

**Masters in Environmental Studies, 2020-21**  
Masaryk University, Brno, Czech Republic

# **Class 1**

## **Introduction: capitalist natures**

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# Introductions: a bit about me

## Senior Research Fellow



Universitat  
Pompeu Fabra  
Barcelona

Department  
of Political and Social  
Sciences



**PUBLIC POLICY CENTER**



Universitat  
Pompeu Fabra  
Barcelona



## Background:

- Studies
- Jobs
- Research interests

# Introductions: students introduce themselves

- Name
- Course you are doing at Masaryk Uni
- Place of origin
- First degree in ... from ... University

# Class outline

1. Introduction to course:
  - Logistics
  - Evaluations, etc.
2. Introduction to some key terms for the course
  - Fields and sub-disciplines used in the course
  - Terms/ concepts: politics, power, political ecology, etc.
3. Class 1: Capitalism and environmental transformation

# **1. INTRODUCTION TO THE COURSE**

# Course structure

- Course aims
  - How power influences **environmental change and governance**
  - Environmental social science (political ecology) + environmental history
  - Develop critical understanding of environmental change and relevance of **power and politics** in producing it
- Course logic
- Structure of classes
  - **Reading and assignment (upload to IS: 2 hours before the class)**
  - Answer assignment in class (individually, small groups, whole class)
  - Classroom activities
  - Lecturing: expand points from reading; summarise class
    - \* Notes pages of ppt

# Course evaluation

## Essay (70%)

- **Deadline: Thursday 17 December 2020**
  - Late submissions: **'Fail'**
  - If you get less than 50% overall mark, then chance for another short essay
- **Individual or Collective essay**
  - Collective: maximum 2 students per group
  - Group will produce *one* essay
  - I mark the essay, i.e. both students get same mark
- ❖ **Topic:** Klein, N. 2016. *Let Them Drown. The Violence of Othering in a Warming World.*
  - Answer 3 questions
  - max 1,000 words (excluding references)
  - I will explain into more detail what you need to do for this **in Class 3**

Evaluation tool	% of final mark
Assignments and participation in classroom	30%
Final Essay	70%

## Class participation (30%)

- Student commitment and performance in answering class assignment: 10% per assignment
- You should upload (IS) each assignment 2 hours before class
- I provide brief feedback to each class assignment (IS Notebook) and you can also ask me in person after the class
- 10%: eager to participate and constructive comments in classroom

## Grades:

- FAIL
- PASS
- DISTINCTION
- But: for **MUNI system** purposes I can only assign 'Pass' or 'Fail'

# A note on answering assignments

- File name of your assignments
  - Your name assignmentnumber
  - E.g. **Zografos\_Christos\_2**

NOTHING ELSE PLEASE!

How to answer your assignment:

- First, **answer** the question, e.g. in one sentence
- Then, substantiate, **support** your answer with **arguments** (reasoning) + **evidence** from the text
  - Avoid being descriptive: don't answer by simply describing a situation and don't re-state what the question says!
- Finally, you can say whether you **agree-disagree** with author, and why



# Other

- Can reach me through my email [christos.zografos@upf.edu](mailto:christos.zografos@upf.edu)
- Help with English (unknown words): <http://dictionary.cambridge.org/>
- Do you have any questions re: course programme, structure, outputs, etc.?

## **2. INTRODUCTION TO KEY TERMS**

# ACTIVITY 1: pollution

## Watch:

- India pollution: Air quality reaches 'hazardous' levels in Delhi  
<https://m.youtube.com/watch?v=9E-aJeRLmW8>
- Ground Report: Why Farmers Are Burning Stubble In Punjab  
<https://m.youtube.com/watch?v=6y8z5bw9GO4>
- Watch: What makes Delhi's air so deadly:  
<https://www.youtube.com/watch?v=bVzvZxW5n2Q>

## Questions, discuss:

1. What goes on here? Who suffers?
2. What are the causes of this?
  - Why are there such levels of pollution?
3. What can be done?

# Fields and disciplines

Main ones used in course

– Study: interaction humans – environment

- **Political ecology**

Environmental change and its consequences

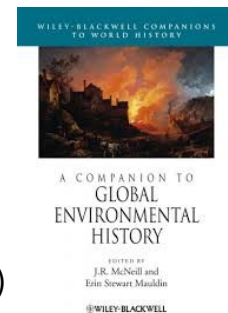
- The causes of change
- Power and politics: analytical concepts (more: later)



- **Environmental history**

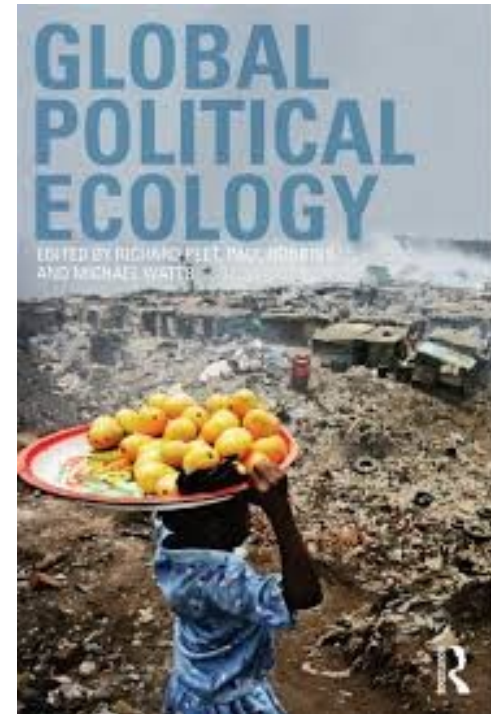
Human interaction with natural world over time

- How humans shape their environment
- How they are shaped by it: active role played by nature in human affairs (agency of nature)



# Political ecology (Simsik, 2007)

- Field: to understand relationship human societies – nature
- Environmental change is intrinsically **political**
  - Decisions (e.g. policy)
  - Consequences (e.g. environmental conflict)
- Environmental change: unequal distribution of ‘goods’ (benefits) and ‘bads’ (costs)
  - Winners and losers -> generation of conflict



# Politics

- Not confined to a particular sphere (e.g. government, the state)
- Concerns production, distribution and use of resources in the course of social existence
- At work in all social activities and every corner of human existence
  - Leftwich (1984): at heart of *all* collective social activity, formal and informal, public and private, in *all* human groups, institutions & societies
- Takes place at every level of social interaction within families, amongst small groups of friends just as much as amongst nations and on the global stage
- Radical feminist assertion: 'the personal is the political'

# What do we mean by “political” in PE?

- Politics as power
  - Power as a key *analytical* term for studying politics
- In political ecology:
  - Power as a social **relation** built on **asymmetrical** distributions of resources and risks (Hornborg, 2001)
  - So, we study: **practices** and **processes** through which power is *yielded and negotiated* (Paulson et al., 2005)



# Defining *Power*

- ❖ But what exactly is/ do we mean by power?
  - Max Weber: *“chance of a man or a number of men to realise their own will in a social action even against the resistance of others”*
- In political ecology:
  - Two ways of understanding and studying power (how it operates)



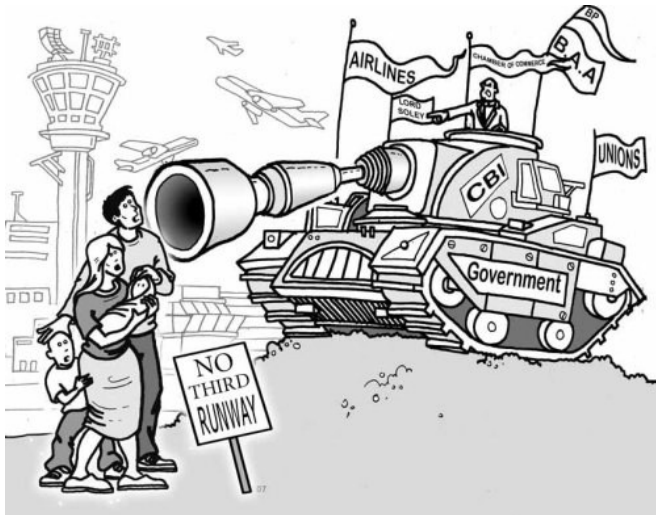
Source: Public Domain



# Two types of power

## Sovereign power

- Capacity (of state and its institutions) to **legitimately impose** will; e.g. enclose resources for conservation
- Note 1: multiplies/ controls degradation
- Note 2: non-legitimate force as well



Source: [mechanicsofpower.wordpress.com](http://mechanicsofpower.wordpress.com)

## Internalised power

- Power also expressed on how individuals come to obey and take things as natural (e.g. enclosure; property)
- Internalising control and authority as normal and natural
- How power is *exercised within* individuals



Copyright: David Hayward (source: [geotimes.co.id](http://geotimes.co.id))

# The political economy

- Political economy
  - Study of: *how **political** institutions, the political environment, and the **economic system** influence each other* (Oxford Dictionary)
- Environmental issues:
  - How these shape the environment
    - how they produce environmental change
  - How environmental change shapes them back

*“Capitalism inevitably produces environmental degradation”*

### **3. CAPITALIST NATURES: CAPITALISM AND ENVIRONMENTAL DEGRADATION**

# ACTIVITY 2: Debate

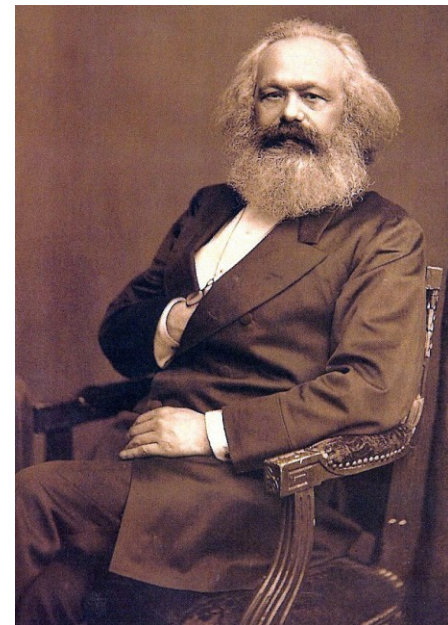
- Watch those three videos (in that order):
  - Free Markets and the Environment.  
<https://www.youtube.com/watch?v=bAgFHuFXvzc>
  - Climate Change : What Do We Need To Do To Address It, George Monbiot?  
<https://www.youtube.com/watch?v=Ir-XjQhOyNQ>
  - Is capitalism sustainable?  
<https://www.youtube.com/watch?v=DsyCD4dulzg>
- Answer the question: So, does capitalism have to necessarily be bad for the environment?

# The green materialist claim

Robbins, 2004: environ degradation

***because***

- “all progress in capitalistic agriculture is the progress in the art, not only of **robbing** the **labourer**, but of robbing the **soil**; all progress in increasing the fertility of the soil for a given time, is a progress towards **ruining the lasting sources of that fertility**” (Marx, 1967)



# Value surplus: what is it?

- Marx (1867)
  - “Yield, profit or **return on production capital invested**, i.e. amount of the increase in the value of capital...”
  - ...after it goes through the production process
- new value created by workers **in excess of** the cost of their own labour in the production process
- excess:
  - appropriated by capitalist as profit when products are sold
  - not shared with worker/ labourer



# How is it generated?

Owner (shoe in mkt) = 40€  
4 pairs (produced in 1h) = **€160**

Worker prod (machine):  
10€/ 15min = 40€/ hour  
or: 4 pairs/ hour



Source: <http://utama.info/>

Worker labour (wage) produces  
one shoe in 1h worth = **10€/ hour**

Operational costs = **20€/ h**

Invest (put in prod) = **50€/ hour**

Profit (above value investment) = **80€/ hour**  
\* not shared with labourer

# Why is it necessary?

## Capital accumulation



THE WHITE MAN'S BURDEN.

<http://weknowwhatsup.blogspot.com.es>



Source: <http://freedombunker.com>

*"Accumulate, accumulate! This is Moses and the Prophets!"* (Marx, Capital, Vol 1)





Niger Delta (Nigeria) (Image: Socialistisk Ungdom – SU/Flickr)



Tar Sands from space (source: <http://stephenleahy.net>)

**Extracting surplus from nature**

**Intensity of extraction > restoration**

# Second contradiction of capitalism



Source: <http://sovietrussianow.blogspot.com.es/>

- *Capitalism degrades the material basis upon which it depends*
- James O'Connor (1988): contradiction capital accumulation vs. **production conditions**
- Degrading production conditions is **inevitable**

# Why Inevitable?

Why K degrades those conditions (Spence 2000)?

- It is driven by individual capitals seeking to shore up [support and/or maintain] their profitability through cost-cutting which degrades, or fails to maintain, the material and social conditions of their own production
- But these conditions are common to capitalist production as a whole, so capital-in-general is confronted with higher costs further down the road, in order to repair the damage done to the shared conditions of production by the short-termism of individual capitals (O'Connor, 1998)

# The 2nd contradiction in action (example): environmental impact and profit (surplus)

None of the world's top industries would be profitable if they paid for the natural capital they use

TABLE 1: RANKING OF THE 5 REGION-SECTORS BY EKPI WITH THE GREATEST IMPACT ACROSS ALL EKPIs WHEN MEASURED IN MONETARY TERMS

RANK	IMPACT	SECTOR	REGION	NATURAL CAPITAL COST, \$BN	REVENUE, \$BN	IMPACT RATIO
1	GHG	COAL POWER GENERATION	EASTERN ASIA	361.0	443.1	0.8
2	LAND USE	CATTLE RANCHING AND FARMING	SOUTH AMERICA	312.1	16.6	18.7
3	GHG	IRON AND STEEL MILLS	EASTERN ASIA	216.1	604.7	0.4
4	WATER	WHEAT FARMING	SOUTHERN ASIA	214.4	31.8	6.7
5	GHG	COAL POWER GENERATION	NORTHERN AMERICA	201.0	246.7	0.8

Source: [grist.org](http://grist.org) - April 2, 2015 3:02 PM

*A sobering new study finds that the world's biggest industries burn through \$7.3 trillion worth of free natural capital a year. And it's the only reason they turn a profit.*

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TEEB for Business Coalition and Trucost publish study of the top 100 business externalities

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TEEB for Business Coalition and Trucost publish study of the top 100 business externalities

The TEEB for Business Coalition have released a report conducted by Trucost "Natural Capital at Risk - The Top 100 Externalities of Business". It estimates that the global top 100 environmental externalities are costing the world economy around \$4.7 trillion a year. The majority of environmental externality costs are from greenhouse gas emissions (38%) followed by water use (25%); land use (24%); air pollution (7%), land and water pollution (5%) and waste (1%). The study ranks the top 100 impacts in over 500 business sectors, broken down by region, to provide a platform for companies and investors to assess exposure to unpriced natural capital, both directly and through supply chains and holdings. The primary production (agriculture, forestry, fisheries, mining, oil and gas exploration, utilities) and primary processing (cement, steel, pulp and paper, petrochemicals) sectors analyzed are alone estimated to have externality costs totalling US\$7.3 trillion, which equates to 13% of global economic output in 2009. The authors find that no high-impact region-sectors generate sufficient profit to cover their environmental impacts. Subject to adaptive capabilities, this will cause them to pass on these costs to customers. Region-sectors most at risk include coal power generation in Eastern Asia and Northern America, wheat farming in Southern Asia, and cattle ranching in South America and Southern Asia.

# [Contemporary experiences with enclosing NRs: privatising wetlands (Robertson, 2000)]

Source: <http://www.biodiversityoffsets.net/>



- When wetlands stand in the way: **“No Net Loss”** by G. Bush Sr.
- Solution: **restoration wetlands**
- Robertson argues this is a case of “accumulation by dispossession” (next)
  - Privatisation of public assets
  - That dispossesses public of its ecological wealth
- **Dispossess: how?** Biodiversity-ecosystem perspective of restored wetlands
  - **restored or created wetlands are often very different from natural**
  - They are coarser + have less organic matter
  - Result: lower rate of colonisation by plants
  - Lower capacity for nutrient cycling: **key wetland ecological function**

# Accumulation by dispossession

- David Harvey (2004):
  - Neoliberal **policies** in western nations from 1970s onwards...
  - ...result in **centralization of wealth and power** in the hands of a few...
  - ...by **dispossessing *the public*** of their wealth or land (publicly-owned assets, e.g. water, forests, etc.)...
  - ...that pass to become **private property**
- Privatisation: main practice



Reuters: Roy Letkey (source: [www.abc.net.au](http://www.abc.net.au))

# Implications: environmental movements

- Labour movement
- Environmental movement



Image credit: america.gov/Flickr

# Accumulation by dispossession

- The previous are contemporary examples of ways in which capitalism produces environmental degradation
  - Claim: *capitalism degrades the environment to generate the necessary profit (surplus value) in order to maintain the capital accumulation project running which is essential for the preservation and continuation of the system (capitalism)*
- But there are also historical examples





Source: <http://pixgood.com>

## **Primitive accumulation**

The question: how did some people manage to accumulate capital in the first place?

“England is not a free people, till the poor that have no land,  
have a free allowance to dig and labour the commons...”

*Gerrard Winstanley, 1649*



Source: <https://theliberi.wordpress.com>

**Primitive accumulation: example**

English 16<sup>th</sup> – 19<sup>th</sup> century enclosures



Source: [www.fs.fed.us](http://www.fs.fed.us)

## **Ecological effects of sheep overgrazing**

Ecological degradation: soil erosion and deforestation

# Take away points

- Environmental change is **political**
  - **Winners and losers** from environmental change
  - Asymmetrical **power relations** (more, next classes)
  - **Political economy**: role in producing change and injustice
- Political economy *of capitalism* (capitalist natures)
  - Capital accumulation and the quest for value surplus are bound to (inevitably) **produce** environmental degradation
  - Two forms of accumulation: primitive, by dispossession