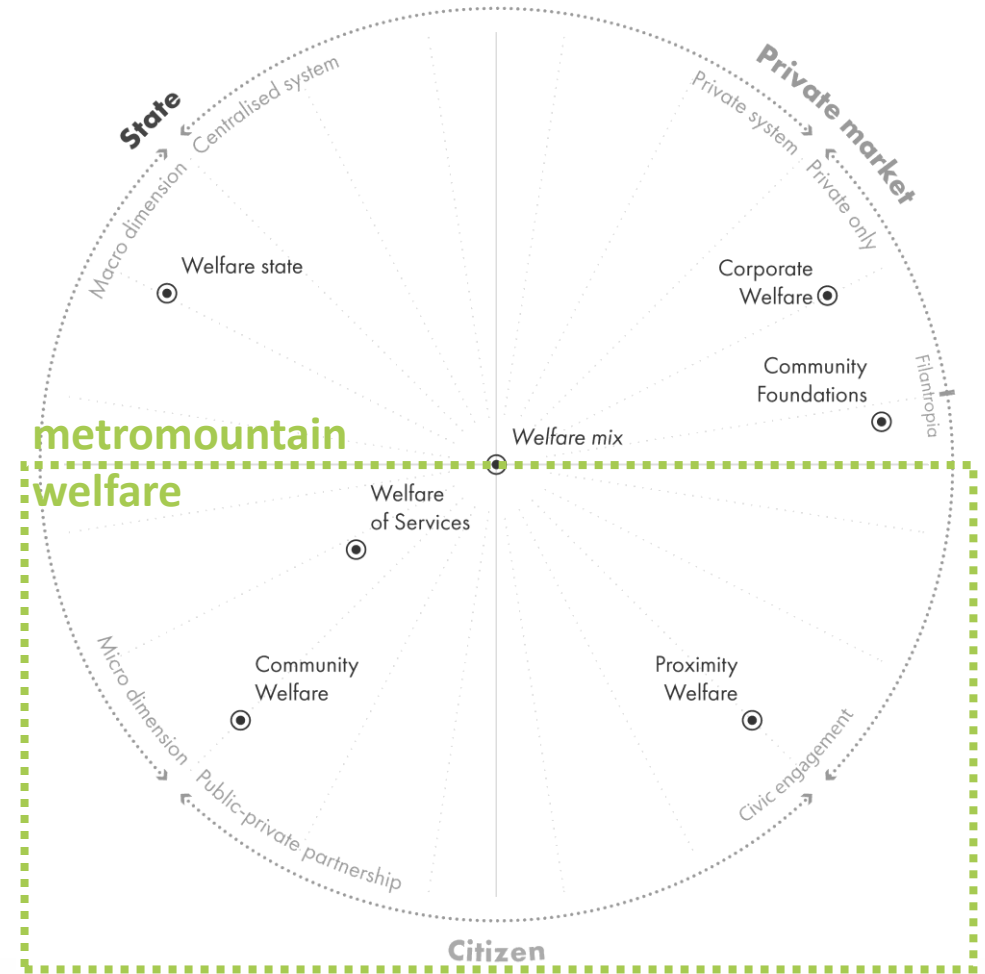
### Innovative Management Models

- Community cooperatives
- Consortia and social enterprises
- Public-private partnerships
- Resident associations
- Local institutions

space and community

### Hybrid and Adaptable Uses

- Cultural activities
- Training and research activities
- Recreational activities
- Social and healthcare services
- Educational and training services
- Local commercial activities
- Local production activities
- Tourism promotion activities



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## The case of Ostana: the background

1921

Ostana has 1200 inhabitants



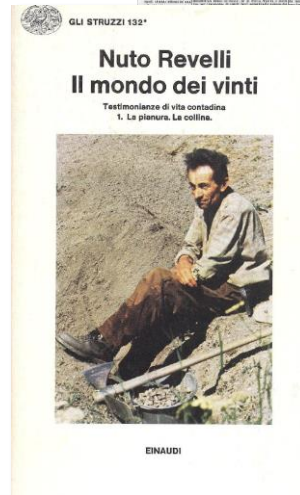
End of XX century

Ostana has only 5 permanent inhabitants



today

Ostana has more than 50 permanent inhabitants (88 residents)



1985 - 2004

From decline to revitalization through practices of enhancement and patrimonialization of local resources.



2004 - today

Role of culture, self-centred local development, repopulation and economic revitalization, building a system of skills and alliances with the outside



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## The case of Ostana: Cultural Center - Lou Pourtoun



Design: M. Crotti, A. De Rossi,  
M.P. Forsans



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## The case of Ostana: House of welfare - Mizoun de la Villo



Design: M. Crotti, A. De Rossi,  
L. Dutto



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## The case of Ostana: Housing - Valentin



Design: S. Costamagna, A. De Rossi,  
L. Mascino, M. Tempestini



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## The case of Ostana: key points



PREPARATORY ACTION ON  
**Smart Rural Areas  
in the 21st Century**

### Smart Rural 2021 strategy

- Sustainable environmental development  
**Sustainable mobility, natural resources management**
- Residentiality  
**Regeneration of building, management and funding**
- Culture and social innovation  
**Culture and community-based actions, new services**



### 'Viso a viso' Community cooperative

- Cultural and welfare building  
**Restaurant, Library, Auditorium and Coworking**
- 'Scuola di O'  
**School 1-3 years old children also from city**
- 'Segnavia - Porta di Valle Varaita'  
**Urban-mountain exchanges**

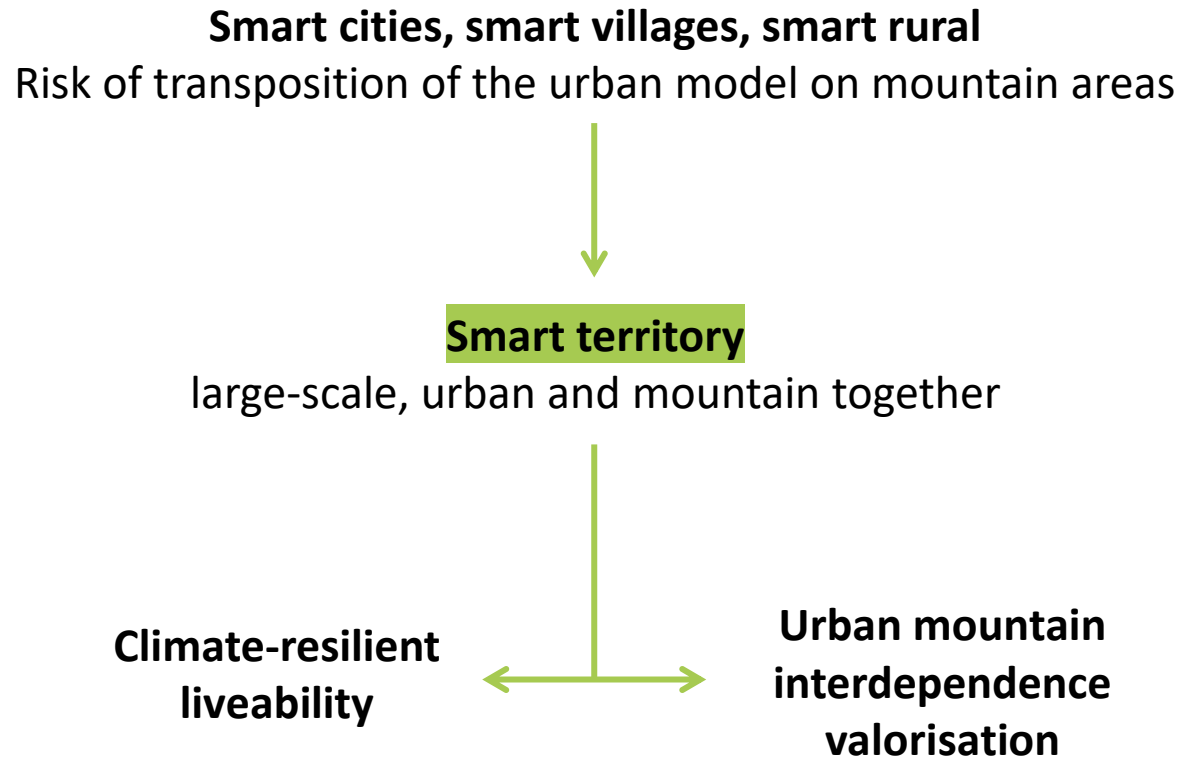


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## Conclusion



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