

The Limits to Growth: Sustainability and the Circular Economy

Lecture 10: Beyond the Circular Economy

Prof. Dr. Benjamin Leiding
M.Sc. Anant Sujatanagarjuna
M.A. Theresa Sommer

License

- This work is licensed under a **Creative Commons Attribution-ShareAlike 4.0 International License**. To view a copy of this license, please refer to <https://creativecommons.org/licenses/by-sa/4.0/> .
- Updated versions of these slides will be available in our [Github repository](#).

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

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

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

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

→ 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*

- Example:

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

- 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)

Eco-Sufficiency

Definition(s)

“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)

“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

“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

Eco-Sufficiency Definition(s)

“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

“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

Sufficiency → All you need is less

Eco-Sufficiency

Example - New Apartment

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

■

■

Eco-Sufficiency

Example - New Apartment

- Scenario:
 - Size: 120m²
 - Heat demand: 130 kWh pro m² and year
- (Energy-)efficiency: Well-insulated houses and highly-efficient heating systems require less energy to heat the apartment, i.e., minimize the heat demand as much as possible
-

Eco-Sufficiency

Example - New Apartment

- Scenario:
 - Size: 120m²
 - Heat demand: 130 kWh pro m² and year
- (Energy-)efficiency: Well-insulated houses and highly-efficient heating systems require less energy to heat the apartment, i.e., minimize the heat demand as much as possible
- Consistency: Minimize ecological damage by choosing the most sustainable way of heating

Eco-Sufficiency

Example - New Apartment

- Scenario:
 - Size: 120m²
 - Heat demand: 130 kWh pro m² and year
- (Energy-)efficiency: Well-insulated houses and highly-efficient heating systems require less energy to heat the apartment, i.e., minimize the heat demand as much as possible
- Consistency: Minimize ecological damage by choosing the most sustainable way of heating
- 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

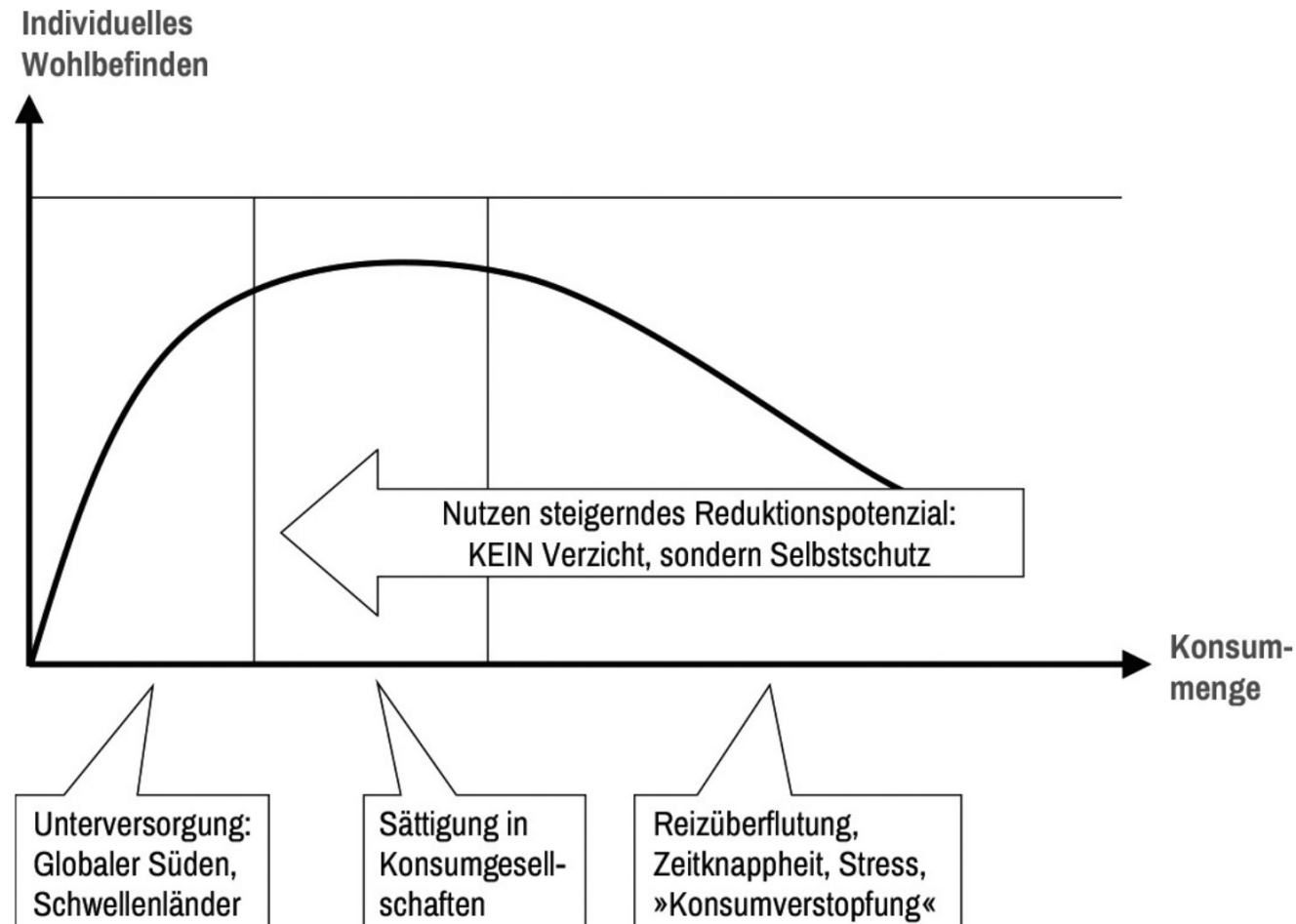
Example - New Apartment

- 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

TODO - RECREATE



DETOUR

Detour Sustainability

Sustainability → Consume less

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

Detour Sustainability

Sustainability → Consume less

- Consume less → Less money spend, i.e. lower living costs?
- Lower living costs → Less work hours required cover costs, e.g., 20h work week?

Detour Sustainability

Sustainability → Consume less

- 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

Detour

Why am I working 40+h a week?

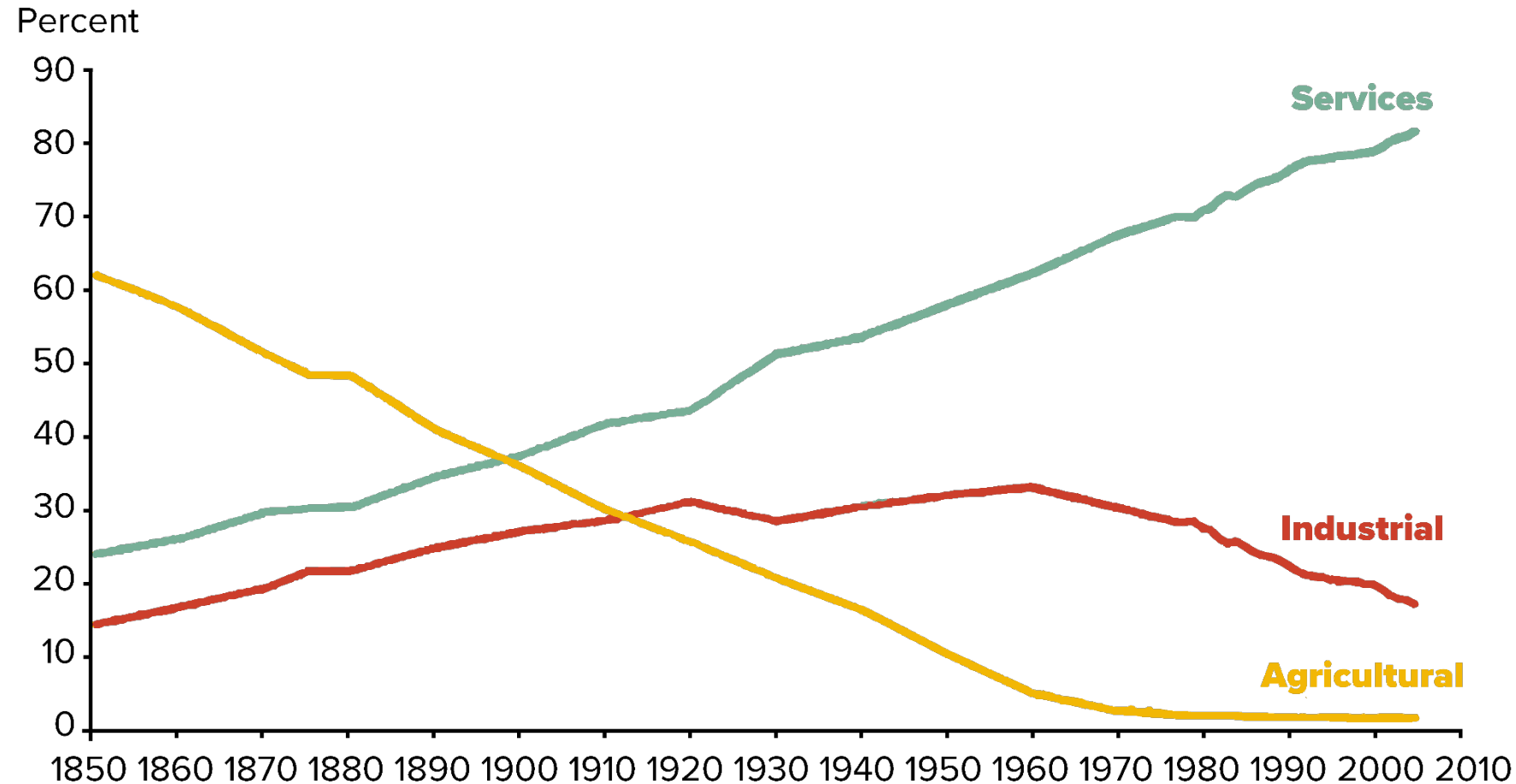
- Lively debates pertaining to Keynes prediction – especially among economists.
- Main problem: Keynes did not account for the massive increase in consumerism → Majority of people chooses more toys and pleasure over less work hours



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)

Detour

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.“

Detour

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.“

→ 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

Detour

Bullshit Jobs - Categories

- Flunkies: Serve to make their superiors feel important, e.g., receptionists, administrative assistants, door attendants, store greeters, makers of websites whose sites neglect ease of use and speed for looks

Detour

Bullshit Jobs - Categories

- Flunkies: Serve to make their superiors feel important, e.g., receptionists, administrative assistants, door attendants, store greeters, makers of websites whose sites neglect ease of use and speed for looks
- Goons: Act to harm or deceive others on behalf of their employer, e.g., lobbyists, corporate lawyers, telemarketers, public relations specialists, community managers

Detour

Bullshit Jobs - Categories

- Flunkies: Serve to make their superiors feel important, e.g., receptionists, administrative assistants, door attendants, store greeters, makers of websites whose sites neglect ease of use and speed for looks
- Goons: Act to harm or deceive others on behalf of their employer, e.g., lobbyists, corporate lawyers, telemarketers, public relations specialists, community managers
- 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

Detour

Bullshit Jobs - Categories

- Flunkies: Serve to make their superiors feel important, e.g., receptionists, administrative assistants, door attendants, store greeters, makers of websites whose sites neglect ease of use and speed for looks
- Goons: Act to harm or deceive others on behalf of their employer, e.g., lobbyists, corporate lawyers, telemarketers, public relations specialists, community managers
- 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
- Box tickers: Create the appearance that something useful is being done when it is not, e.g., survey administrators, in-house magazine journalists, corporate compliance officers, quality service managers

Detour

Bullshit Jobs - Categories

- Flunkies: Serve to make their superiors feel important, e.g., receptionists, administrative assistants, door attendants, store greeters, makers of websites whose sites neglect ease of use and speed for looks
- Goons: Act to harm or deceive others on behalf of their employer, e.g., lobbyists, corporate lawyers, telemarketers, public relations specialists, community managers
- 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
- Box tickers: Create the appearance that something useful is being done when it is not, e.g., survey administrators, in-house magazine journalists, corporate compliance officers, quality service managers
- 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%



Detour

15h Work Week

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

Detour

Bullshit Jobs - Why?

- Assumption → Capitalism does not allow for inefficiencies

Detour

Bullshit Jobs - Why?

- Assumption → Capitalism does not allow for inefficiencies
- Hypothesis → Maybe this is not capitalism and rather just "managerial feudalism"?

Detour

Bullshit Jobs - Why?

- Assumption → Capitalism does not allow for inefficiencies
- Hypothesis → Maybe this is not capitalism and rather just "managerial feudalism"?

Feudalism: „The dominant social system in medieval Europe, in which the nobility held lands from the Crown in exchange for military service, and vassals were in turn tenants of the nobles, while the peasants (villeins or serfs) were obliged to live on their lord's land and give him homage, labour, and a share of the produce, notionally in exchange for military protection.”

(Oxford Dictionary)

Detour

Bullshit Jobs - Why?

- Assumption → Capitalism does not allow for inefficiencies
- Hypothesis → Maybe this is not capitalism and rather just "managerial feudalism"?
 - The pains of dull work as a justification for the ability to fulfill consumer desires
 - Fulfilling those desires → Reward for suffering through pointless work

Feudalism: „The dominant social system in medieval Europe, in which the nobility held lands from the Crown in exchange for military service, and vassals were in turn tenants of the nobles, while the peasants (villeins or serfs) were obliged to live on their lord's land and give him homage, labour, and a share of the produce, notionally in exchange for military protection.”

(Oxford Dictionary)

Detour

Bullshit Jobs - Why?

- Assumption → Capitalism does not allow for inefficiencies
- Hypothesis → Maybe this is not capitalism and rather just "managerial feudalism"?
 - 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

Feudalism: „The dominant social system in medieval Europe, in which the nobility held lands from the Crown in exchange for military service, and vassals were in turn tenants of the nobles, while the peasants (villeins or serfs) were obliged to live on their lord's land and give him homage, labour, and a share of the produce, notionally in exchange for military protection.”

(Oxford Dictionary)



Detour

Bullshit Jobs - Now What?

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

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

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?