



# SUSTAINABILITY AND ECO-SOCIAL CHANGES

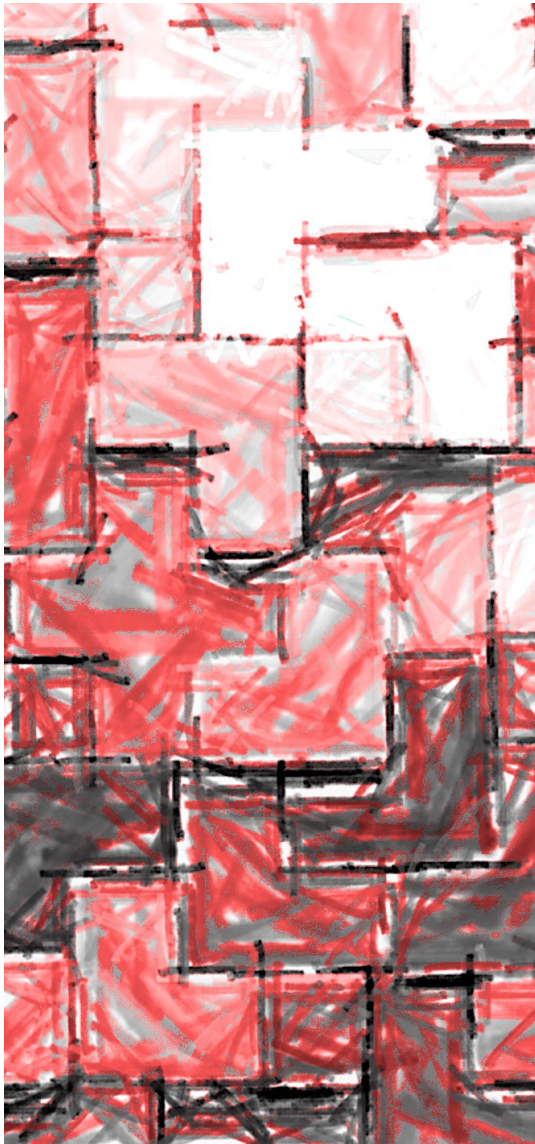
Giovanni Carrosio – [gcarrosio@units.it](mailto:gcarrosio@units.it)

Introductory lesson – Teams code ezzr7rj

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## Course introduction:

1. Know each other;
2. What's environmental sociology;
3. Why «sustainability», «eco-social» and «changes»;
4. Course organization: lessons content, working methods, exams;
5. Discussion about what is nature.



# PLEASE BE PATIENT WITH MY ENGLISH!

Umm... How you say...?

I'm trying my best!

We understand, Prof!

Sorry for my SLOW language... I make mistakes!



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- 2006 Degree in Sociology at the University of Trieste
- 2007 - 2009 Phd in Sociology at the International University  
Institute for European Studies (consortium of Eastern  
European Universities);
- 2009-2014 Researcher and lecturer in Environmental Sociology and  
Sociology of Development: Padua, Venice, Trieste
- 2014-2018 Policymaker at the Department of the Presidency of the  
Council of Ministers in Rome
- 2018 - 2021 Researcher in Territorial and Environmental Sociology -  
University of Trieste
- 2021-2024 Associate Professor in Territorial and Environmental  
Sociology - University of Trieste
- 2024 - Full Professor in Territorial and Environmental  
Sociology - University of Trieste

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My courses:

Department of Political and Social Sciences:


- Sociology of borders (what, why, when, where; the contradictions of borders: ex. line between being people with rights and being people without rights)
- Network Systems, Territory and Development (what's development in the Network Society; why globalization has created new and widened territorial gaps; what is underdevelopment; how to develop marginalized areas)

Department of Life Sciences + Department of Political and Social Sciences:

- Sustainability and Eco-Social Changes...




My research and theoretical interests:

- Energy transition, environmental and climate justice, energy poverty, inequalities and climate crisis, sustainability theories, environmental conflicts, climate denial;
  - Eco-social policies, climate welfare, social desirability of the ecological transition;
  - Territorial development, territorial inequalities, development theories, territorial cohesion policies, citizenship rights in marginalized areas.
- 



The scholars who shaped my thinking:

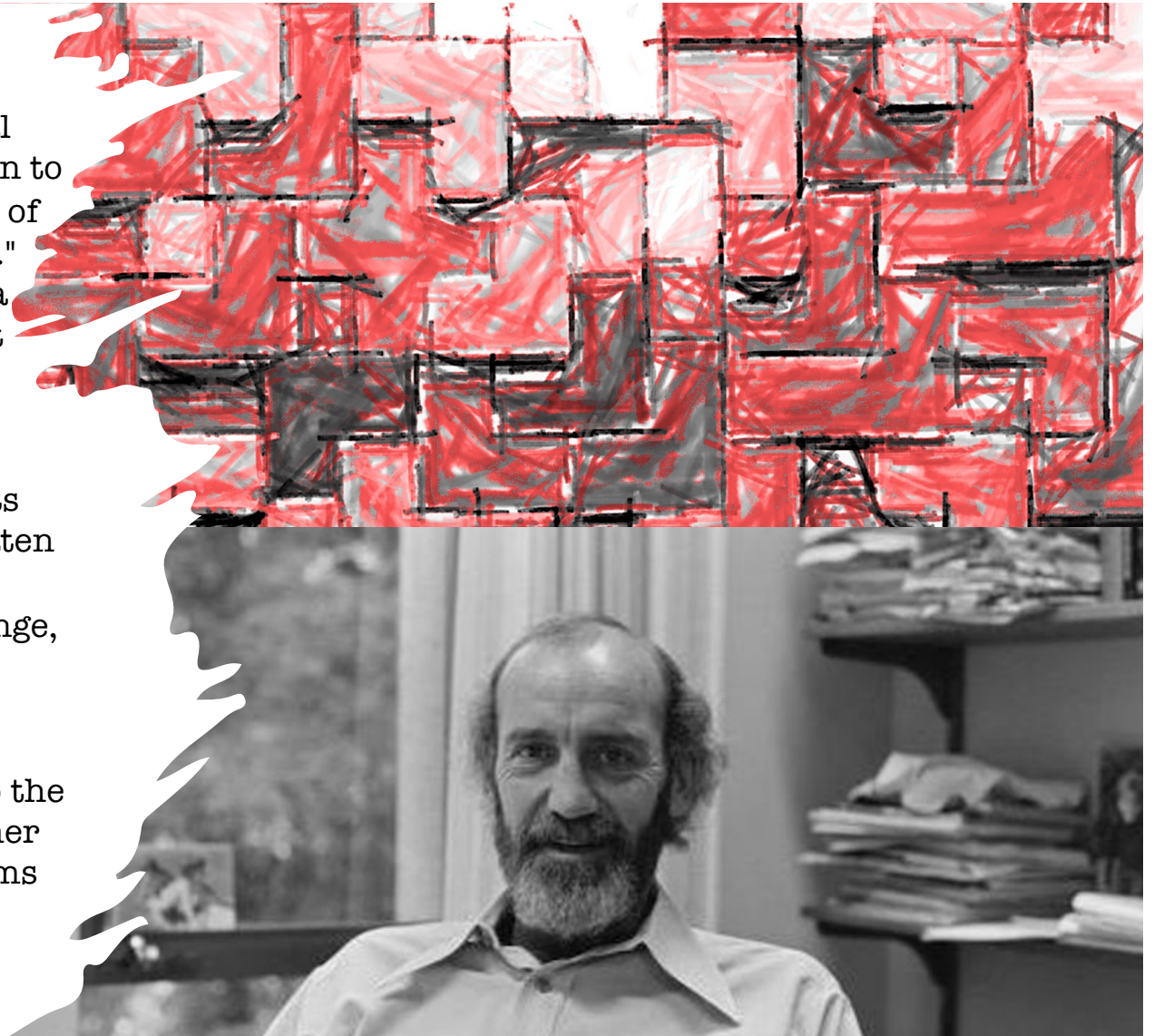
- James O'Connor: the fiscal crisis of the state; the second contradiction of capitalism;
  - Erik Klinenberg: social infrastructures; the social autopsy of environmental disasters;
  - Jan Dowe van der Ploeg: rural sociology and the repeasantization;
  - Elinor Ostrom: alternative ways of managing natural common goods, between the State and the market
  - Kate Raworth: the safe and just space for humanity
- 

# James O'Connor

is a foundational figure in the ecological critic to capitalism. His key contribution to environmental sociology is the concept of the "second contradiction of capitalism." O'Connor argued that capitalism faces a second, equally fundamental conflict: it systematically destroys the natural conditions it requires for production.

This destruction raises production costs and creates ecological crises that threaten accumulation itself. This contradiction produces ecological crises: climate change, resource depletion, biodiversity loss.

This framework helps environmental sociologists connect ecological crises to the structural dynamics of capitalism, rather than treating them as technical problems or individual failures.



# Kate Raworth

is a British economist whose "Doughnut" model has become an essential reference for environmental sociology.

The model is simple: a ring with two boundaries. The inner boundary represents a "social foundation"—the minimum conditions for human wellbeing (food, health, education, housing, political voice, gender equality). The outer boundary represents an "ecological ceiling"—the nine planetary boundaries identified by earth system scientists (climate change, biodiversity loss, ocean acidification, etc.). Between these two boundaries lies the "safe and just space for humanity." The goal of economics, Raworth argues, should not be endless growth but thriving within the doughnut.

For environmental sociology, Raworth's contribution is threefold. First, she makes visible the structural connection between social inequality and environmental degradation: the same growth-oriented economy that fails to meet basic human needs is destroying ecological systems. Second, she provides an alternative to GDP as the measure of economic success, asking instead whether people's needs are met within planetary limits. Third, she transforms the planetary boundaries framework from a purely biophysical concept into a socio-ecological one, inviting questions about distribution: who overshoots, who falls short, and why.



# Erik Klinenberg's

work is essential for understanding how social conditions shape vulnerability to environmental hazards.

His study of the 1995 Chicago heat wave pioneered the "social autopsy" method: investigating not just how many people died, but why deaths concentrated in certain neighborhoods.

He found that the victims were not random. Isolated elderly people in abandoned, disinvested neighborhoods died at far higher rates than those in communities with active street life, local businesses, and public spaces. The disaster was natural, but the death toll was socially produced.



This research is foundational for environmental sociology because it shows that environmental events become disasters through social structures.

Klinenberg's concept of "social infrastructure"—the physical spaces that enable social connection—offers a framework for understanding resilience.





**Ostrom's** work addresses one of environmental sociology's central questions: how can societies manage natural resources sustainably? Ostrom documented hundreds of cases where communities successfully governed common-pool resources for generations—without external authorities or private property.

From Swiss alpine meadows to Philippine irrigation systems, she found functioning institutions based on local rules, collective monitoring, and graduated sanctions.

For environmental sociology, Ostrom provides an alternative to both market environmentalism (privatize everything) and state environmentalism (regulate everything).

She demonstrates that communities can be effective environmental actors when given the conditions to self-organize. This is crucial for contemporary debates on climate governance, biodiversity conservation, and local resource management.



# Van der Ploeg

offers environmental sociology a critical perspective on agriculture and sustainability.

Industrial agriculture is a major driver of environmental destruction: it depletes soils, contaminates water, reduces biodiversity, and depends on fossil fuels.

Van der Ploeg shows that this model is not inevitable. His central concept is "repeasantization": across the world, farmers are actively moving away from industrial methods and toward more ecologically-grounded practices.

Peasant agriculture minimizes external inputs (fertilizers, pesticides, purchased feed), builds soil fertility over time, maintains biodiversity, creates more localized food chains.

For environmental sociology, van der Ploeg demonstrates that agricultural sustainability is not simply a technical question but a social and political one.

It requires understanding power relations, resistance, and the agency of rural communities in creating alternatives to industrial food system.





## **And what about you?**

Your name, country of origin, and city


Your passions/interests

Your previous educational background

People who have influenced your thinking or interests (intellectuals, artists, musicians, writers, influencers, fictional characters, etc.)

Your interests in environmental issues

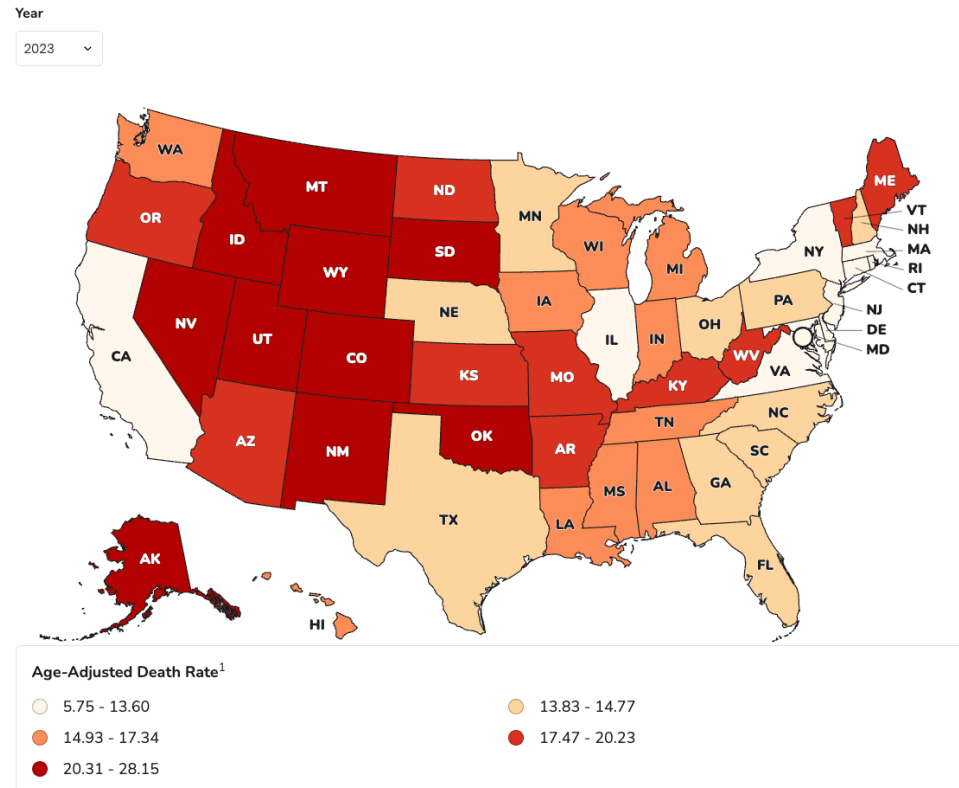
What you expect from this course



## What's the key question in sociology?

Let's start with an example... far away from environmental issues... the problem of suicide... Certainly, suicide is an individual, intimate, private act linked to the psychological dimensions of the individual. **But sociology unveil that it is also a social act.**

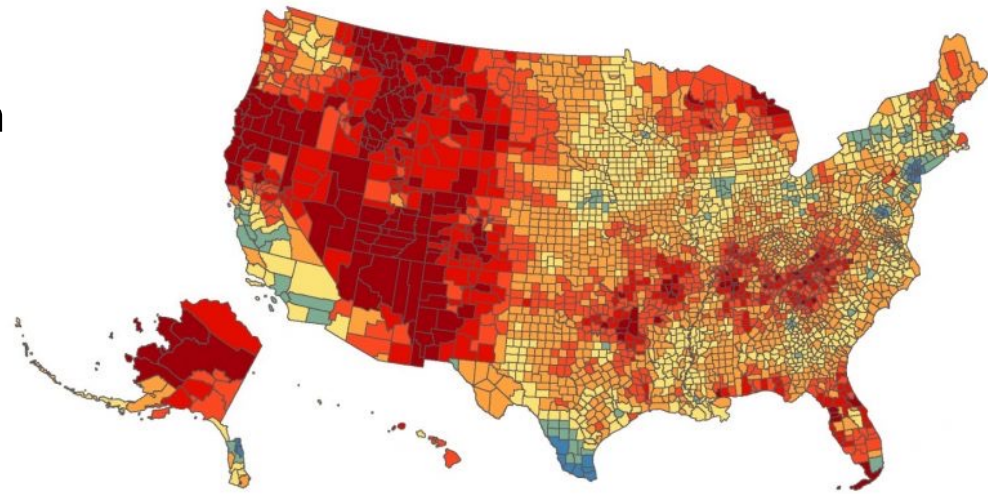
Suicide rates by state



The number of deaths per 100,000 total population

## What's the key question in sociology?

In 2017, the suicide rate was considerably higher in the most rural areas of the U.S. compared to the most urban areas (20.0 per 100,000 people in noncore rural areas versus 11.1 per 100,000 people in large central metro areas). This difference in suicide rates between rural and urban areas has widened from 1999 to 2019, increasing 50% in rural areas compared to 31% in urban areas. In some states, the suicide rate in rural areas continues to rise whereas in urban areas it has remained stable (CDC, via WISQARS, as of July 21, 2021).



Urban vs Rural suicide rates

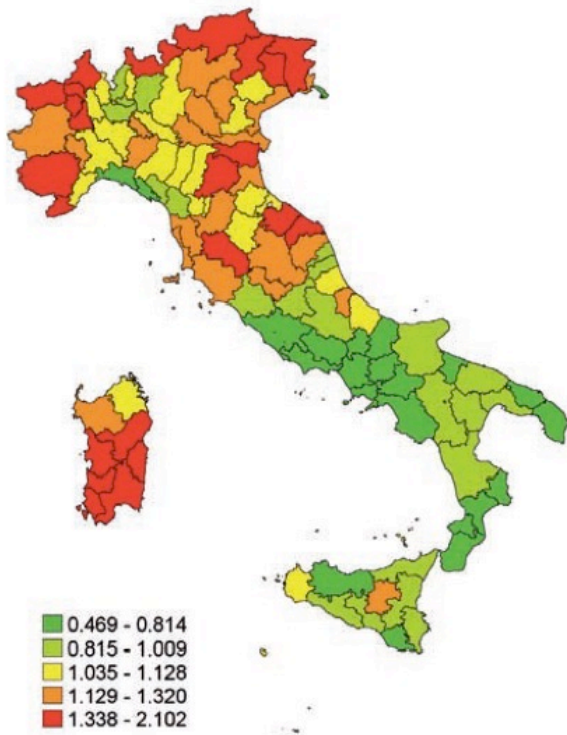


**UOMINI**

MEN

**ETÀ 30-89**

AGE 30-89

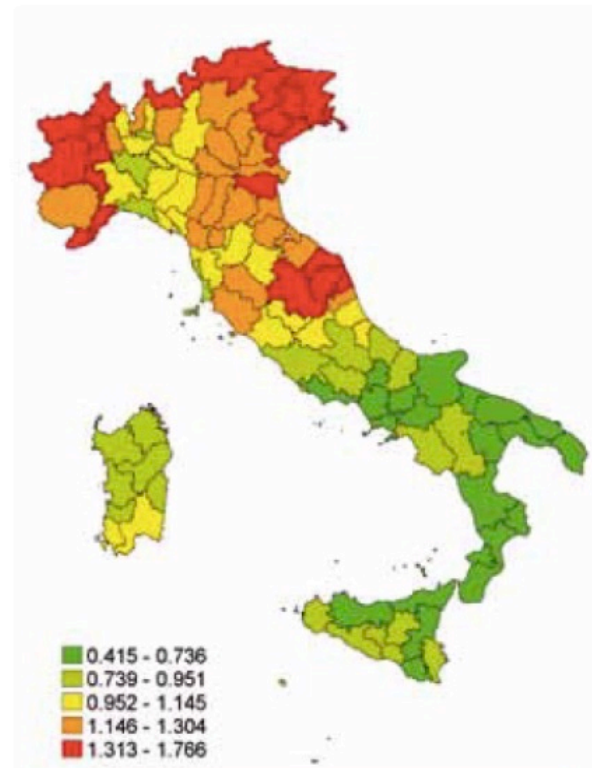


**DONNE**

WOMEN

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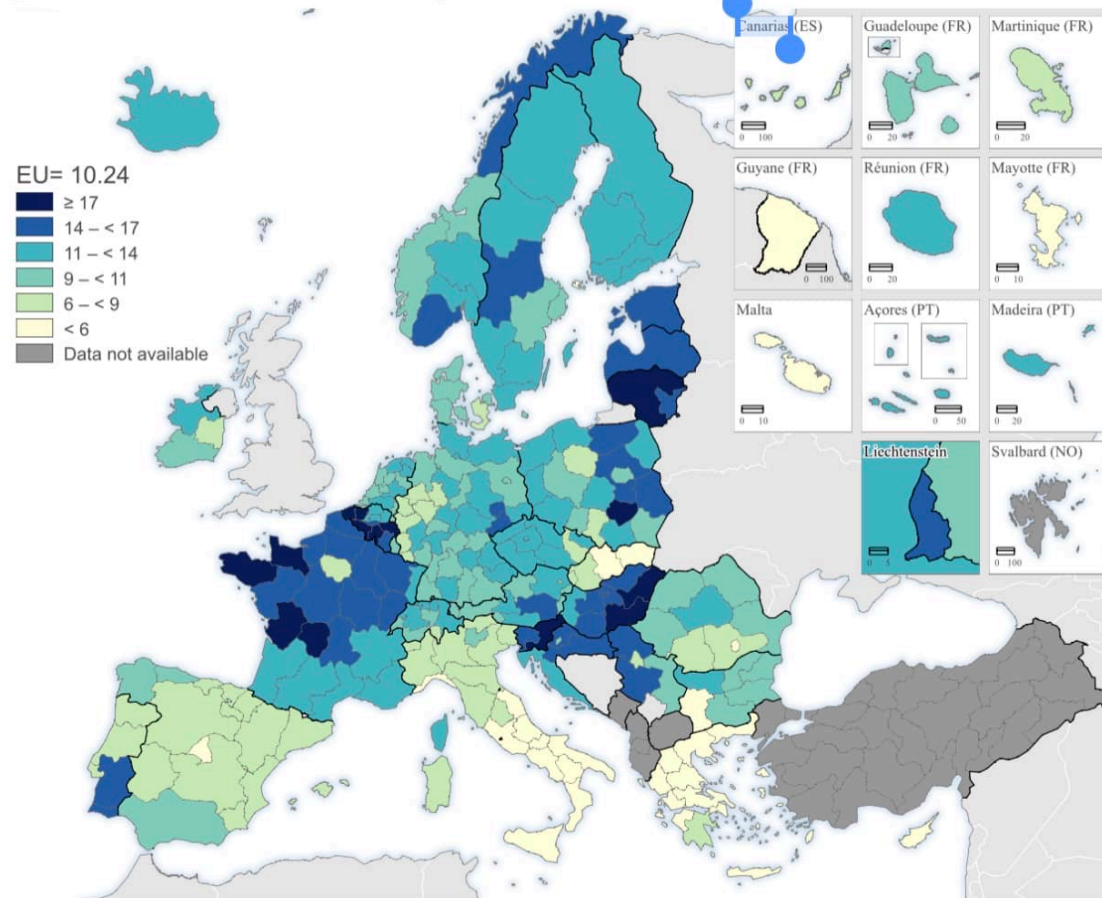
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Territorial and gender differences in Italy (Sardinia!)



**Standardised death rate due to intentional self-harm, by NUTS 2 regions in 2020**  
 (Number of deaths due to self-harm per 100 000 inhabitants)



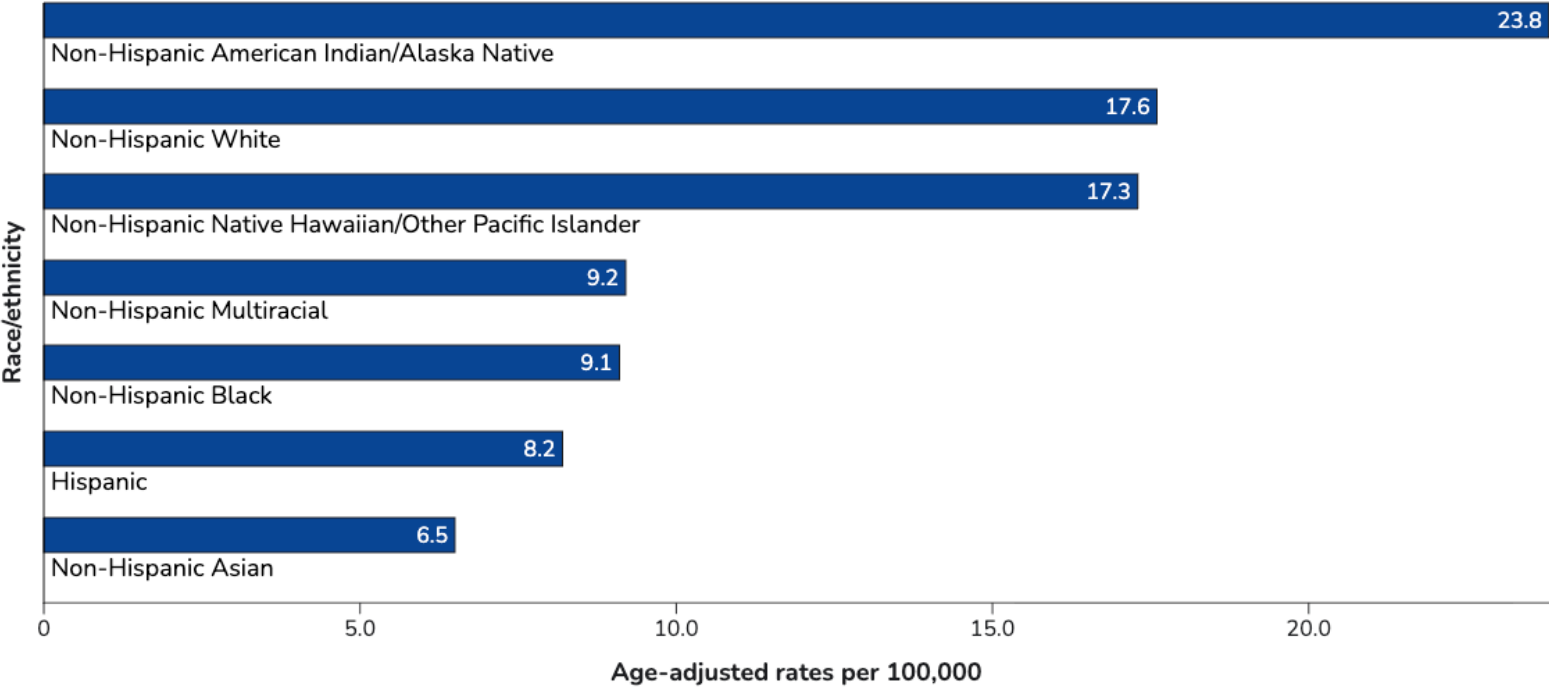
Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat  
 Cartography: Eurostat – IMAGE, 09/2023

Differences between European Regions



# Some groups have disproportionately high rates of suicide.

The racial/ethnic groups with the highest rates in 2023 were non-Hispanic American Indian and Alaska Native people and non-Hispanic White people.

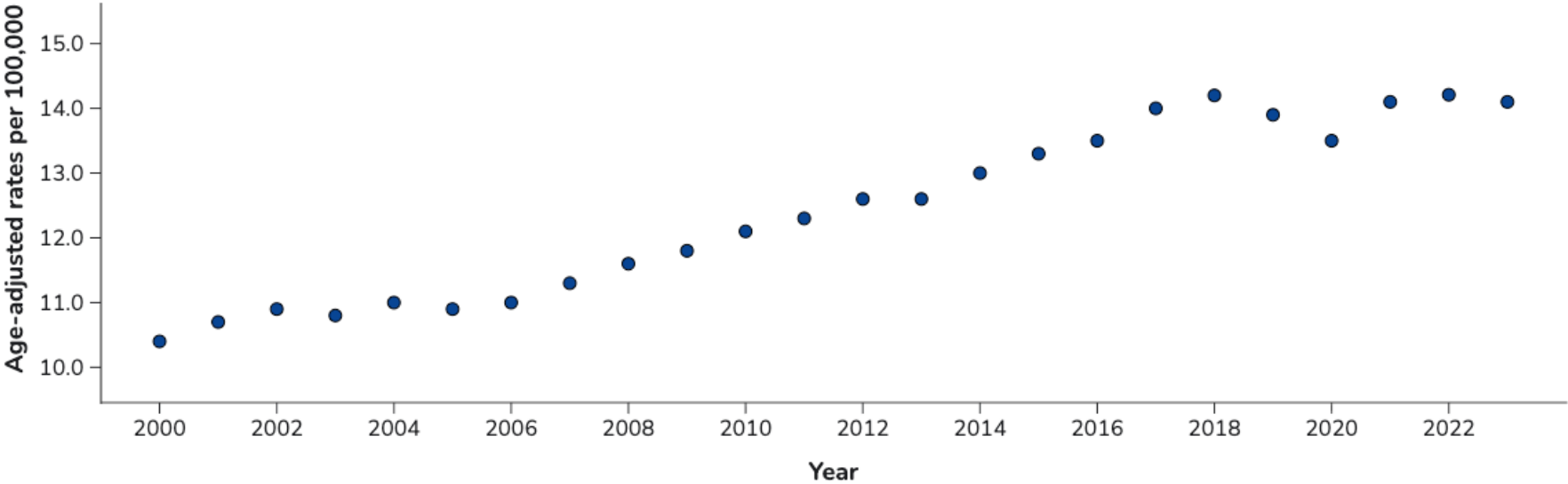


Ethnic differences



# Suicide rates

Suicide rates increased 37% between 2000-2018 and decreased 5% between 2018-2020. However, rates returned to their peak in 2022.



Changes over time





## What's the key question in sociology?

Why, given equal individual conditions, do certain social groups, or different States/areas have systematically different suicide rates? Why do suicide rates change over time? And what are the social conditions that determine these differences?

For example:

- Protestants commit suicide more than Catholics (less community integration)
- Unmarried people more than married people (less family integration)
- Rates increase during economic crises but also during booms (anomie).

The explanatory variable is not the individual psyche, but the degree of social integration and regulation. Certain structural conditions in our society are intertwined with individual motivations. **Sociology looks for these structural conditions.**

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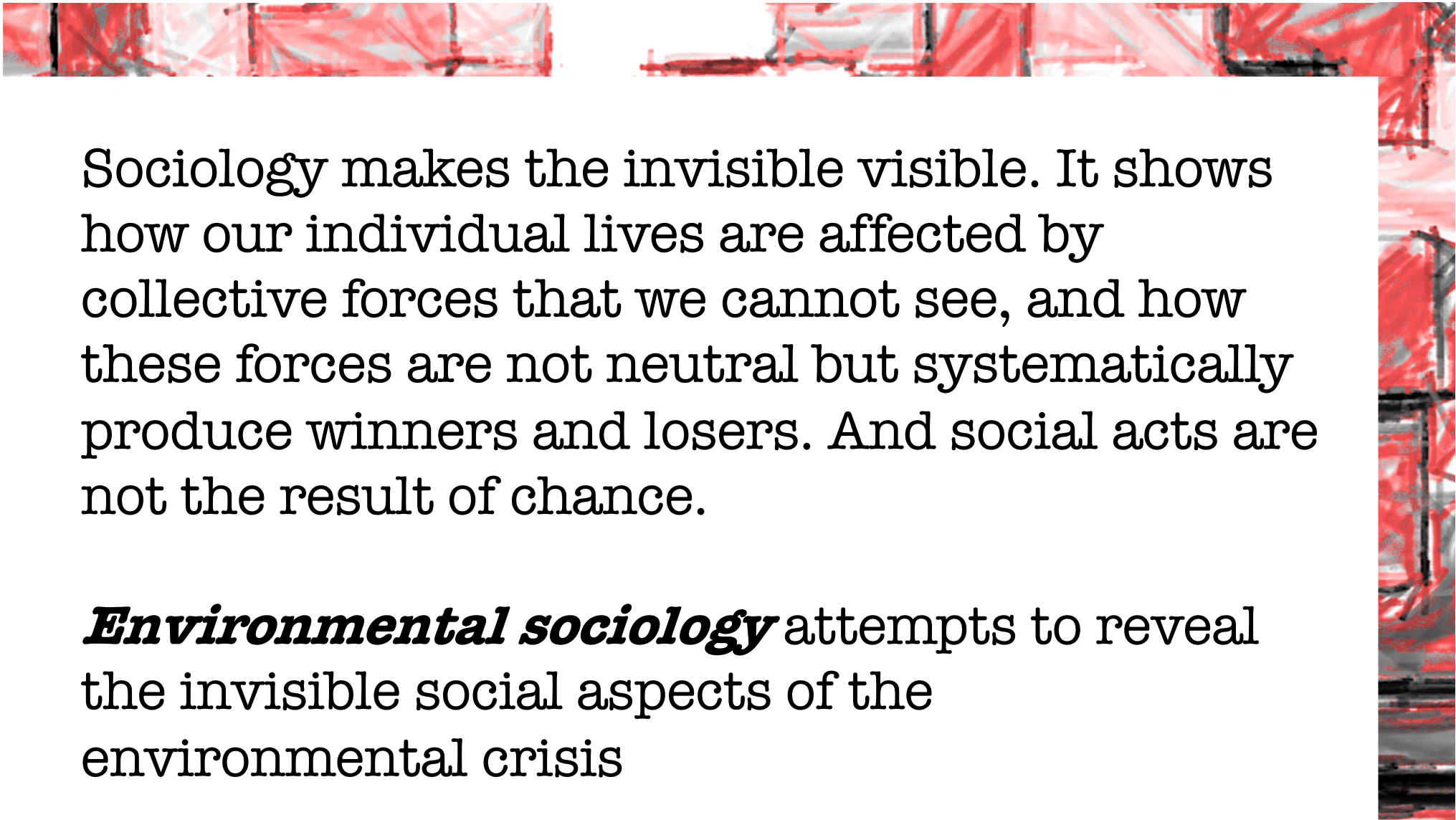
**What's the key question in (environmental) sociology?**

Why and how is what seems individual, natural, or inevitable actually produced by collective forces, historically situated, and distributed in a systematically unequal way?



## What's the key question in (environmental) sociology?

- **De-naturalization:** What seems natural and obvious it is really social constructed. Sociology asks: *How did we get to this point? Who decided this? Could it be otherwise?*
- **De-individualization** Apparently private behaviors or conditions reveal collective regularities. Suicide, divorce, academic success, to be rich or poor... are distributed along class, gender, territory, ethnic lines. Sociology asks: *Why certain groups and not others?*
- **Distribution and power** Every social fact implies a distribution: resources, voice, risk, recognition, bads and goods. Sociology asks: *Who wins and who loses? Who decides? Who has access and who is excluded? Who has power and who does not?*

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Sociology makes the invisible visible. It shows how our individual lives are affected by collective forces that we cannot see, and how these forces are not neutral but systematically produce winners and losers. And social acts are not the result of chance.

***Environmental sociology*** attempts to reveal the invisible social aspects of the environmental crisis



## **What's the key questions in environmental sociology?**

### **The social construction of environmental problems.**

Why did climate change become a global political issue while biodiversity loss remained marginal for decades? Why do some risks (nuclear power) generate massive public concern while others (air pollution) are quietly normalized? Environmental problems don't simply "exist" — they have to be recognized, named, framed, and made politically visible. This is a social process, shaped by media, social movements, scientific institutions, and political interests.

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**What's the key questions in environmental sociology?**

**The unequal distribution of risk: who bears the environmental costs and who benefits?**

Pollution, environmental degradation, and climate impacts are not distributed randomly. They follow the lines of social inequality. Poor communities, racialized minorities, and the Global South systematically bear the heaviest environmental burdens while benefiting least from the economic activities that produce them. This is what we call *environmental injustice* – and understanding it requires sociological tools, not just chemical measurements.



## What's the key questions in environmental sociology?

**Climate change as a social phenomenon.** Yes, climate change is a physical process driven by greenhouse gas emissions. But it's also profoundly social: who produces emissions (and who doesn't), who suffers the consequences (and who is protected), why governments act or fail to act, how denialist movements organize and spread, what makes some societies more resilient than others, and how climate discourse shapes policy and public understanding. Environmental sociologists have been particularly active in studying **climate denial** – not as individual ignorance, but as an organized social movement with identifiable funders, networks, and political strategies.



**What's the key questions in environmental sociology?**

**Collective responses: how do societies organize themselves (or fail to organize themselves) in the face of crisis?**

Why are some communities able to mobilize while others are not? Why do governments act or fail to act? How is consensus for ecological transition built (or blocked)? transitions are never just technological – they involve power struggles, cultural shifts, winners and losers, resistance and adaptation. Think of the shift from coal to renewable energy: it's not simply a matter of building wind turbines, but of transforming entire regional economies, retraining workers, overcoming entrenched interests, and reimagining what "progress" means.



## **What's the key questions in environmental sociology?**

### **The relationship between society and nature: how do societies conceive and organize their relationship with the environment?**

This is a more theoretical, almost philosophical question. The separation between “society” and “nature” is itself a historical and cultural product—typical of Western modernity. Other cultures and other historical periods conceive of this relationship differently. Environmental sociology questions this division: is it still useful? How was it constructed? What consequences has it had?

## The three thematic focuses of the course

sustainability	eco-social	changes
<p>Sustainability is a pervasive concept in our society, but it is a complex word, too generic. When I say sustainability, I don't mean the same things as when someone else says sustainability. We will devote a lot of space to this issue.</p>	<p>Society and the environment co-evolve, and social and environmental crises are closely linked. If this is true, environmental policies and social policies cannot be separated, but must interact.</p>	<p>Change, transformation, development, conflict, resistance, obstacle, action, reaction</p> <p>Our societies are changing in different directions. What are the trajectories of change? How do public policies promote ecological change? How does society react?</p>

## Course organization (in progress)

	Keyword	1	2	3
1	Sustainability	theoretical introduction	individual work on sustainability frames	plenary discussion
2	Sustainability frames	theoretical introduction	biographical method	plenary discussion
3	Environmental conflict	Individual reading of a decision case	theoretical focus on the decision case	working group and plenary discussion
4	Energy (just) transition	theoretical introduction	Individual reading of a decision case	working group and plenary discussion
5	Ecological citizenship	theoretical introduction	Biography method	Biography method
6	Heat waves	"Cooked: Survival by Zip Code"	"Cooked: Survival by Zip Code"	theoretical insights
7	Public policies	theoretical introduction	examples of public policies	work on data
8	Negationism	theoretical introduction	Work on denial texts	Plenary discussion
9	Community engagement	Field trip	Field trip	Field trip



## **The decision case method**

- relatively short written narratives of some real-life situation in which a person, group of people, organization, or community faces a problem or dilemma.
- usually, a social actor in a case has to make a decision and there is uncertainty about how she or he should proceed.
- cases typically are written in such a way that the final outcome is unknown and there is uncertainty about what happened and why.
- cases are open to multiple interpretations, allowing students to use acquired sociological concepts and theories to develop “readings” of the case.



## **The decision case method**

**The context** – where, when, what institutional configuration


**The actors** – who is involved, with what interests, resources, constraints

**The problem** – what is at stake, what makes it a dilemma

**The options** – what paths are viable (explicit and implicit)

**The evaluation criteria** – effectiveness, fairness, feasibility, legitimacy...

**The expected consequences** – for whom, over what time frame



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## **The sociological approach on decisional cases**

Attention to inequalities: who bears the costs, who reaps the benefits

Analysis of power relations between actors

Understanding the processes of social construction of the problem (framing)

Sensitivity to mechanisms of exclusion/inclusion in decision-making arenas

Analysis of the dynamics of trust and conflict

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## **How we will work on cases**

- individual reading of the assigned case study
- group work to answer the questions that will be asked
- plenary discussion with one (or more) spokesperson per group



## Evaluation and examination

### Attending students

The exam will be based on a decision-making case:

- a text with a story
- you will have to analyze the case according to the criteria we will learn in class
- answer questions, connecting topics covered in class with the case

### Non attending students

Study of some chapters of the book (uploaded on Moodle):

- *Pellizzoni, L., Leonardi, M., Asara, V., (eds.), **Handbook of Critical Environmental Politics**, Cheltenham/Northampton: Elgar, 2022*
- three written questions (Ex. What's environmental violence?)



**What's nature? What's natural?**

exercise

A forest planted by humans 100 years ago	A wild boar living in a city park	Honey from bees
The Amazon rainforest	A river that has been diverted and channeled	Bottled mineral water
A coral reef damaged by warming	Laboratory-grown meat	Your own body
A golden retriever	A wolf	A garden tomato
Mount Everest (with climbing routes and debris)	A wooden table	Penicillin
A child born through IVF	Rain falling on Milan	The COVID-19 virus
Olive oil	An organic apple	A vitamin supplement
Woman breast milk	A beaver dam	The Po Delta (formed by human land use)



Important: This is not a 'solution key' – there are no correct answers. This table shows one possible classification with explicit reasoning, designed to stimulate further discussion about the criteria we use and the contradictions that emerge.

<b>NATURE</b>	<b>NOT NATURE</b>
<p style="text-align: center;"><b>NATURAL</b></p> <ul style="list-style-type: none"> <li>• A wolf</li> <li>• The Amazon rainforest</li> <li>• Rain falling on Milan</li> <li>• A beaver dam</li> </ul>	<p style="text-align: center;"><b>NATURAL</b></p> <ul style="list-style-type: none"> <li>• Honey from bees</li> <li>• Olive oil</li> <li>• An organic apple</li> <li>• Woman breast milk</li> </ul>
<p style="text-align: center;"><b>NOT NATURAL</b></p> <ul style="list-style-type: none"> <li>• A coral reef (damaged)</li> <li>• A golden retriever</li> <li>• A garden tomato</li> <li>• A wild boar in a city park</li> <li>• A forest planted 100 years ago</li> <li>• Mount Everest (with debris)</li> <li>• The Po Delta</li> <li>• The COVID-19 virus</li> </ul>	<p style="text-align: center;"><b>NOT NATURAL</b></p> <ul style="list-style-type: none"> <li>• Laboratory-grown meat</li> <li>• A wooden table</li> <li>• A vitamin supplement</li> <li>• Bottled mineral water</li> <li>• Penicillin</li> <li>• A river (diverted/channeled)</li> </ul>
<p style="text-align: center;"><b>CONTESTED ZONE</b></p> <p style="text-align: center;">Your own body • A child born through IVF</p>	