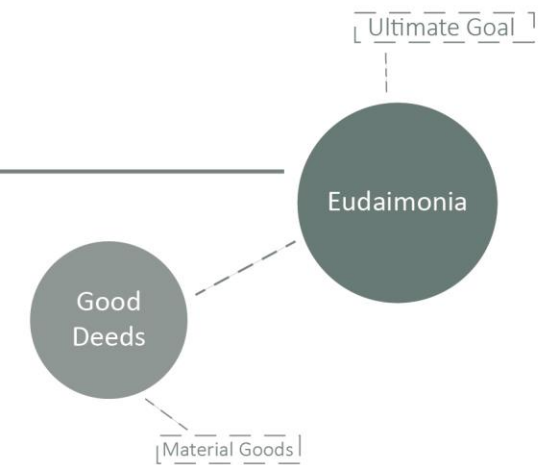


Happiness & Sustainability Around the Earth

Happy Cities: Strategies and Applications in pursuit of urban well-being

Savvas Stroumpas



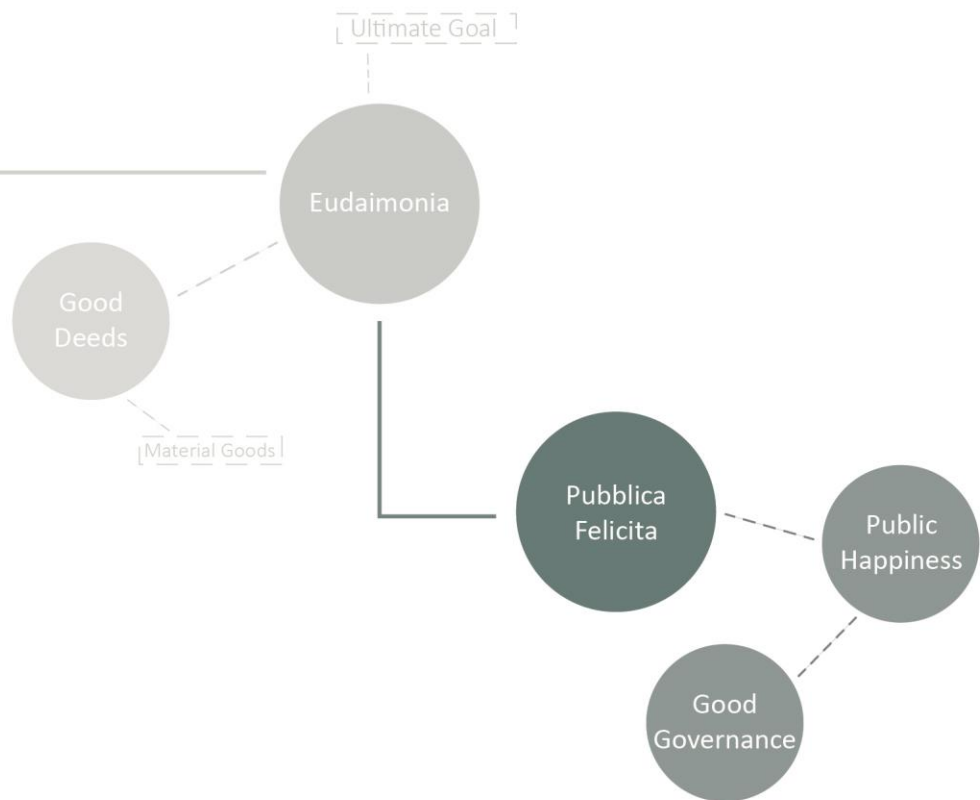


Nicomachean Ethics
Aristotle, 349 b.C.



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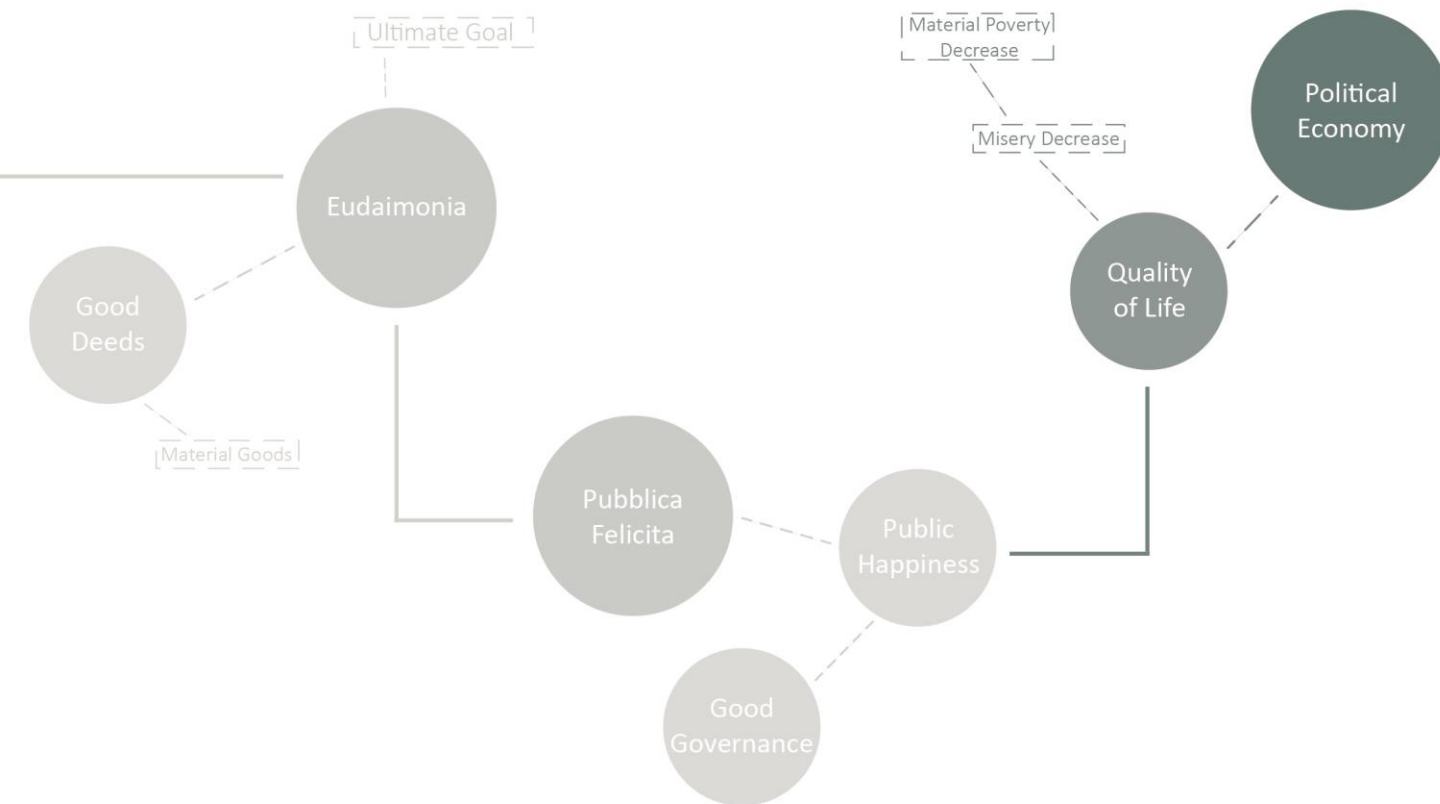


Lezioni di Commercio
Antonio Genovesi, 1769



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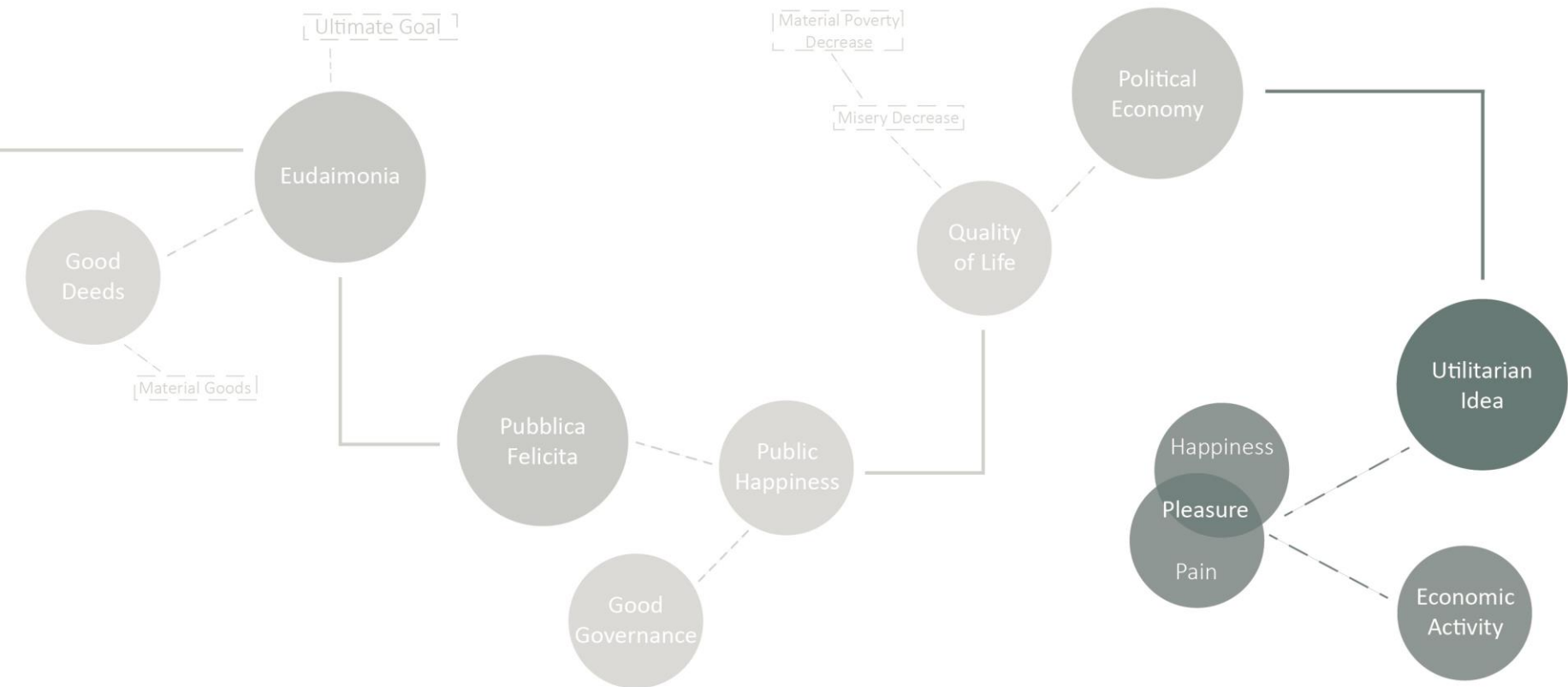


Nouveaux Principes d'Economie Politique
Jean Charles Léonard de Sismondi, 1819



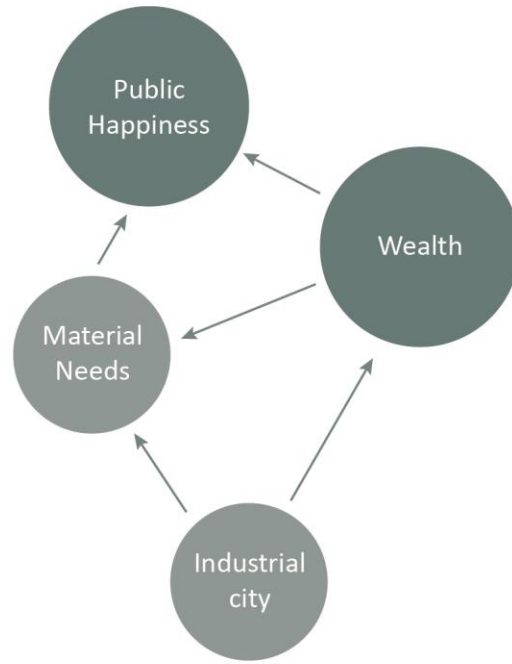
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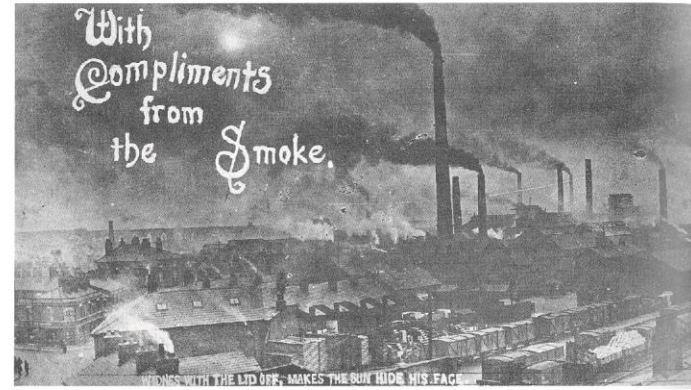


An Introduction to the Principles of Morals and Legislation
Jeremy Bentham, 1789





The Wealth of Nations
Adam Smith, 1776

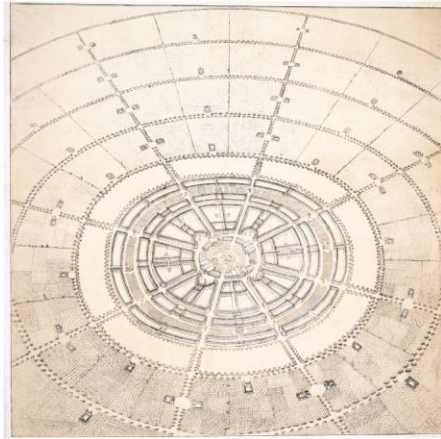


A COURT FOR KING CHOLERA.

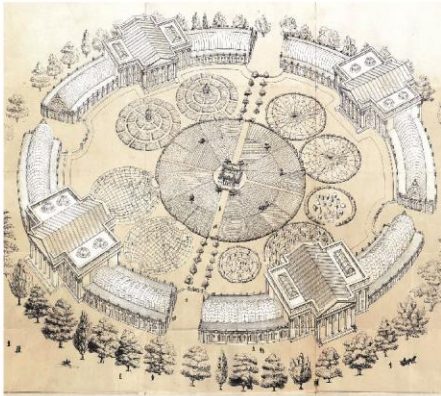


Happy Colony

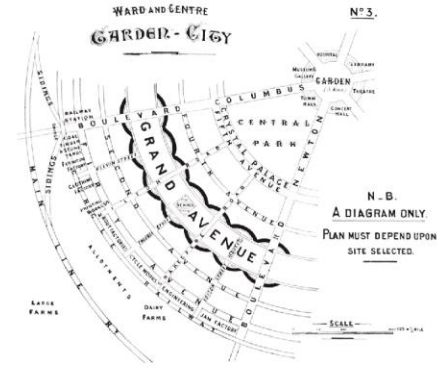
by Robert Pemberton



In the center of the circular city are placed the four colleges, in the second ring the factories, in the third the houses and in the fourth the public gardens, the crops with the rural houses.



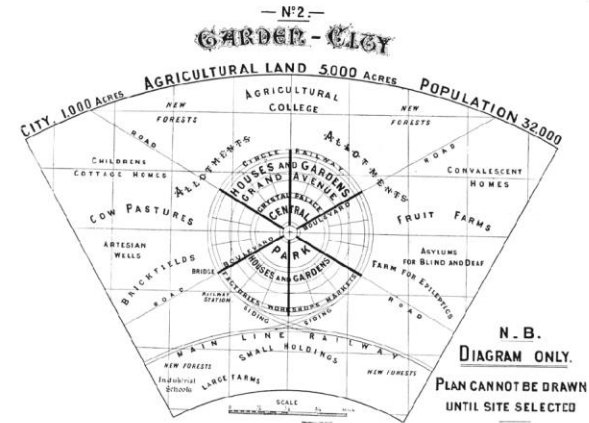
View of the four colleges at the central circle of the city



Garden City

by Ebenezer Howard

The main rings of organization of the city



The main structure of the city in the center with the regional agricultural areas as a restrictive zone of expansion of the city



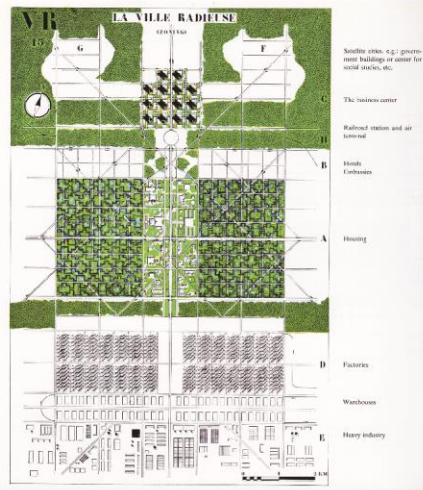
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Ville Radieuse

by Le Corbusier

Image of a city model with the towers above the Ile de la Cité in Paris

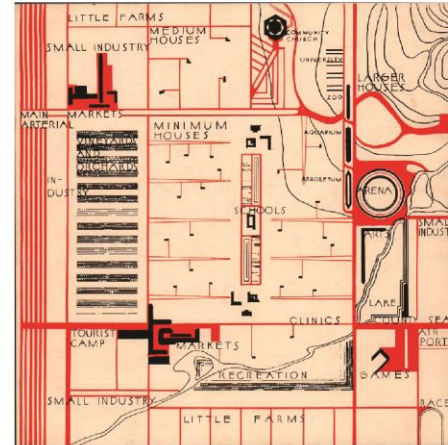
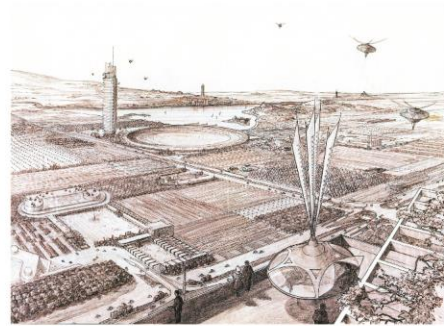


The masterplan with the zones of land use

Broadacre City

by Frank Lloyd Wright

Aerial view of agricultural land along with supporting structures

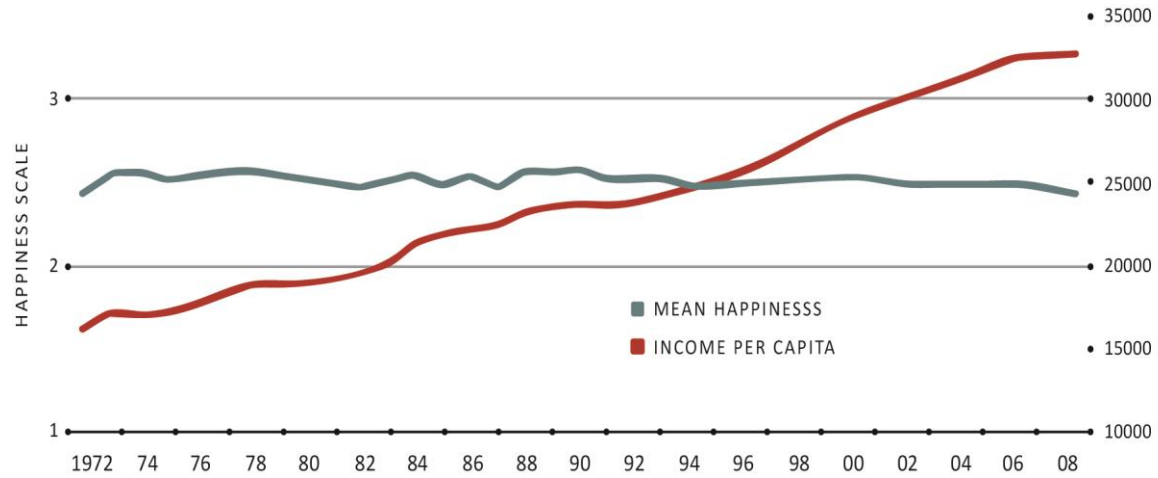


The masterplan with farmland and scattered infrastructure



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Easterlin Paradox





HAPPY PLANET INDEX

$$\text{HPI} = \frac{\text{Subjective Well-being} \times \text{Life expectancy} \times \text{Outcome inequality}}{\text{Ecological footprint}}$$

The diagram illustrates the formula for the Happy Planet Index (HPI). On the left, a dark grey circle contains the text "HPI". This is followed by an equals sign. To the right of the equals sign is a horizontal line. Above this line are three circular icons: a yellow circle with a black smiley face, a pink circle with a white heart and a red heartbeat line, and a dark grey circle with a white balance scale. Below the horizontal line is a single circular icon: a green circle with a white footprint. The text labels for each icon are placed directly below them: "Subjective Well-being", "Life expectancy", "Outcome inequality", and "Ecological footprint".

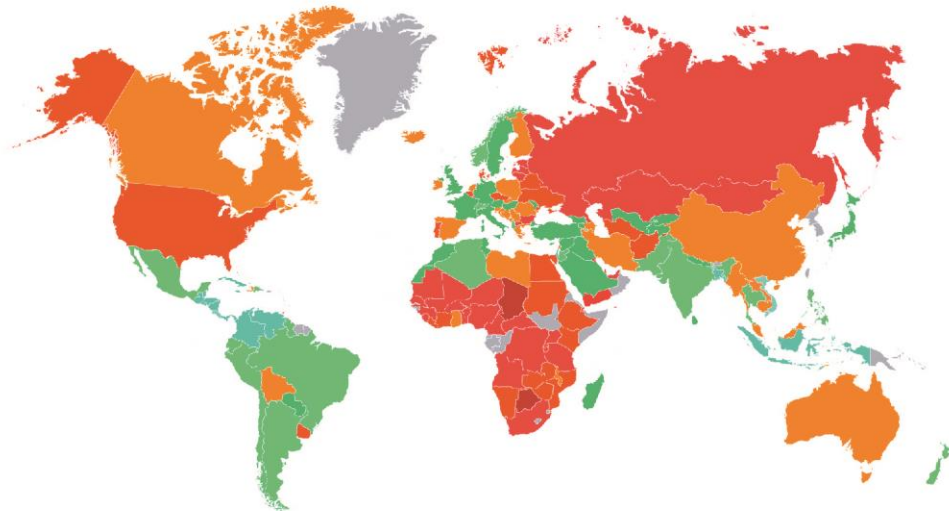


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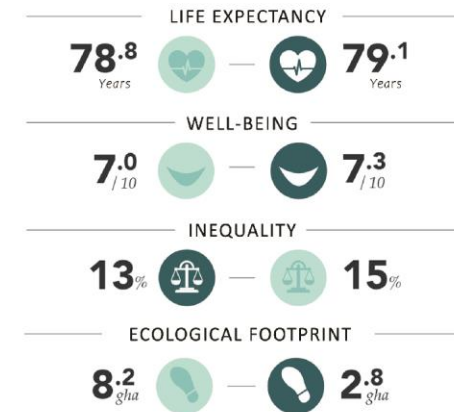




HAPPY PLANET INDEX



USA  VS  COSTA RICA
#108 from 140 #1 from 140

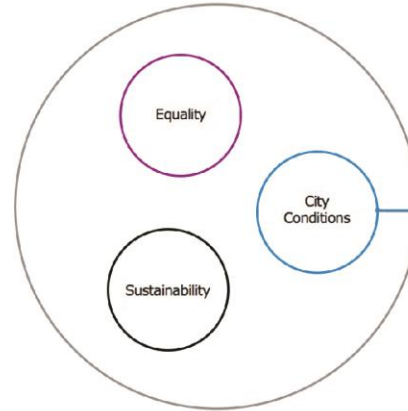


Happiness & Sustainability
Around the Earth





Level 1



Level 2

domain

work

Health

Education

Place

Community

Level 3

sub-domain

quality of work
Income
Unemployment

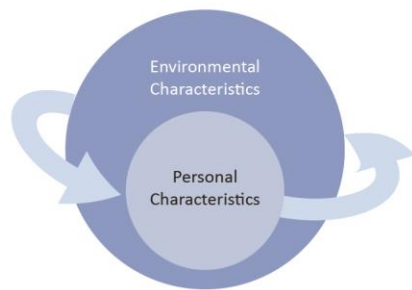
mortality and life expectancy
Illness and disability
Healthy and risky behaviours
Mental health

children's education
Adult qualifications

safety
Housing
Transport
Green space

culture
Participation
Social isolation
Local business



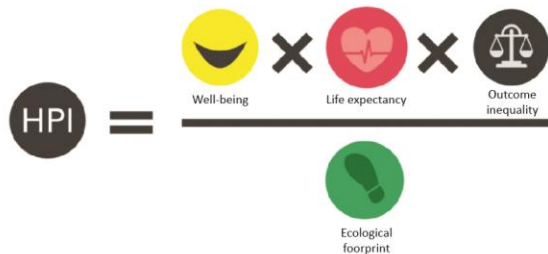


Subjective
Well-being

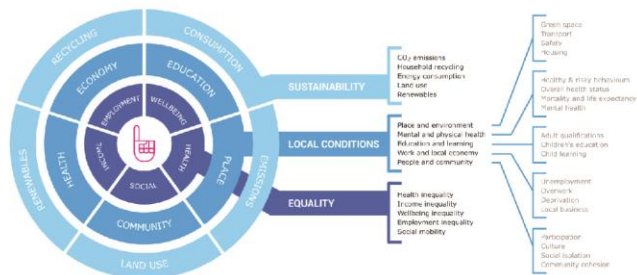


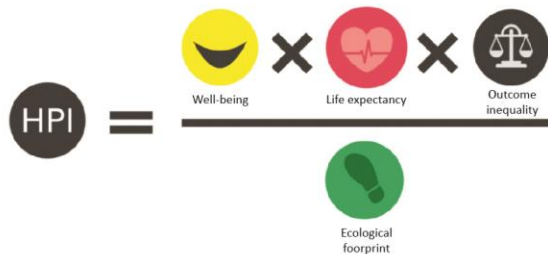
Factors associated with
subjective well-being





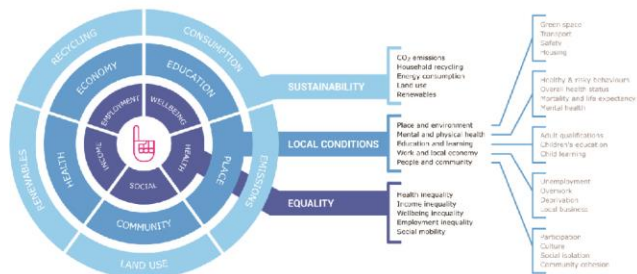
Ecological Footprint as variable





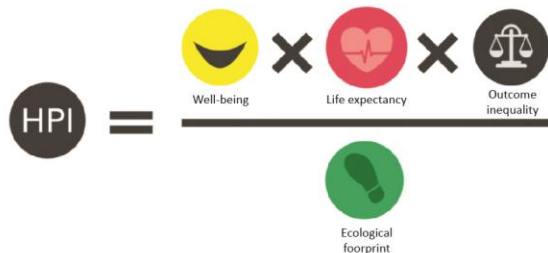
Ecological Footprint as variable

national scale of measurement and evaluation



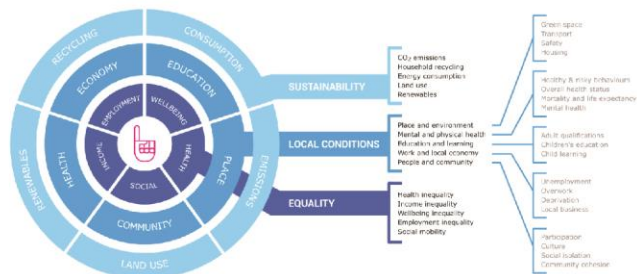
local communities or administrative scale





Ecological Footprint as variable

national scale of measurement and evaluation



local communities or administrative scale

classified factors



non classified

Education
Life Expectancy
Qualifications
Community
Mental Health
CO₂ Emissions
Subjective Well-being
Participation
Social Cohesion
Employment Inequalities
Culture
Social Isolation
Political Commitment
Healthy Behaviors
Employment
Unemployment
Life Satisfaction
Ecological Footprint
Security
Income
Local Companies
Enviroment Outcomes
Recycling
Energy Consumption
Public Trasportation
Green Spaces
Access to Services
Housing
Income Inequalities





Urban Planning
and Placemaking



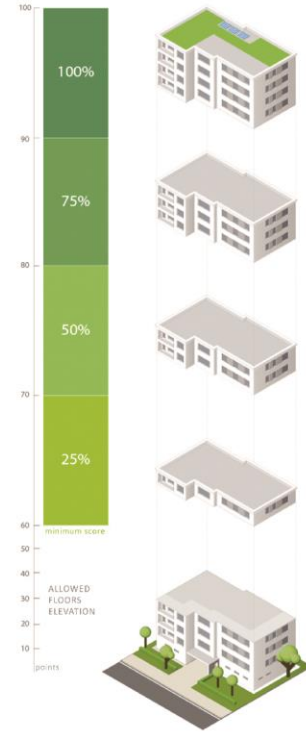
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Urban Planning and Placemaking

- Tool for Ecological Efficiency, Quito, Ecuador
Compact development and mixed use areas near transport hubs



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Urban Planning and Placemaking

- Tool for Ecological Efficiency, Quito
Compact development and mixed use areas near transport hubs
- Placemaking method
combination of top-down and bottom-up initiatives



Before



After



Placemaking program through participatory
design with the inhabitants of the neighborhood
in city of Patras, Greece
May 2019
astikakoina.org



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Around the Earth**





Urban Planning and Placemaking

- **Tool for Ecological Efficiency, Quito**
Compact development and mixed use areas near transport hubs
- **Placemaking method**
Combination of top-down and bottom-up initiatives
- **Walkability**
Strengthening the liveability of individual and social activities



1966: 15,800 m2



1996: 95,750 m2



Development of the pedestrian
network in the city of Copenhagen



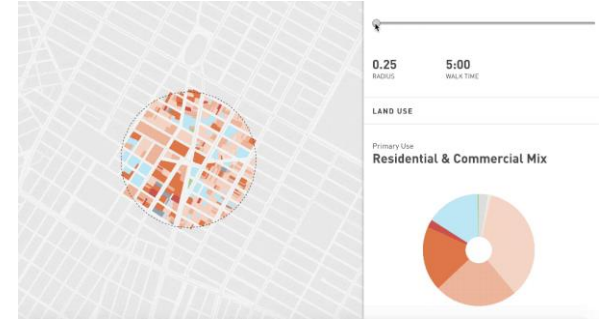
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Urban Planning and Placemaking

- Tool for Ecological Efficiency, Quito
Compact development and mixed use areas near transport hubs
- Placemaking method
Combination of top-down and bottom-up initiatives
- Walkability
Strengthening the liveability of individual and social activities
- 20minute neighborhood
Mixed use areas of housing, trade, daily needs within walking distance



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Natural Environment

56%

of the world's population will live in cities until 2025 consuming 70% of world energy

1,78_{bn}

people have inhaled polluted air over the last decade. This has led to multiple diseases

12 °C

warmer night temperatures in urban areas with a population exceeding 5 million compared to the surrounding areas



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Natural Environment

- Parklets

Small-scale urban interventions to strengthen pedestrian traffic on sidewalks



Community program for installing parklets
Vancouver, Canada



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Around the Earth**





Natural Environment

- **Parklets**
Small-scale urban interventions to strengthen pedestrian traffic on sidewalks
- **Reuse of abandoned infrastructures**
Conversion of useless urban structures into parks



The High Line (*former railway infrastructure*)
New York City



The Bentway (*use of remaining space under a highway*)
Toronto





Natural Environment

- **Parklets**
Small-scale urban interventions to strengthen pedestrian traffic on sidewalks
- **Reuse of abandoned infrastructures**
Conversion of useless urban structures into parks
- **Short-term change of use of public spaces**
Pilot programs of possible change of land use program for greater involvement of citizens in public life

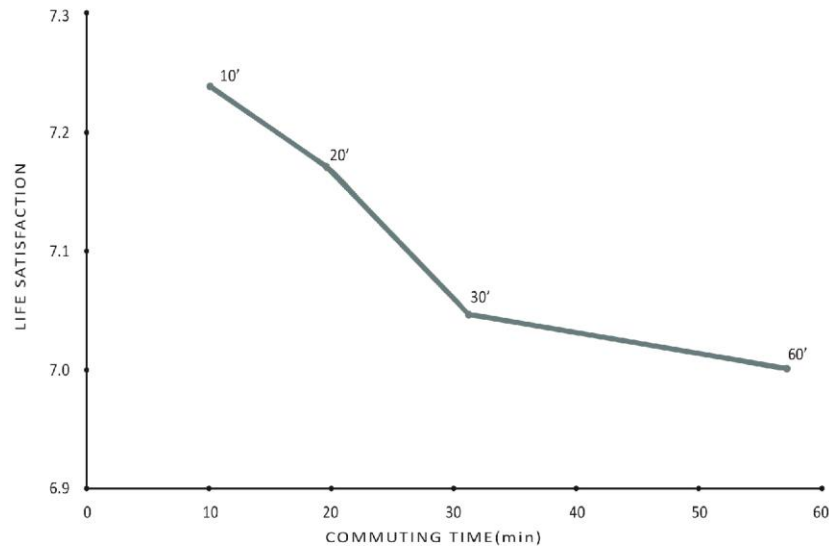


Short-term transformation of a square into park in Aarhus, Denmark
Schonherr Architects

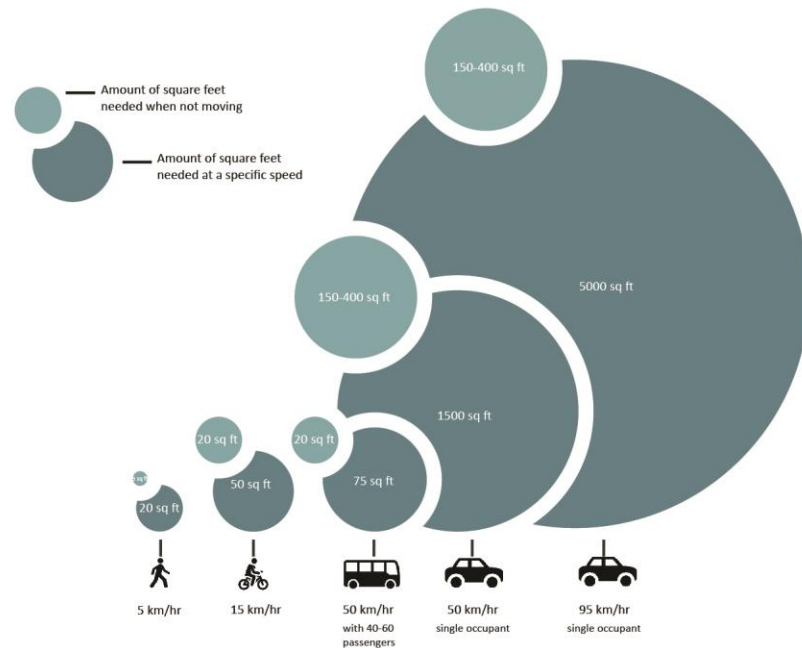




Mobility and Public Transport



Commuting time and average reported satisfaction with life,
Germany 1985-1998



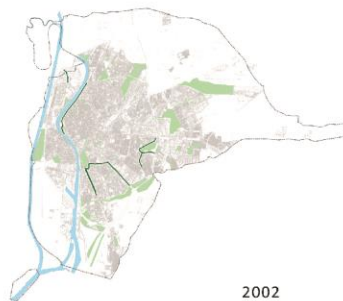
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Mobility and Public Transport

- **Bicycle Network, Seville**
Promoting active mobility through the development of a bicycle network



2002



2006



2012

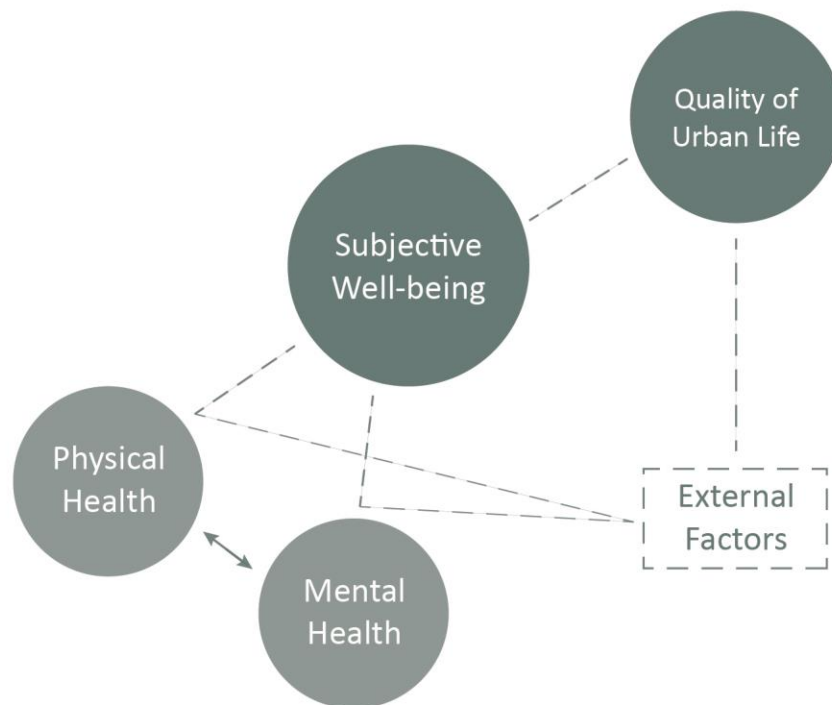


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Public Health
and Quality of Life



**Happiness & Sustainability
Around the Earth**





Public Health and Quality of Life

- **Ciclovía Program, Bogota**
Motor vehicle removal day for
free movement of bicycles and
pedestrians



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Security



Safety as the second most valuable need at Maslow's hierarchy of needs pyramid



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CONCLUSIONS

Interventions related to design within the urban fabric usually have a direct effect on people's quality of life.

Issues related to policy making are aimed at deeper changes in the social fabric.

The local authorities must activate the citizens through these methods, in order for them to actively participate.

Cities need to invest on all levels to achieve a holistic and sustainable result.

The challenge is not only design, but also psychological and social.



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Around the Earth**





urban happiness

Urban happiness can be defined as a concept that gives a positive perception of a place to the people who live in it and which induces them to spend a long time there and/or to opt to live there again with the same experience

Mariçhela Sepe



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