

## **Systems thinking** Capitalism as a system condition

MUO-E8029 & SPT-1050 Mikko Jalas, Aalto University, Department of Design 10.11.2020

## **Outline of the session**

13.15-13.25 Intro

13.25-14.15 Jukka Heinonen

- Consumption based accounting (possibly brief overview of methods, and data, and/or policy implications

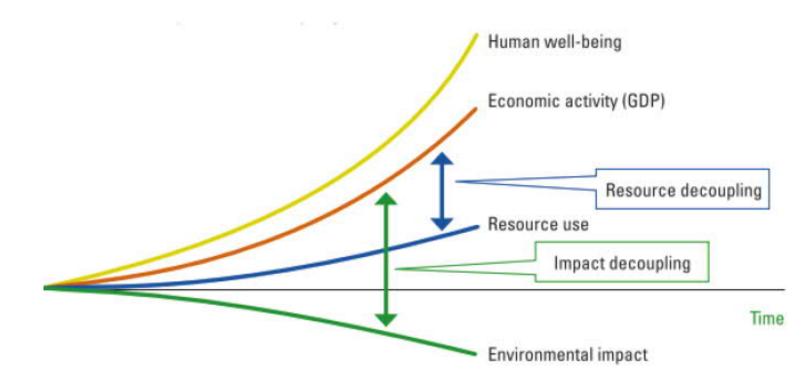
- Connections between urban form and consumption
- Rebound effect as a concept
- Discussion

14.15-14.30 Break

14.30-15.10 Mikko Jalas: Capitalism as a system condition15.10-15.30 Group exercise: Opportunities for idleness.15.30-15.45 Discussion

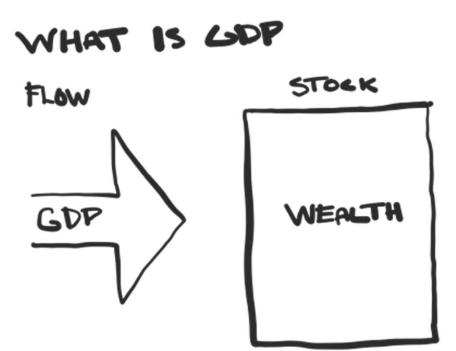


## Decoupling





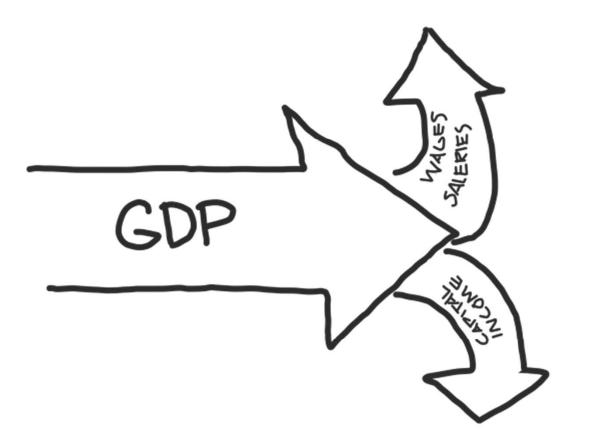
UNEP 2012 / www.materialflows.net





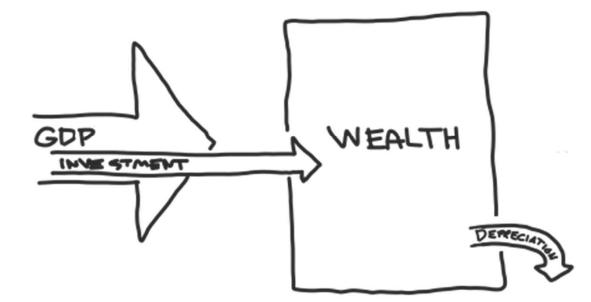
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#### ACCUMULATING WEALTA





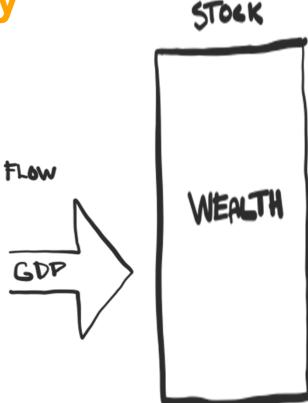
## **Capital in the 21<sup>st</sup> century**

Growth will fall/return to appr 1%

Capital/income ratio will return to high levels.

Inherited capital will matter more

Capital must be checked and taxed





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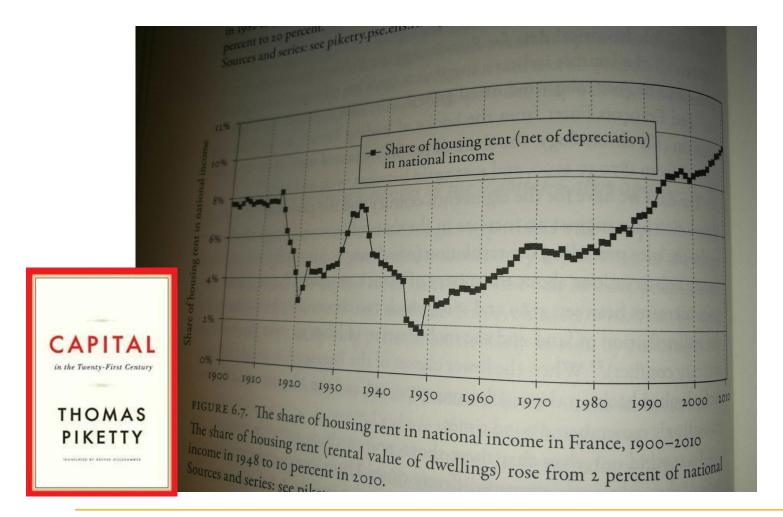
CAPITAL

in the Twenty-First Century

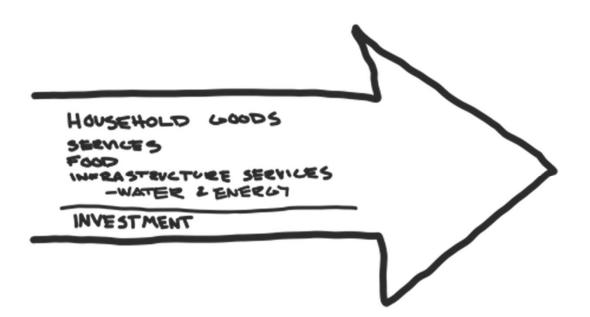
THOMAS

PIKETTY

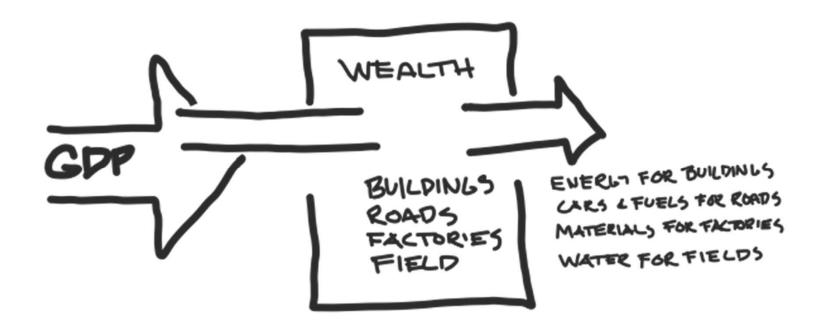
TEAMDATED BY ARTHUR DUCLEARANTS



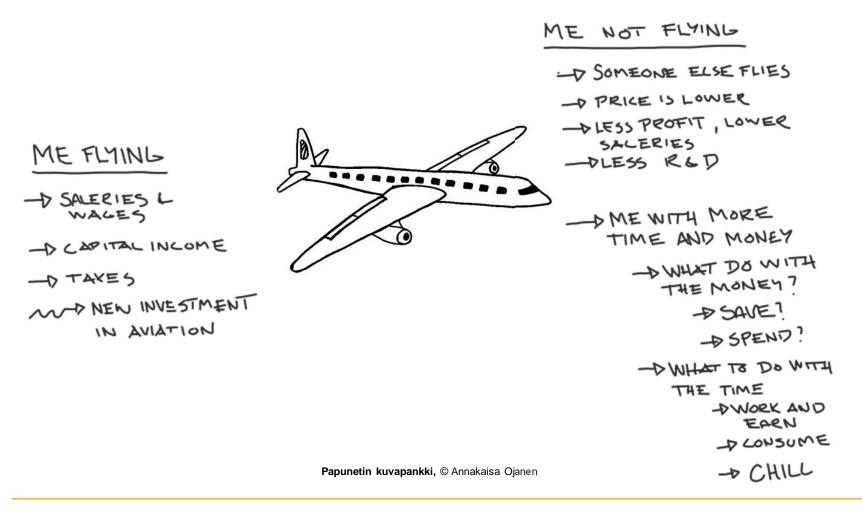














## Rebound effect

**Two meanings** 

# Any unintended and counterproductive side effect

'Building more lanes will not solve traffic problems'

'Increasing protective gear increases injuries

### In economics:

Price effect / Direct effect Efficiency improvements (in steam engine) will increase demand (for coal)

Income effect Saved money will be used elsewhere

*Economy-wide effects* Demand effects relative prices in the economy, R&D and general prospects



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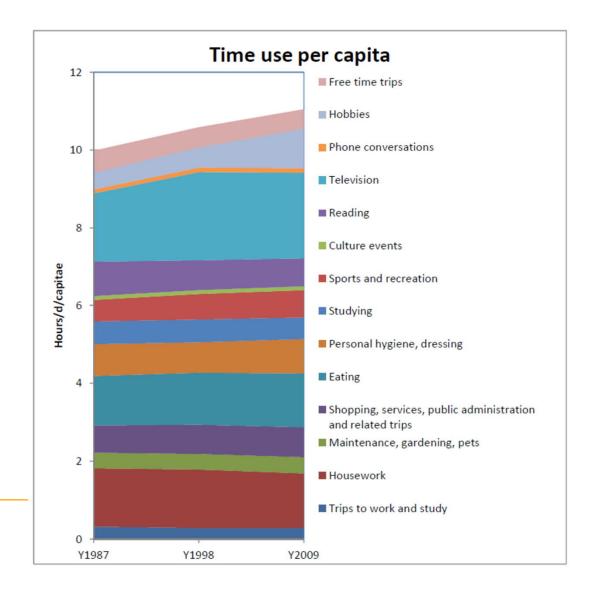
GROWTH



GROWTH HAS IMPROVED	PROSPERITY IS NOT EQUALLY SHARED
HUMAN LIFE	
RESOURCES ARE SLARCE	WE MUST LIVE WITHIN ECOLOGICAL BOUNDARIES
E CONOMIC MODELS CAPTURE	IMPORTANT THENOMENALLAN IN SENSORAL, EMOTIONAL AND ETHILLAL REALMS
GDP	HAPPINE 55
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OVERCOME NATURE	AMONL SPECIES
WORLD IS IN PROBRESS	MODESTY
HUMAN ARE DENETICALLY	PEACEFUL CO-EXIJENCE
PRODRAMMED TO WANT MORE	ABUNDANCE
FAST	SLOW



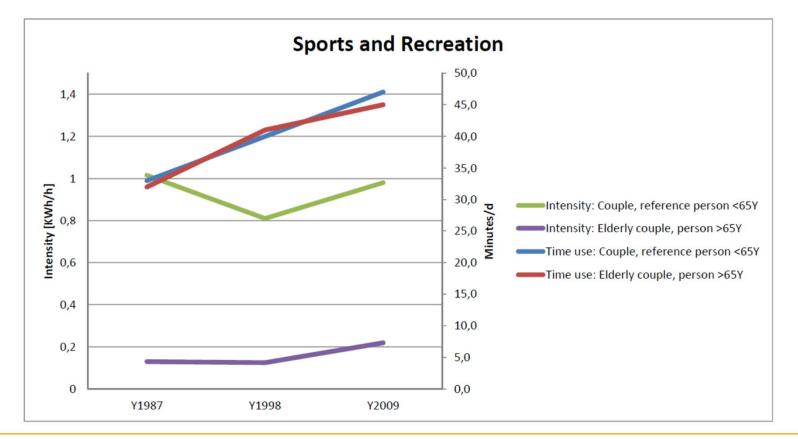
## Time use in Finland





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### **Energy intensity of activities**





Aalto University School of Arts, Design and Architecture Jalas, M., & Juntunen, J. K. (2015). Energy intensive lifestyles: Time use, the activity patterns of consumers, and related energy demands in Finland. *Ecological Economics*, *113*, 51-59.

## **Readings for the next session**

**Regenesis (2016) Ch2 Understanding place. In: Regenerative Development and Design: A Framework for Evolving** Sustainability. pp33-60.

Video by Daniel Wahl at https://www.youtube.com/watch?v=qQUqna4ObxQ

Additional: Soulé, M. E.: What is conservation biology? (link) Access from aalto.finna.fi



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