

# Nuclear Cultures

Dominic Kelly  
University of Warwick  
01/09/15

Inaugural CPE  
Conference, Lancaster



**DANGER**  
**POISONOUS RADIOACTIVE ☸ WASTE BURIED HERE**  
**DO NOT DIG OR DRILL HERE BEFORE A.D. 12,000**

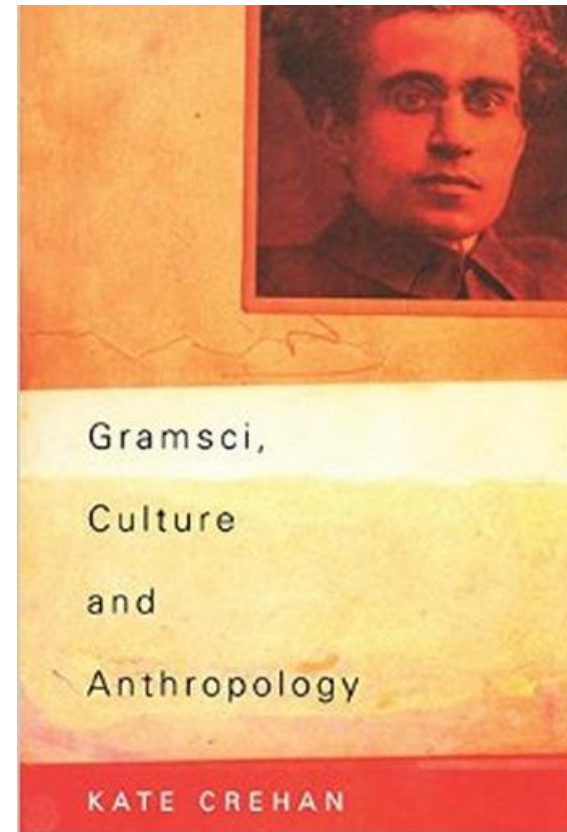


# Frameworks...

## Culture

- Gramscian take on this.  
Culture is never:
  - Seen as an autonomous domain
  - Treated as epiphenomenal
    - ... a reflection of fundamental economic relations
  - Fixed historically
    - Historical processes / context is central

## Kate Crehan

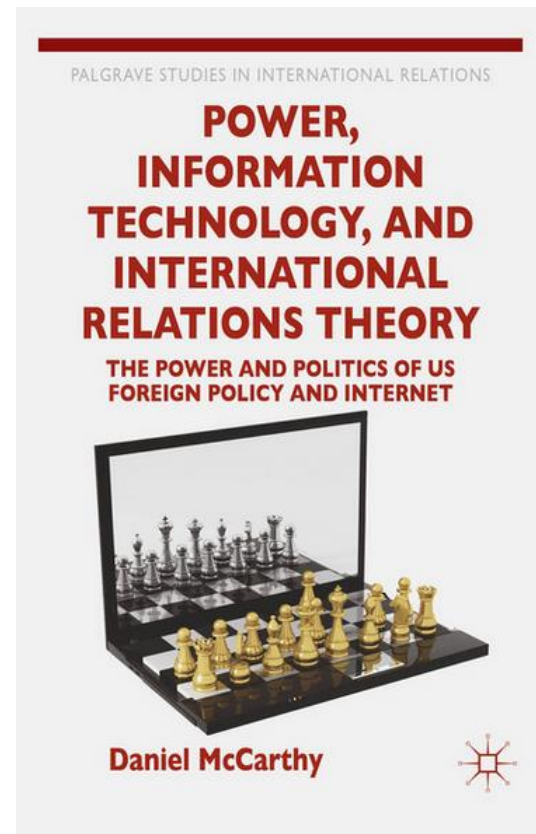


# Frameworks..

## Technology & Capitalism

- (Nuclear) Technology as an outcome of the social relations of production within a particular mode of production
- Innovation as an outcome of 'struggle' in other words
  - Between classes
  - Between capitalists
  - A thorough 'mapping' of technology into a Marxist framework

## Daniel McCarthy



# Broad Theme: Power

## Generating Consent

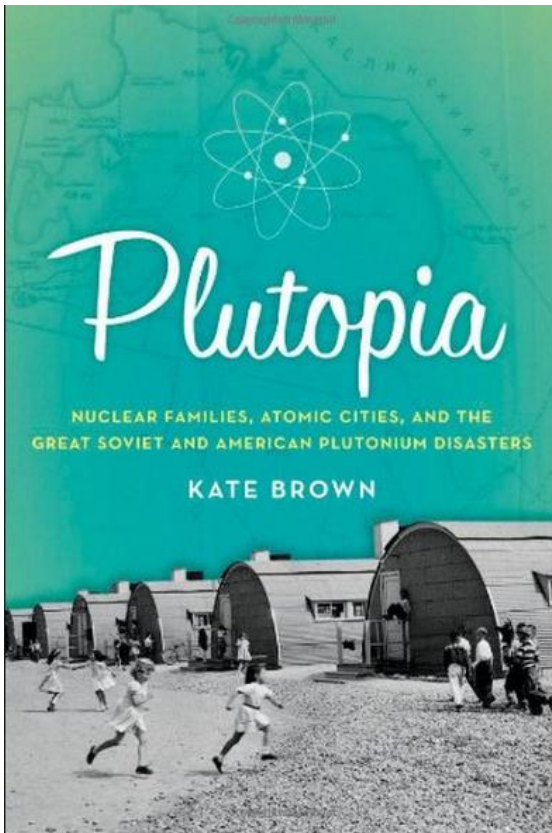
- For and through political, economic, and social means
  - Strategic concerns / creating the 'good' life / countering deprivation
  - Money; Propaganda; Exhibitions; Media; Advertising
- Generally, it's about security:
  - through missiles / technology; and through the promise of endless consumption.

## Siting Issues

- Landscapes of Power
  - Usually in deprived areas already heavily polluted by industrial, agricultural or military activity
    - The 'Dead West'
- Possibility to build in comparative work
  - Japan, France & the UK
    - Cumbria - Sellafield – waste storage

# Theme 1: Imagining the 'Good Life'

## Kate Brown



## Plutopia

- Examines the construction of the Hanford nuclear facility in Washington State
  - Imagined as an 'ideal' community – a vision of the American dream (white, middle class 'nuclear' families etc).
  - Built on expropriated Indian land, by poor working class people segregated along racial and gender lines.
    - No "Asian's" allowed; African-Americans trucked in from 'elsewhere'

# Theme 2: Risk, Regulation, Resilience

## Structures

- The impossibility of containing radiation within physical structures
  - Fukushima; Chernobyl; Three Mile Island etc

## Processes

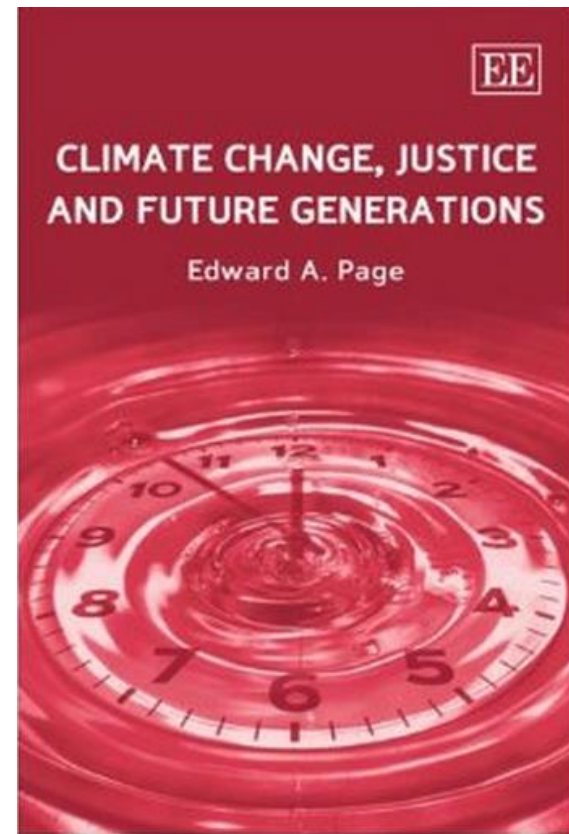
- Regulatory frameworks
  - ‘acceptable limits’
    - Of exposure to radiation
- Oversight
  - Privatisation / sub-contracting
  - Close links between government & business etc.
    - Corruption / incompetence
- The politics of blame

# Theme 3: Inter-generational Justice

## The Question of Waste

- What do we do with nuclear waste?
- Should we tell anyone about it and, if so, how?
- Who is responsible?

## Ed Page



# Case Study: WIPP





# Overview

- The only deep geological repository for nuclear waste in the US
- Handles 'low level' transuranic waste
  - Equipment; clothes; tools; soil and other residues from nuclear production
- Conceived in the 1950s; starting taking waste in the late 1990s; due to be sealed in 2035
  - <http://www.wipp.energy.gov/wipprecovery/about.html>

# WIPP & My 'Themes'

- Power / Consent / Siting Issues
  - WIPP is located in the 'dead west'
  - Carlsbad is an area characterised by relatively high deprivation
    - Winding down of the potash industry in the 1970s
    - The town 'invited' the DoE to assess the area as a site for WIPP in the early 1980s
    - WIPP was tied up in legal battles through the 1980s until the US Congress intervened in the early 1990s.

# WIPP: Risk, Regulation, Resilience

## The Kitty Litter Catastrophe



## The Truck Fire



Figure ES-1: EIMCO Haul Truck 74-U-006B after Fire

# Contamination & Cover Up?

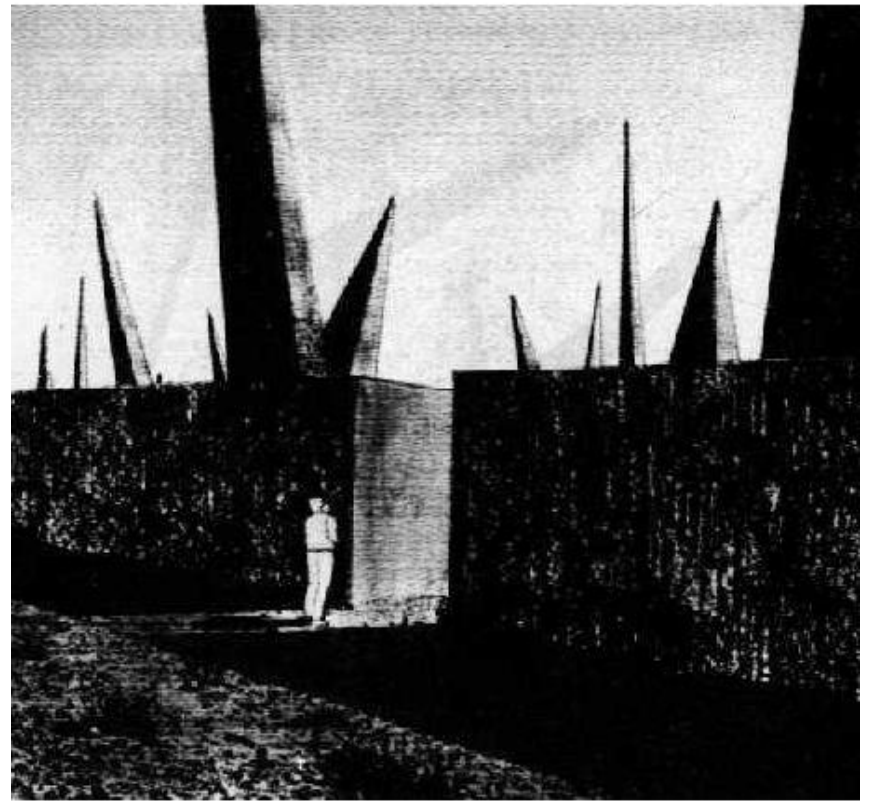
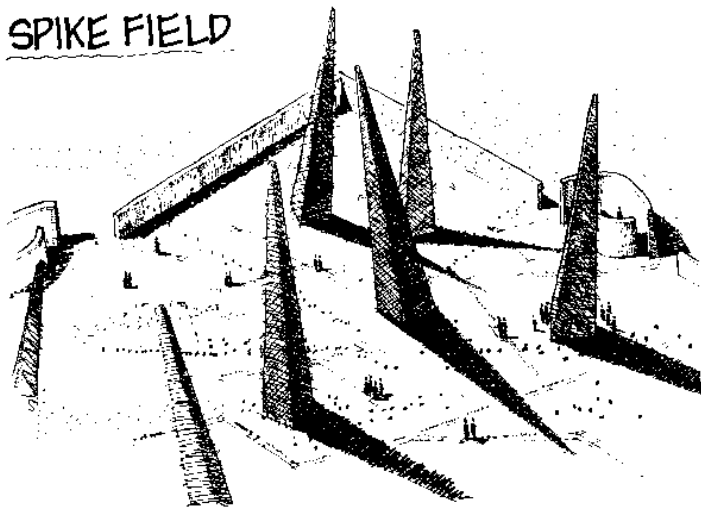
- No injuries from the fire
- 22 workers contaminated by the radiation from the burst barrel
- Evidence emerging this year that a simple transcription error set the chain of events in motion
  - ‘inorganic kitty litter’ became ‘an organic kitty litter’



# WIPP: Inter-generational Justice

- The Permanent Markers Implementation Plan
  - In 1990 a panel of experts commissioned to draw up
    - Scenarios for future human activity in and around the WIPP site
    - Plans for permanently marking the site so as to deter ingress by humans
    - The time span was set at between 200 and 10,000 years into the future
  - They came up with a plan based upon:
    - A massive physical structure; semiotics; dispersal

SPIKE FIELD



## Forbidding Blocks

### FORBIDDING BLOCKS

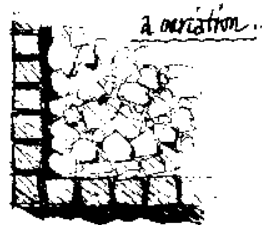
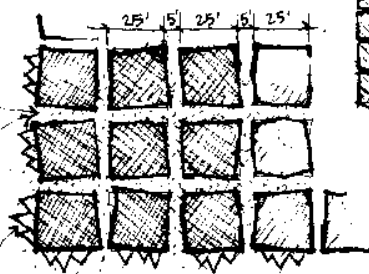
exploded landscape, but approximated an irregular regularity, ordered but not regularized

massive effort  
to deny text

form narrow to  
wide in form in

very not historic  
from block-dyed  
concrete

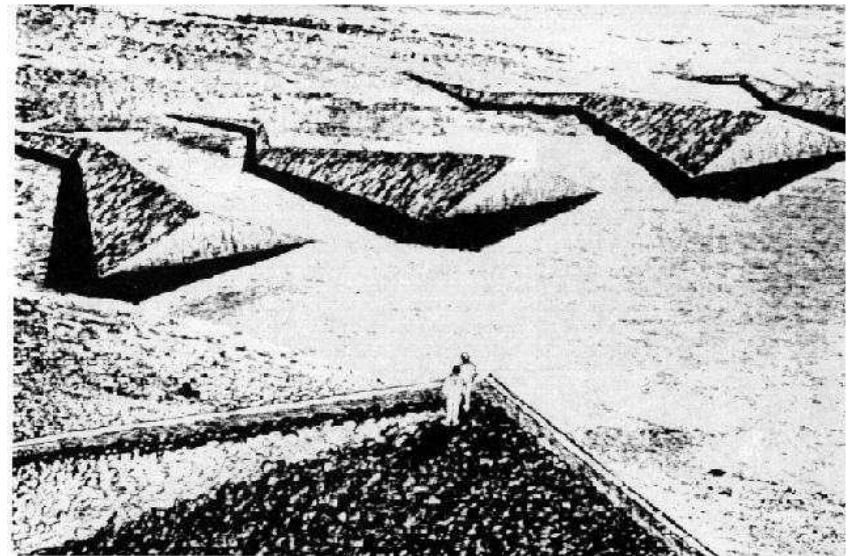
spiked cubes

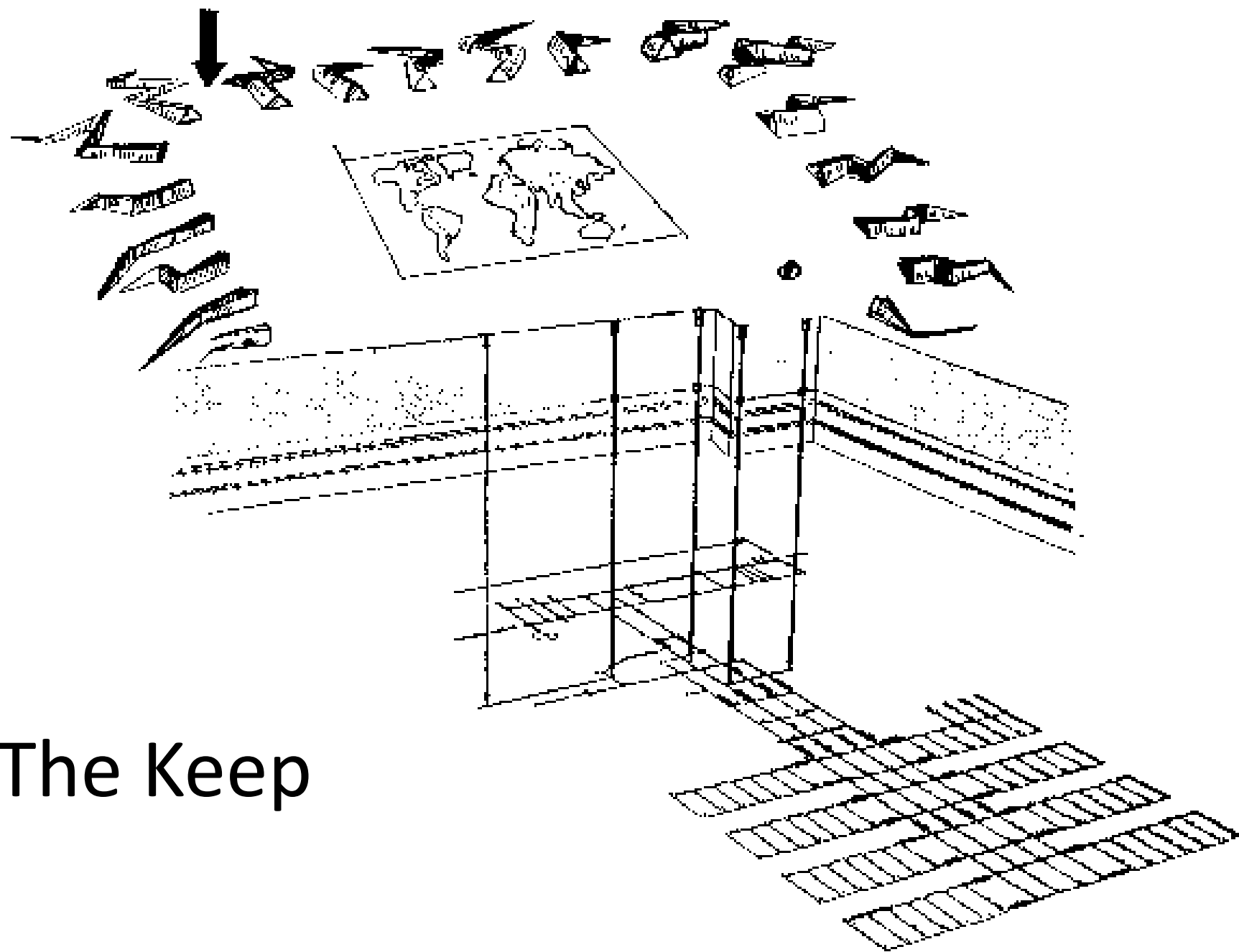


hollow square of blocks  
around a rubble core



## Menacing Earthworks





The Keep