ECOSYSTEM SERVICES
AND THE LAW OF VALUE

A Hypothesis

Cambridge
June 2016
What role do ecosystem-service transactions play in “self-expanding value”? How do ecosystem service transactions contribute to capital accumulation?

How are struggles against ecosystem service transactions linked, actually and potentially, to other “anticapitalist” struggles, e.g. to labour and anti-extractivist struggles?
Capital accumulation, classically conceived as the accumulation of abstract social labour ...
… in fact presupposes the creation not only of *exploitable* wage labour but also of *appropriable* (resourcified) unpaid activities of humans and nonhumans.

commons, *territorios*, ของส่วนรวม, *iriai*, etc.
This requires not only the separation but also the simultaneous “reformatting” of both human beings and extrahuman “natures”.
Only in this way can capital be accumulated.
But “behind” wage labour lies ...
... which also has to be organized ...
... even if it's unpaid.
ΔU = Q – W

invisibilized
ΔU = Q - W

"invisibilized"

UNPAID devalued
\[ \Delta U = Q - W \]
ΔU = Q - W

devalued

UNPAID

"invisibilized"
Unpaid (and devalued) “obra de la naturaleza” (human and nonhuman)

Productivity of wage labour

Unpaid (and devalued) “obra de la naturaleza” (human and nonhuman)
Coal
Cheap labor
Foreign investment
Exports
These processes are not only continuous ...
... but also continually failing, incomplete and vulnerable...
... in part because of continuing *refusals*
and evasions of capitalist labor ...

... including battles over wages, conditions, health ...

$ \quad \text{computer} \quad \text{stethoscope}$
… together with refusals of the “resource-ification” of commons, which is part of the same process ...

“Our territorios are NOT natural resources.”
... together with the general, progressive “exhaustion” or “maxing out” of the flexibility of successive capitalized, commensurated natures and reproductive regimes of all kinds.
How do **ecosystem service transactions** fit into this picture?
Ecosystem service transactions are “institutional responses to the threat to accumulation that environmental regulations pose.”

“On Climate Rent”, Historical Materialism, December 2014
\[ \Delta U = Q - W \]
$\Delta U = Q - W$

regulation
\[ \Delta U = Q - W \]

(movements)

regulation
POSSIBLE RESPONSES FROM CAPITAL?
DEREGULATE

\[ \Delta U = Q - W \]

(movements)

regulation
“In 'climate summits', the Green faction of Capital ... looks to the world working class and asks of it: 'Are you willing to buy our “stranded asset,” oil in the soil, to the tune of tens of trillions of dollars and so face a long period of a sort of indentured-servitude-with-increased-work and decreased wages? In other words, do you agree to satisfy our need for surplus-value in exchange for us doing what is necessary to ‘save the planet’?”

George Caffentzis
OR ...
REREGULATE TO REPAIR THE APPROPRIATION PIPELINE

\[ \Delta U = Q - W \]
1970s

Claims that the new environmental regulation curbs accumulation

→ pressures to make legislation more “flexible”

→ offsets, bubbles, and the beginning of pollution trading experiments.
“The objective is to transform environmental regulation into tradable instruments.”

Pedro Moura Costa
Bolsa Verde, Rio de Janeiro
$t\text{CO}_2e$

GWPs

"species-equivalents"

units of "functional lift"

f_{ik}

ITMOs

$\Delta U = Q - W$
The catch?

This *further* realm of organized appropriation of unpaid work of humans and nonhumans is subject to pretty much the same dialectic as the original.
“We people who live with the forests don’t want REDD.”
suggesting that questioning labor-land-thermodynamic energy-ecosystem services is about four anticapitalist refusals supporting each other …
TO
PARAPHRASE
Just as, in previous eras, the technics of creating, measuring and circulating No. 2 Yellow Corn ...

Yellow Corn No. 2
>.695 kg/l
< 5% damaged grains
< 3% foreign material

Yellow Corn No. 2 from Mexico =
Yellow Corn No. 2 from Iowa

1 kg Yellow Corn No. 2 with 4% damaged grains and
1% foreign material =
1 kg Yellow Corn No. 2 with 2% damaged grains and
3% foreign material

e tc.
... or, going further back, the technics of increasing the “rentability” of European land in the 16th and 17th centuries ...
... were ways of bringing the unpaid work of nonhumans cheaply out of the land and into circulation ...
... so, too, far from being ways of “recognizing” or increasing the value of nature, $t\text{CO}_2\text{e}$, $f_{ik}$ and other manifestations of the technics of ES measurement, commensuration and surveillance are ways of “bringing the goods out” and into circulation ...
1 CO₂ =
0.04 CH₄ =
0.0034 NO₂ =
0.00015 CFC-11

Derecho a estar
excentos de las
leyes que
prohíben que
emita 1 tonelada
de CO₂
Fossil $\text{CO}_2 = \text{biotic } \text{CO}_2$

Derecho a estar excentos de las leyes que prohíben que emita 1 tonelada de $\text{CO}_2$
Increasing the earth's carbon-cycling capacity = preventing it from decreasing
Rights to be exempt from laws forbidding you from emitting 1 tonne of CO₂

Rights to be exempt from zoning laws

Rights to develop biodiversity conservation areas
And, as with transactions in units of No. 2 Yellow Corn or 17th-century land surveying ... 

... ecosystem service token transactions change what the land or “territory” itself is.
Thus, if, in the past few centuries, much capitalist territory has been redesigned to mass-produce certain “units” that are abstract, measurable, isolable, transportable and widely reproducible in a capitalist economy (for example, commercial grain or livestock varieties) …
so too the new capitalist territory (or capitalist nature) of ecosystem services (including its human inhabitants) is designed to mass-produce new elements that also are isolable, measurable, transportable, reproducible – and in some senses, even more abstract.

Ecosystem Service Credit Stacking

- Credit Stacking –
  - multiple payments for different ecosystem services from the same parcel of land.
- Credit Bundling –
  - a single payment for multiple ecosystem services.
  - not intended to be the sum of individual ES values.
- Stacking GHG and WQ credits should incentivize greater production of ES credits.
This is no less a way of "externalizing" nature than your classical extractivist or resource politics ...

... and again tends to attempt to render it a "static, governable, non-mutable landscape."

Morgan
The relevant science is a continuation of the long colonialist tradition of capitalist science of treating the nonhuman world as a “globe” (Tim Ingold) of “resources” dichotomized from human beings. (Which is an anti-commons tradition.)
PUNCHLINE
Techniques for creating and measuring ES are *not* ways of valorising but rather of *devaluing* and re-externalising the (unpaid) work of nonhumans in order to shore up the productivity of wage labour against the threat of conventional environmental regulation – *meaning, ultimately, the threat from commons and environmental movements*, which are emerging more and more clearly as “Public Enemy No. 1” of contemporary capital.
Growing opposition from peasants and indigenous peoples who understand ecosystem services as historically continuous with extractivism, colonialism, and Cartesianism, and as a repudiation of their commons rights and knowledge.
“Worse than mining for the local people …”

Ivonne Yanez, Accion Ecologica and Oilwatch, Ecuador
“Indigenous Peoples who participate in carbon trading are giving [oil companies] a bullet to kill my people.”

Casey Camp-Horinek, Ponca indigenous nation

US
“Stop iron smelters.” “CDM – Country Disrupted by Merchants.”
Ugandan villagers stand amid corn planted on what the government says is national park, but which they claim has belonged to them for generations. To plant the corn, the villagers chopped down trees planted by the Dutch FACE Foundation as part of a carbon trading project.
“Could be the biggest land grab in history …”

Tom Goldtooth, Indigenous Environmental Network
NO to Carbon Trading
Swedish climate forest is impacting the lives of thousands in Uganda.

They beat me and ruined my crops.

The villagers are beaten and imprisoned due to the Swedish climate project.

They are funding climate destruction and climate injustice.

https://youtu.be/COoPVXINbqQ
CDM satire – Carbon Destroy Movement. “Reducing global warming or perpetrating global fraud?”
“. . . reflects one of the worst forms of neoliberal fanaticism and attempts at re-legitimating corporate rule experienced in past decades.”

Isaac Osuoka, Joint Coordinator, Gulf of Guinea Citizens Network
“. . . the most absurd and impossible market human civilization has ever seen.”

Soumitra Ghosh,
National Forum of Forest Peoples and Forest Workers, West Bengal
“Se aprovechan de la ignorancia y la pobreza de nuestra gente.”

Alejo Girón, ejidatario de La Venta y dirigente campesino que se ha resistido a ceder sus tierras.
EUTSEK
CARBON
TRADING
VOESEK!

[Image of a protest sign held by a person in a crowd]
“The California Environmental Justice Movement stands with communities around the world in opposition . . .”

Marta Arguello, Angela Johnson-Meszaros and others at CEJM
ECOSYSTEM SERVICES
AND THE LAW OF VALUE

A Hypothesis

www.thecornerhouse.org.uk
“How to build and impose on expropriated men and women the discipline of the wage labour system (with the unwaged labour it presupposes) was the problem posed five centuries ago in initiating the process of capitalist accumulation. It is still the problem today for the continuation of this mode of production and its combined strategies of development and underdevelopment.”