Methods and Questions for Increasing and **Decreasing Phases of the Population**

Living Spaces with No Optimizations

> Local Narratives and Communal Movements in "Fairness and Justice"

Populations and Regional **Clusters**



Topographic-Demographic and **Ecological Data** from Pre-Modern and Modern Times

Institutions and Spatial-Economical Principles in "Markets and States"

1) Animals

i) aquatic animals

ii) wildlife

iii) domestication

iv) zoo and aquarium

v) species preservation & extinction

2) Plants

i) greening

ii) forestry (afforestation, deforestation)

Fields of Living Spaces

iii) wild plants (edible, medicinal, spiritual)

iv) crops (agroforestry, agriculture)

v) invasive species

vi) species preservation & extinction

3) Microorganisms

i) biosphere

ii) atmosphere

iii) microbes

iv) infectious diseases & vectors

v) pandemic/endemic

vi) zoonosis

5) Air

4) Water

i) urban water

ii) lakes and river water

iii) ground water

iv) wetlands

v) seas and oceans

vi) irrigation

i) atmosphere

ii) clean air iii) air/space pollution

iv) weather

v) climate change (anthropogenic and natural)

6) Land

i) lithosphere/cryosphere

ii) soils

iii) earth movers

iv) cultural/ecological landscapes

v) continents and islands

7) Disasters

i) natural events

ii) extreme weather events

iii) anthropogenic environmental disasters

iv) historical records

v) mitigation

vi) resilience and recovery

8) Foods

i) food security

ii) food and technology

iii) animal husbandry/pastoralism

iv) land and sea nomadism

v) material circulation (land and sea links)

9) Waste

i) biological waste

ii) chemical and hazardous wastes

iii) waste management

iv) material circulation

v) consumption behaviour

10) Humans

i) gender/sexuality

ii) population

iii) ethnicity

iv) nature views/religion/ethics

v) ecological footprint

Living Spaces with Optimizations

Where lived florae, faunae, and humanities? Where do they live today? Where will they live in the future? And what is the difference between increasing and decreasing phases of the population?