The cultural political economy of technical fix promises: The (mis)alignment of CC(U)S, geoengineering and neoliberalism

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Raging weather
Carbon Dioxide Removal, CDR
biomass CCS,
biochar, forestry,
ocean fertilisation...

Solar Radiation Management, SRM
white roofs, modified plants,
tropospheric & stratospheric clouds,
space mirrors...
We have to do it now to stave off climate emergency!

Promise/threat

It’s about conserving carbon capitalism, and white, male, Northern privilege
A neoliberal technical fix?

Clean fossil (CF) - 1960s to now

Seemingly neoliberal (NL)
- Technical fix promise!
- The perfect offsetter, (many variants) even materially disconnected
- But, Tyfield (2014) showed how poorly Fossil CCS actually fits with NL, so what about GE?
Technological fixes: Origins and meanings

Optimistic original coinage (Weinberg 1967)
- Cheap, reliable shortcuts, when compared to difficult social change
- A re-framing of the problem

Immediately critiqued
- And soon reduced to a slur (Rosner 2004)

Yet, a paradox
- Despite disillusionment, persist as solutions to socio-natural ills
- Existing literature can’t explain paradox
TFs are productive how?

Co-evolutionary cycle:
- Political/innovation regimes selectively support TFs
- Promise-making and development of TFs legitimize spatio-temporal fixes (STFs) underpinning political regime
- Defensive STFs

A cultural, non-determinist pol econ of TFs

Which regimes do promises of technological fixes favor? And vice versa? And does the cycle work?

(Jessop 2002, Tyfield 2014)
Ideal-typical political (innovation) regimes:

- **Social-liberal (coal-based):**
  - State as regulator/protector
  - Market interventions: public funding, regulation, ownership/control

- **Neoliberal (oil-based):**
  - Reliance on markets, private ownership
  - State as market creator, market-based policy/emissions trading

(Mirowski 2013, Mitchell 2001)
Clean fossil – a brief history

**SL GE**
1. Early GE articulation in relation to CC policy (1965)

**Rise (and fall?) of NL CCS**
2. Norwegian CO$_2$ tax (1991)
4. US policy shift from CCS to CCUS (2009)

**Political ambivalence of GE**
5. Royal Society report on geoengineering (2009)
6. GE in IPCC’s 5$^{th}$ assessment report (2014)
Has remained a promise for 30 years
- Defensive TF promise – As long as STF not realised
- Able to sustain NL climate policy, for a time
- Stable because of misalignment

CDR (BECCS) lined up for this role now
Conclusions

- Applied a cultural political economy conceptualisation of ‘TF promises’ to CF
- Imagined ‘defensive justifications of STFs’
- Explained stability of promises – not in spite, but because of misalignments
- Trump, Brexit...
- ‘Mitigation deterrence’ project
  http://wp.lancs.ac.uk/amdeg/

Sources


IPCC (2014) (A set of reports)


