

The Limits to Growth: Sustainability and the Circular Economy

Lecture 10: Beyond the Circular Economy I

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NEWS/UPDATES/FEEDBACK

Feedback/Recap

E04 (Political Protest) - Group 1

Goals

- Reduce food waste
- Install more bike racks
- Outlaw single-use plastics

Demands (Targets: Cafeteria and university administration)

- Distribute leftovers to students
- Install ten new bicycle racks
- Ban single-use plastic snacks

Community participation principles

- No violence
- Mild vandalism (opposes the concept of nonviolence)
- Peaceful sit-ins

Hypothetical protest actions

- Block cafeteria doors with chained bicycles
- Mounting a bike rack and potentially setting it on fire → Sustainability?
- Peaceful table occupation with placards

Effectiveness

- Getting more bike racks installed than before
- Implementing leftover food distribution to decrease waste
- Reduce or eliminate single-use plastics for less trash than before

Feedback/Recap

E04 (Political Protest) - Group 2

Goals

- Mandatory 15 minutes break for everyone, including professors
- Indoor amusement park to relieve stress
- Morning routine/ritual of “counter-alcohol” games, such as beer pong

Demands (Targets: [University administration and city council](#))

- Building a large playground that is to be funded by the semester fees
- Purchase large inflatable parks with beer taps
- Cafeteria offers “hangover kits” that include a variety of drinks (**unconventional**)

Community participation principles

- Fun is mandatory – else a penalty is given-> must drink
- The minimum alcohol threshold is unsafe and encourages risky behaviour
- No stress allowed – complainers will face a playful consequence -> a beer in the hand

Hypothetical protest actions

- Counter shots every 500m while you “hangover run” through the university
- Loudly toasting while drinking at the cafeteria
- Mobile bar with a DJ

Effectiveness

- Number of students physically fit and awake before lectures
- Professors willingly participating in beer pong
- Rate at which the “hangover run” is formally recognized by the university

INTRODUCTION

Introduction

CE Recap

- Goals of the CE:
 - Maintain natural resources and minimize the discharge of substances that are harmful to health and nature
 - Ecological modernization of the economy to increase resource efficiency, e.g., by technical innovation and digital solutions
 - Products/services designed and constructed in such a way, that they can be returned to the economic and material flows at any time with little financial and energetic effort
 - Increase/maximize utilization of resources, e.g., Performance Economy

Introduction

CE Criticism

- Replace the LE with circularly oriented forms of consumption and production
- CE focus mostly on earned value management (“Wertschöpfungsmanagement”), product-service systems, product/business model innovations within existing power asymmetries
- Decouple economic growth and consumption of natural resources

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→ But why do we need never ending economic growth and why is it good to consume as many goods and services as possible?

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→ But why do we need never ending economic growth and why is it good to consume as many goods and services as possible?

- Alternatives:
 - Sufficiency strategies and lifestyle changes
 - Question the prevailing entrepreneurial orientation towards the shareholder concept
 - Deconstruction of existing power and hegemonic relations



ECO-SUFFICIENCY

Eco-Sufficiency

Eco-Efficiency - Definition

Eco-Efficiency →

Eco-Sufficiency

Eco-Efficiency - Definition/Example

Eco-Efficiency → Minimise the material input required to achieve a certain economic result, i.e. to improve the ratio between the use of resources and the production of goods.

- Example:

Eco-Sufficiency

Eco-Efficiency - Definition/Example

Eco-Efficiency → *Minimise the material input required to achieve a certain economic result, i.e. to improve the ratio between the use of resources and the production of goods.*

- Example: A car that consumes 3 liter per 100km is 2x more ecologically efficient than a car that consumes 6 liter.

Eco-Sufficiency

Eco-Consistency - Definition

Eco-Consistency →

Eco-Sufficiency

Eco-Consistency – Definition/Example

Eco-Consistency → *Ecological consistency is based on the damage intensity and environmental impact of the resources used. Instead of reducing their quantity, their nature or the product design should be optimised so that no emissions or waste are produced, regardless of the level of consumption → i.e., Circular Economy*

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- Example: A battery electric vehicle (BEV) that runs on green energy (e.g., solar/wind/etc.)

Eco-Sufficiency

Efficiency + Consistency - Example

- Example:
 - First, minimize the fuel/energy consumption of a car
 - Second, operate the car with carbon-neutral fuel/energy

Eco-Sufficiency

Definition(s)

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“Seeking enough when more is possible is both intuitive and rational - personally, organizationally and ecologically. And under global ecological constraint, it is ethical.” - Thomas Princen

Eco-Sufficiency Definition(s)

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“A set of policy measures and daily practices that avoid the demand for energy, materials, land, water, and other natural resources while providing wellbeing for all within the planetary boundaries.” - IPCC

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Sufficiency → All you need is less

Eco-Sufficiency

Example - New Apartment

- Scenario:
 - Size: 120m²
 - Heat demand: 130 kWh pro m² and year

■

Eco-Sufficiency

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- Sufficiency: Live in a smaller apartment (or utilize less space per person)

Eco-Sufficiency

Example - New Apartment

- Problem(s):
 - Efficiency and consistency allow us to either:
 - a) continue living a nice life using less resources
 - b) Live even more comfortably using the same amount of resources

Eco-Sufficiency

Example - New Apartment

- Problem(s):
 - Efficiency and consistency allow us to either:
 - a) continue living a nice life using less resources
 - b) Live even more comfortably using the same amount of resources
 - They promise to maintain your individual freedom (of choices) by fixing ecological challenges/downsides using technological/political action
 - Also personal responsibility by buying yourself out of this mess → just buy high-prices eco-friendly products and everything will be fine. No need to consume less.

Eco-Sufficiency

Sufficiency vs. Overconsumption

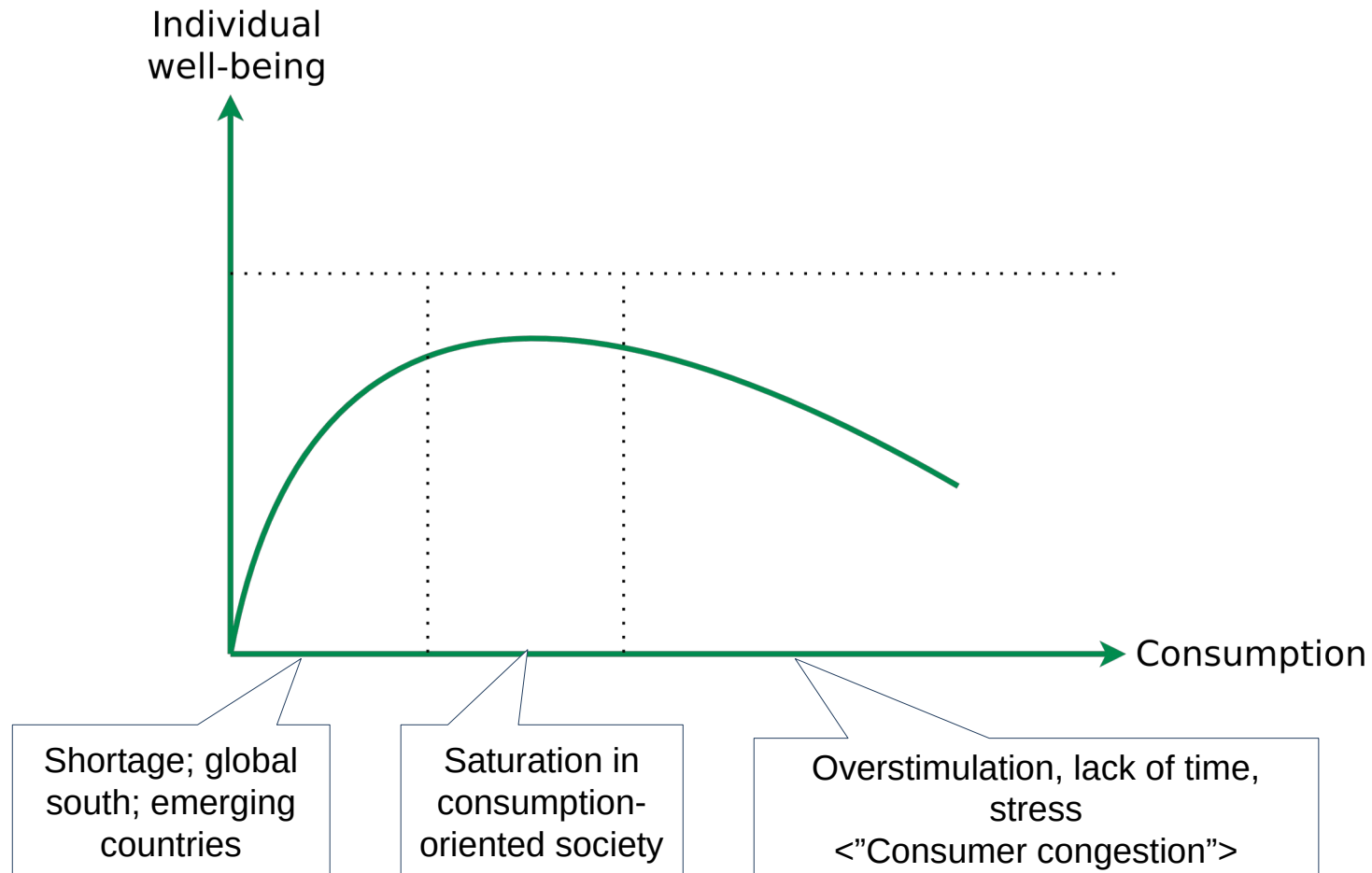


Image recreated from „Manfred Folkers, Niko Paech (2020) – All you need is less“

DETOUR

Detour Sustainability

Sustainability → Consume less

- Consume less → Less money spend, i.e. lower living costs?

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- Consume less → Less money spend, i.e. lower living costs?
- Lower living costs → Less work hours required to cover costs, e.g., 20h work week?
- Technological advances reducing workload even further?

Detour

15h Work Week

John Maynard Keynes predicted a 15h work week in his 1930 essay *“Economic Possibilities for our Grandchildren”*

Detour

Why am I working 40+h a week?

- Lively debates pertaining to Keynes prediction – especially among economists.
- Main problem: Keynes did not account for the massive increase in consumerism → Majority of people chooses more toys and pleasure over less work hours

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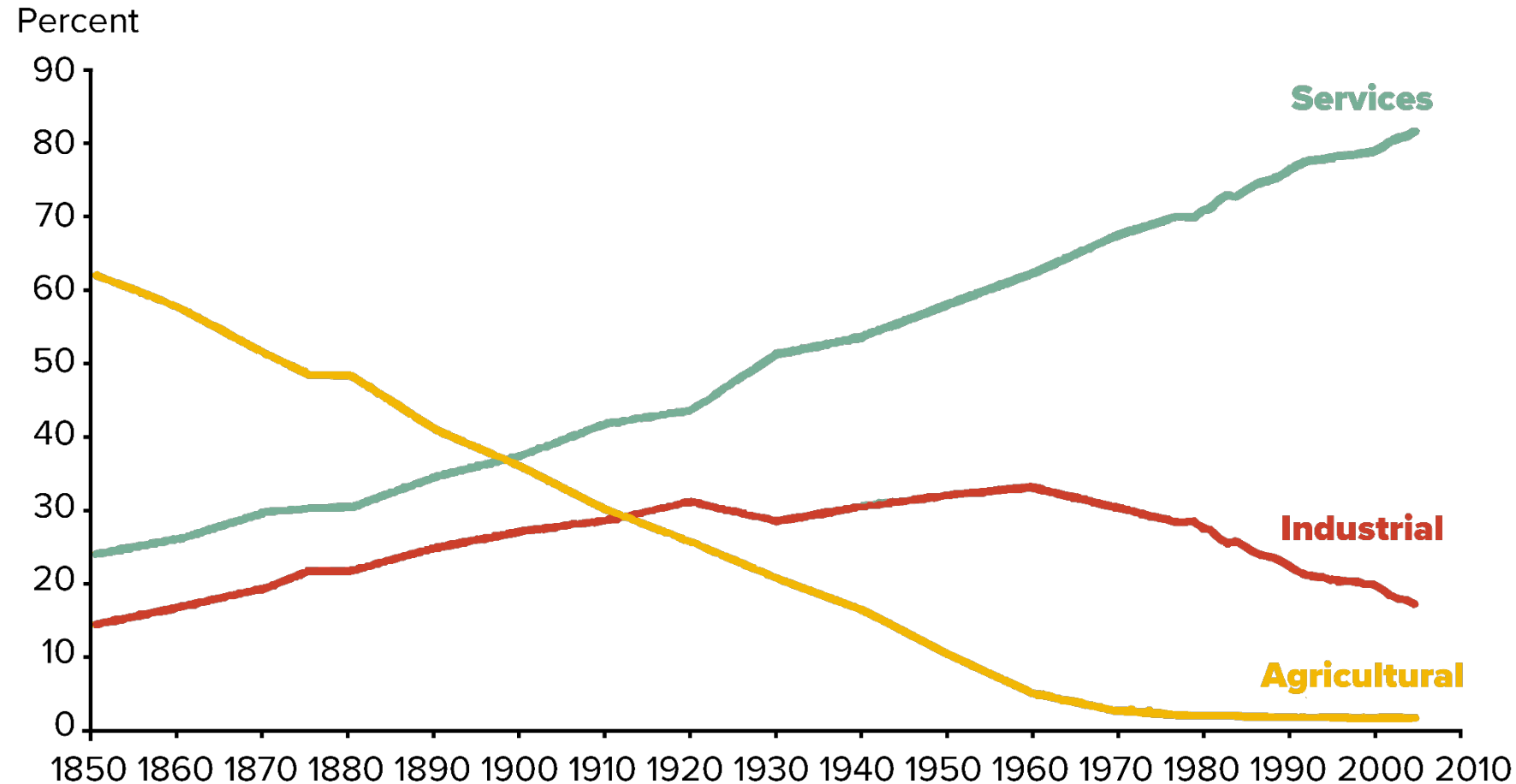
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Contradicts our sustainability paradigm (consume less).

Detour

Shift in Labor Force 1850 - 2010



Detour

Bullshit Job - Essay and Book by David Graeber

- Essay: *On the Phenomenon of Bullshit Jobs: A Work Rant* (2013) - [Link](#)
- Book: *Bullshit Jobs: A Theory* (2018)

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Bullshit Job - Definition

„Form of paid employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence even though, as part of the conditions of employment, the employee feels obliged to pretend that this is not the case.“

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→ Inefficiencies in capitalism?



Detour

Bullshit Jobs - Categories

D. Graeber (2013) - On the Phenomenon of Bullshit Jobs - Essay - [Link](#)

D. Graeber (2018) - Bullshit Jobs: A Theory

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Bullshit Jobs - Categories

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- Duct tapers: Temporarily fix problems that could be fixed permanently, e.g., programmers repairing bloated code, airline desk staff who calm passengers whose bags do not arrive

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- Taskmasters: Create extra work for those who do not need it, e.g., middle management, leadership professionals

Detour

Bullshitization

Transition of a meaningful job into a bullshit job through corporatization, marketization or managerialism.

Detour

Changes in full-time staff size and student enrollment (1976-2011 and 1976-2018)

	1976	2011	% change 1976-2011	2018	% change 1976-2018
Faculty	434,000	762,114	+76%	832,119	+92%
Executive/Administrative	97,003	231,602	+139%	255,881	+164%
Other Professionals	150,319	699,867	+366%	830,189	+452%
Nonprofessional Staff	630,511	742,445	+18%	631,675	+0.19%
Student Enrollment	11,012,137	21,010,590	+91%	19,645,918	+78%



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(Oxford Dictionary)

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 - Fulfilling those desires → Reward for suffering through pointless work

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 - The pains of dull work as a justification for the ability to fulfill consumer desires
 - Fulfilling those desires → Reward for suffering through pointless work
 - Bullshit jobs also serve political ends, in which political parties are more concerned about having jobs than whether the jobs are fulfilling.
 - Also → Populations occupied with busy work have less time to revolt

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Detour

Bullshit Jobs - Now What?

- **Graeber's solution → Universal Basic Income (UBI) → Livable benefit paid to all, thus letting people work at their leisure**

Additional Resources

- Manfred Folkers, Niko Paech (2020) – All you need is less
- David Graeber. *Debt: The First 5000 Years* (2011).
- David Graeber. On the Phenomenon of Bullshit Jobs – Essay (2013) – [Link](#).
- David Graeber. *Bullshit Jobs* – Book (2018).

Questions?