

Commodity Fetishism in Climate Science and Policy

*(in which various men with beards are enlisted to help
explain why official efforts to address climate change
have reached an impasse)*

Imperial College
February 2010



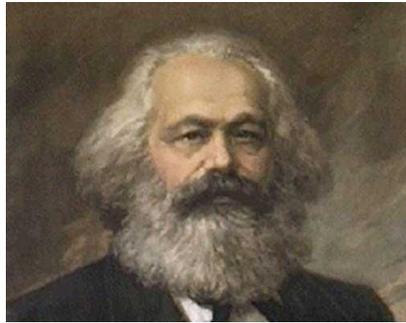
Fetishism ...
what is it?

Fetishism
takes
different
forms ...



... some more
interesting
than others ...





One of the most important and theoretically elaborated is “commodity fetishism.”*

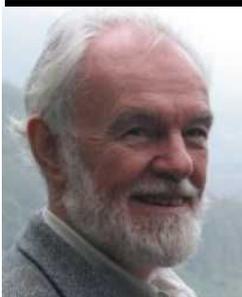
*Marx, *Das Kapital* vol. I, Ch. 1.

... a “social relation between people that assumes, in their eyes, the fantastic form of a relation between things”*

*Karl Marx, *Capital* vol. I.

“What is a structural effect [of a network or process of relations] appears as an immediate property of one of the elements, as if this property also belonged to it outside its relation with other elements.”*

*Slavoj Zizek, *The Sublime Object of Ideology* (1989), p. 14



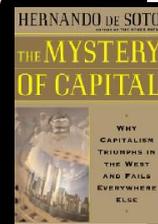
A “consideration of the commodity fetish” can yield “extraordinary insights.”*

David Harvey
CUNY

**“Between space and time: reflections on the geographical imagination”,
Annals of the Association of American Geographers 80 .418-434 (1990).

Classical examples

- ➔ Value is seen as *inhering in commodities* instead of being added to them through labour.
- ➔ “Capital” is treated as magically productive in itself.



- ➔ ... while “machine fetishism” conceals the fact that “what keeps our machines running are global terms of trade,”* unequal relations of exchange, embodied land and labour, etc.

Alf Hornborg
Lund University



**International Journal of Comparative Sociology* 50,237 (2009)

Newer examples



“Genomics sees the fetishism of scientific fact implode with the fetishism of the gene as being understood to somehow designate or represent the entire organism, sometimes even whole populations.”*



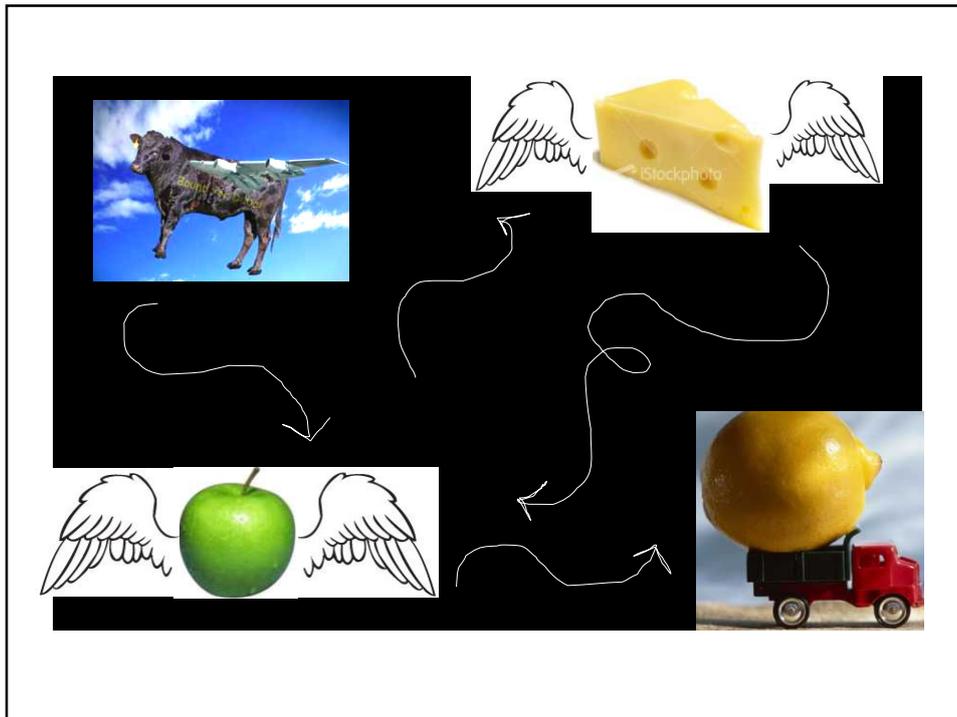
Kaushik Sunder Rajan
University of California

**Biocapital: The Constitution of Postgenomic Life (2006)*

Still more new examples

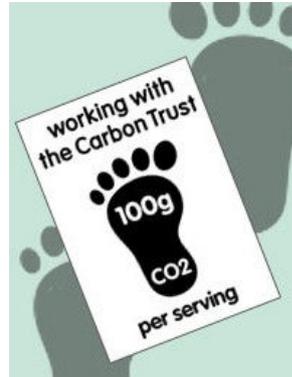


“Food miles” and similar schemes, which invoke weirdly behaving magical objects traveling around the globe as if under their own power ...



... as highly technical practices try to incorporate or “crystallize”* an abstract “carbon content” into commodities as if they were inherent properties of the commodities themselves ... as in an earlier era it became conceivable to “crystallize” abstract labour into commodities ...

*Karl Marx, *Capital* vol. I.



... and more generally ...



A climate science and policy characterized by a depoliticizing “CO₂ fetish” in which CO₂ as a commodity conceals processes and relations of importance for tackling global warming.

Erik Swyngedouw
Manchester University



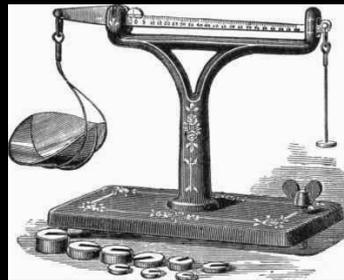
How does this work? Let's get down to specifics ...

In environmental services markets such as the carbon markets, fetishism becomes embodied throughout the system through very mundane mechanisms having very little to do with the plans and consciousness of specific individuals; *e.g.*,

Markets need
accounting ...



Accounting needs
measurement ...



Measurement needs
something to
measure ...

Q. What should we be measuring in environmental services markets



A. Environmental services, of course!



Q. But in the climate market case, what is the environmental service?

A. On a relational, historical, political view, actions that contribute to a coherent movement to overcome fossil-fuel “lock-in” ...

*... and keep oil in the soil, coal in the hole, and tar sand in the land.**

*which is, incidentally, already the goal of many social movements that powerfully encompass movements beyond those focused only on “climate.”



Nnimmo Bassey

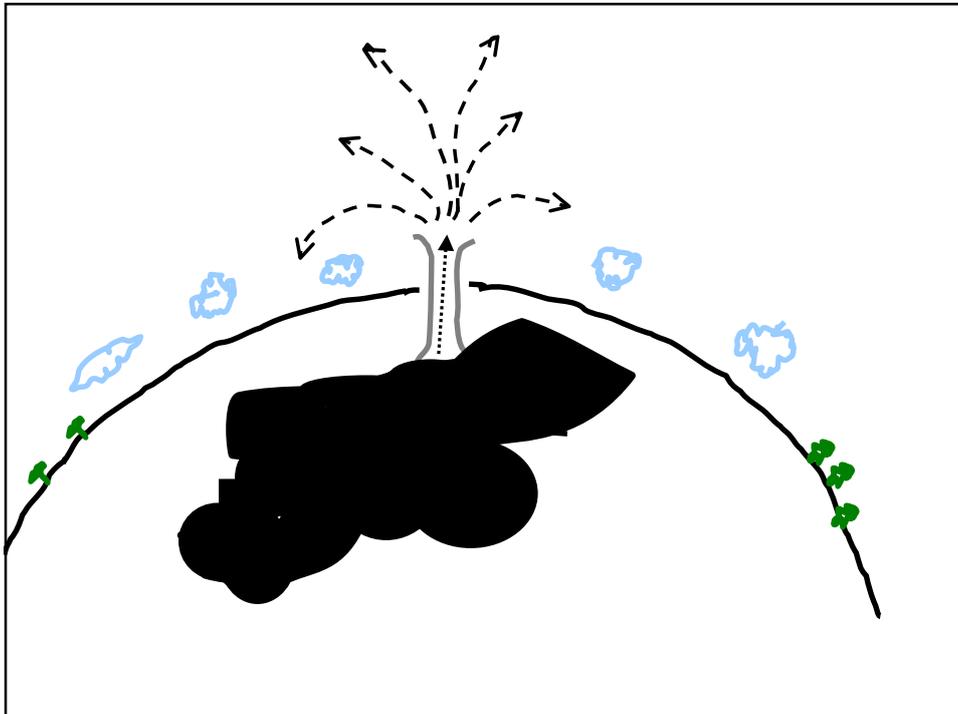
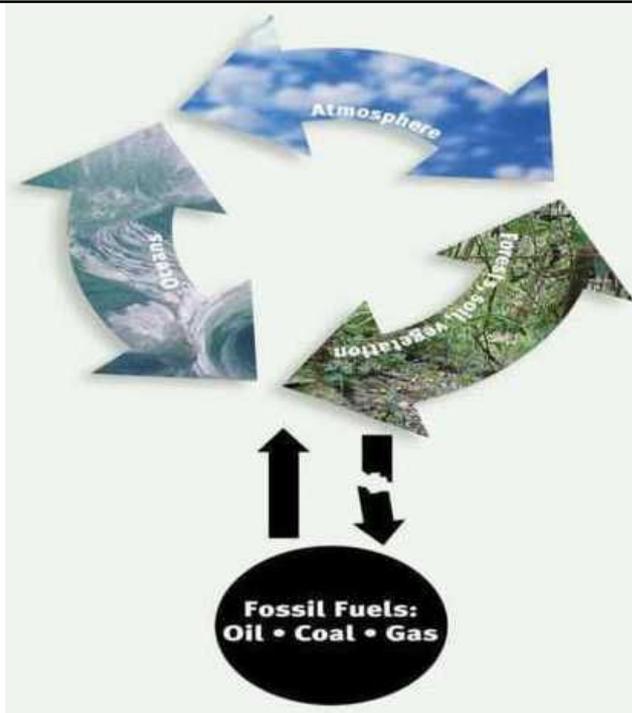


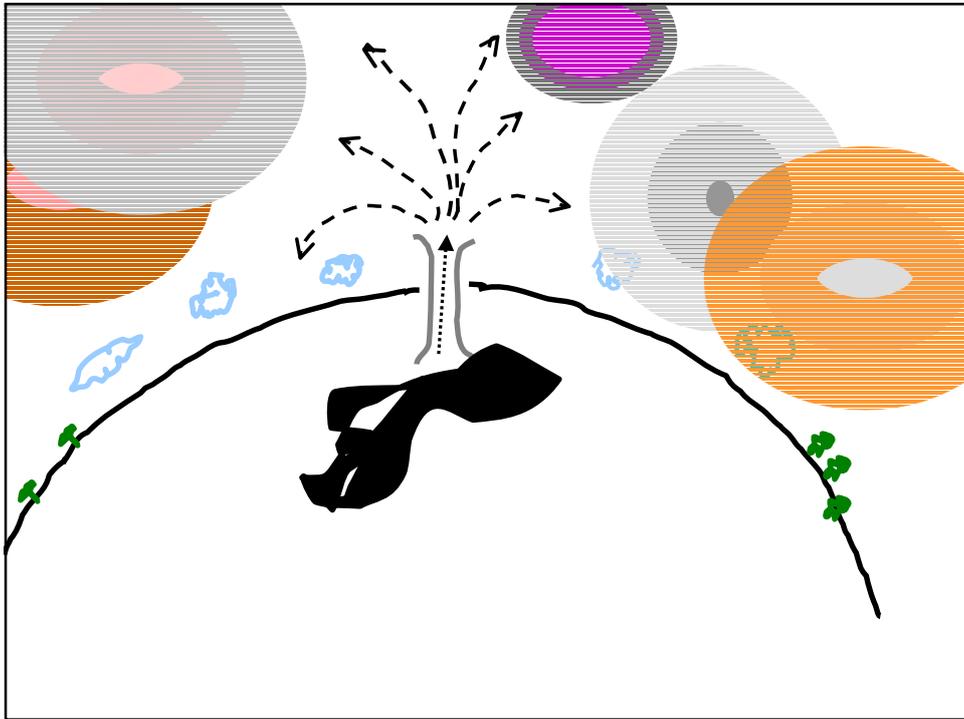
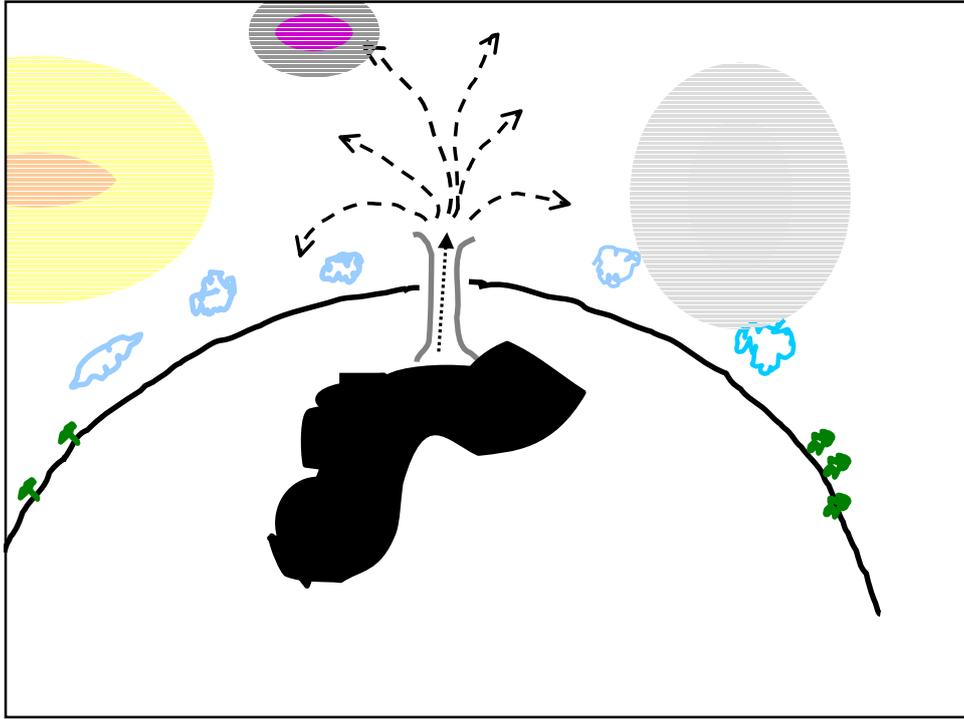
*Why? Among other reasons, because “there is so much carbon buried in the world’s coal seams [alone] that, should it find its way back to the surface, it would make the planet hostile to life as we know it.”**

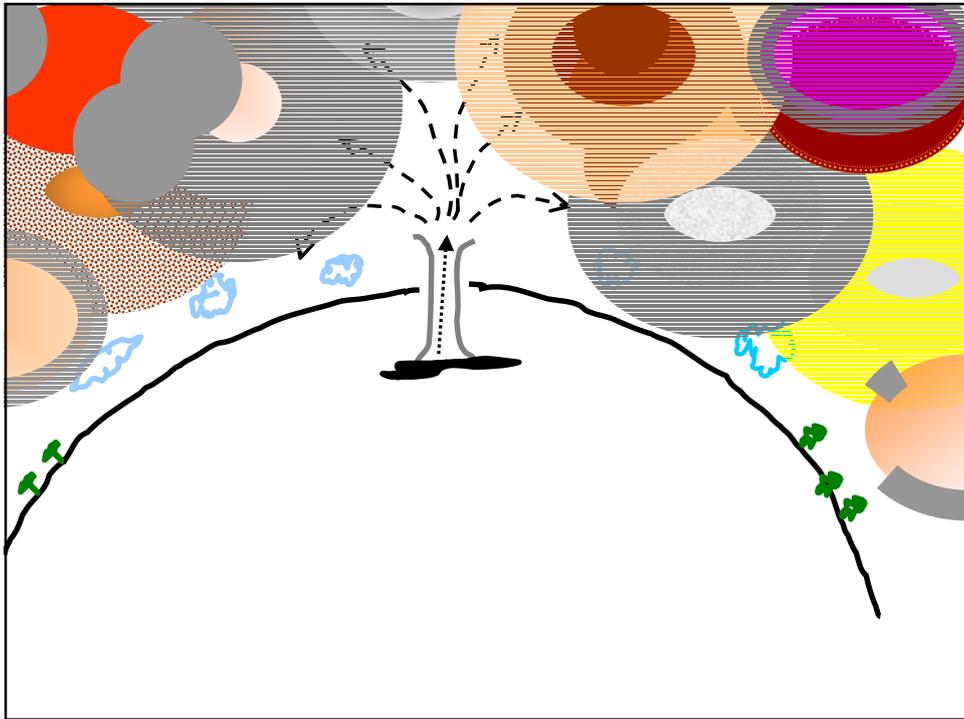
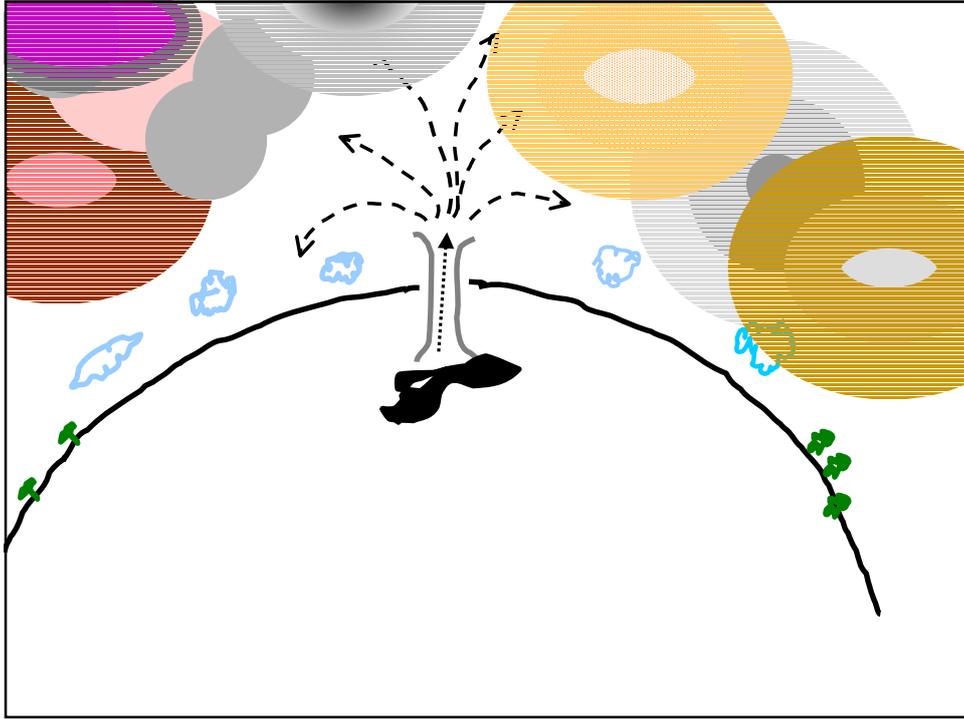


*Tim Flannery
U. Of Adelaide*

No way to “close the loop” (put fossil carbon back underground).





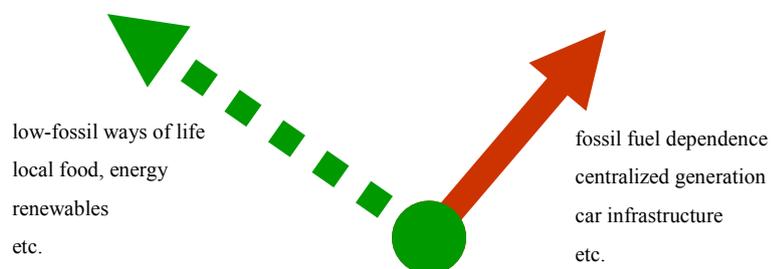


CARBON POOLS (billion tonnes)

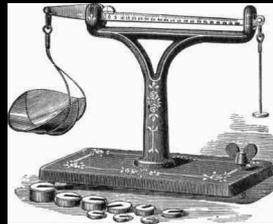
Atmosphere	720-760
Oceans	38,400-40,000
Rock	>75,000,000
Land biosphere	
<i>living biomass</i>	600-1,000
<i>dead biomass</i>	1,200
Fresh water	1-2
Fossil fuels	>4,130
<i>coal</i>	3,510
<i>oil</i>	230
<i>gas</i>	140
<i>other</i>	250

Source: Falkowski et al., Science, 2004

HENCE THE KEY ROLE OF OVERCOMING LOCK-IN



Q. But how could you *measure* the marginal contribution any particular action makes toward overcoming this historical lock-in?



A. You can't. (This is a question of historical trajectory, hence of unquantifiable social and political change ...)

... So you look for a proxy.

The main candidate:
carbon dioxide emissions
(emissions reductions;
molecules) ...



Although CO₂ reductions may or may not contribute to setting society on a path enabling fossil fuels to remain in the ground, it is only through measuring molecules (or the absence thereof) that you can open up the opportunities for cost savings that the carbon market promises ...





...through the creation of a multiplicity of equivalences.

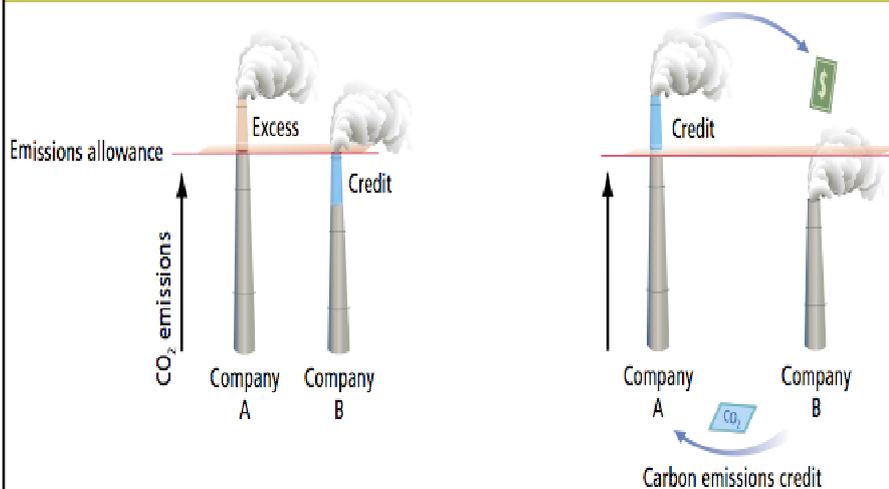
“Equivalence, a reduction into sameness, is ... part of the fantasy work of fetishism.”*

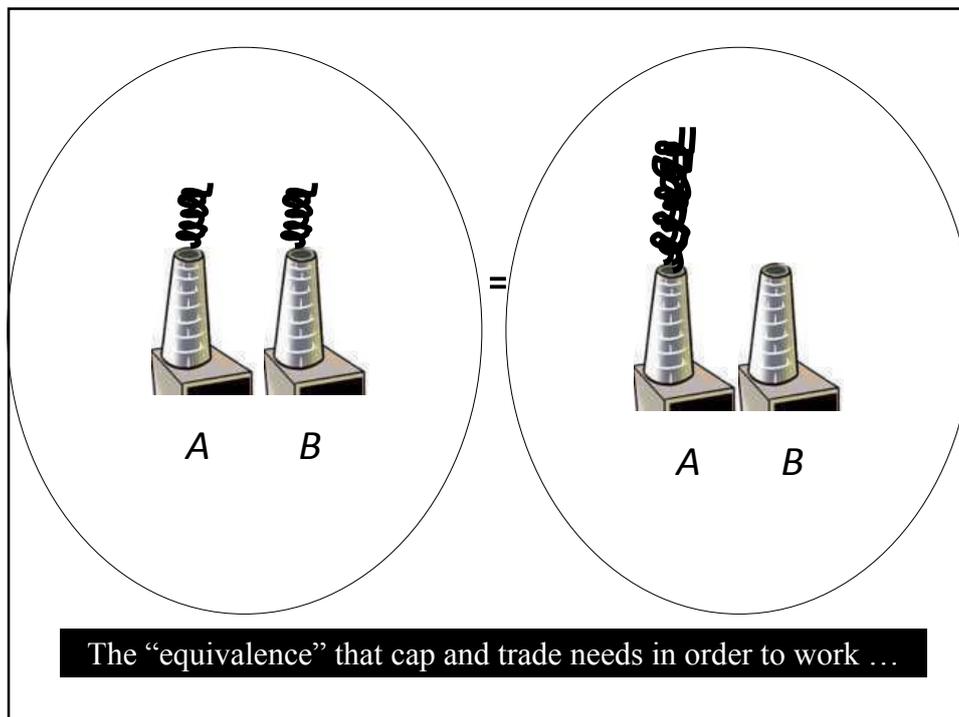
Bill Maurer
University of California, Irvine

Alternative

**Mutual Life, Limited: Islamic Banking, Currencies, Lateral Reason (2005)*

For example, cap and trade (or emissions trading proper) ...





... an equivalence which entails others:

Place A = Place B

Technology A = Technology B

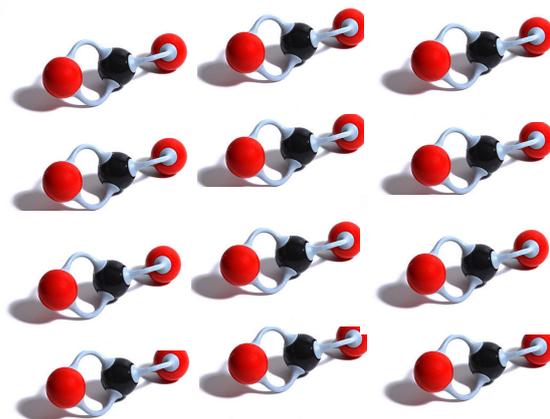
Time A = Time B (if banking of pollution rights is included)

Measuring molecules (or the absence thereof) opens up the possibility of still more cost savings through commensuration of carbon dioxide with *other* greenhouse gases ...



CH₄

=



**Through the hard work of specialist institutions,
these various equivalences are “black-boxed”
... e.g., through the invention of**

Global Warming Potential (GWP)

1990: IPCC offers “preliminary” estimates of GWPs of 19 gases, not including HFC-23.

1995-6: List expands to 26, including a GWP estimate for HFC-23 of 11,700. Fungibility and liquidity in the future carbon market are promoted, but scientific questions (arbitrary time periods, uncertainties, different effects of pulse emissions of different gases on temperature at different times, extent of damages) are concealed or “black-boxed”.

1997: Kyoto Protocol dictates that such GWP “exchange rates” are to be used until 2008-12.



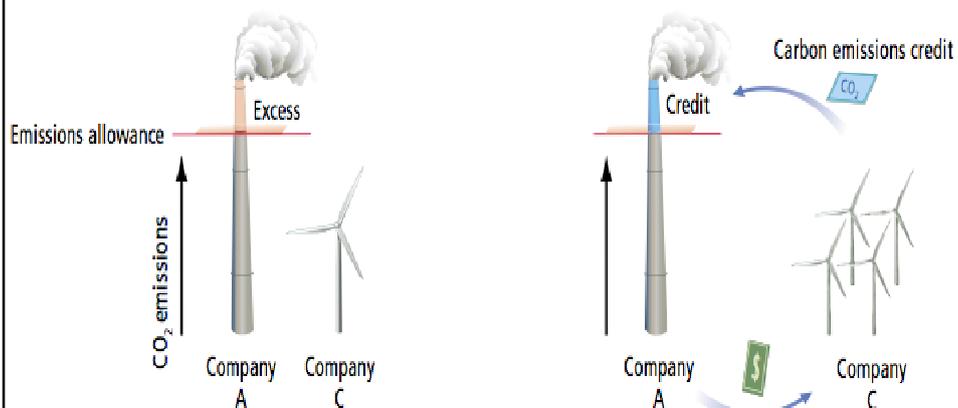
Substituting “methane savings” for
“carbon dioxide savings” opens up new,
top-dollar opportunities for cheap mass
production of pollution rights.



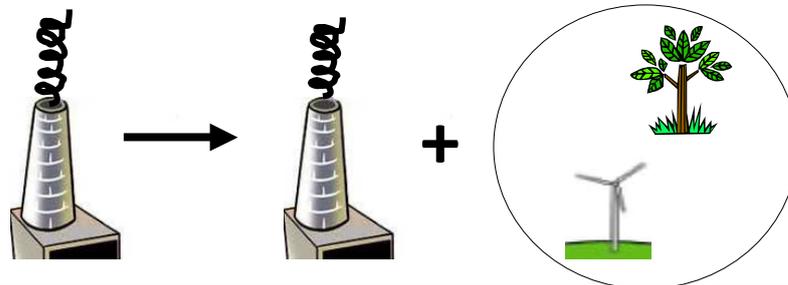
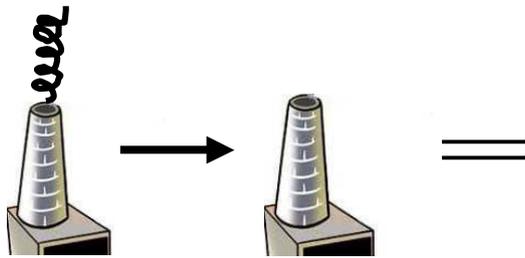
- Rhodia (France) makes adipic acid in South Korea.
- Invests **\$15 million** in equipment that destroys nitrous oxide.
- Nitrous oxide is a greenhouse gas said to be 298 times more potent than carbon dioxide.
- So Rhodia can generate 298 tons of pollution rights to sell just by burning one tonne of the compound.
- In this way Rhodia can produce **\$1 billion** in UN-approved carbon credits for sale to polluting industries in industrialized countries.



Another example: carbon offsets (Clean Development Mechanism, etc.) ...



The “equivalence” that offsets need in order to work.



**...QUICKLY CREATING STILL *MORE*
MOLECULAR “EQUIVALENTS” OUT
OF FURTHER INSTITUTIONAL
BLACK-BOXING**

With regard to offsets, the Kyoto Protocol stipulates that

offsets = emissions reductions

hypothetical reductions = actual reductions

biotic carbon = fossil carbon

Learning to treat things that we know are *different* as *the same* requires a lot of institutional hard work ...

... and SBSTAs and COP/MOPs and DOEs and DNAs and meth panels with their model rules and ERUs and CERs and PDDs and AAUs and NAPs, additionality, supplementarity and leakage ...



... We concerned Northern middle-class greens join in the number fetishism ...



Securitization/derivitization/trading in carbon *prices* (FINANCIALIZATION)

Further tradeable “equivalents” are manufactured for additional “cost savings” and delays in structural change and added to the commodity pool in circulation (OFFSETS)

“Equivalent emissions” are pooled by *abstracting from place, technology and history* and then marketed (TRADE)

The goal is *changed* to one of achieving modest progressive numerical greenhouse gas cuts (CAP)

The goal: structural change that opens a historical pathway toward overcoming fossil fuel “addiction”

A machine for embedding crippling abstractions in both policy and everyday life ...

In sum, the mechanics of setting up carbon markets creates a (fantasy) structure of molecular equivalents ...



... embodied in a vast array of concrete scientific, policy and other social practices ...



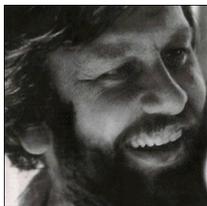
...which cannot be overcome by
“demystification” or a “new
consciousness.”



People behave *as if* they
believed that solving the
climate problem were a
matter of molecules and
targets, not necessarily because
they *do* believe it.



Alfred Sohn-
Rethel



Slavoj Žižek,
University of
London

This is a familiar
fetish-
phenomenon
known as “*Je sais
bien, mais quand
meme ...*”*

*Žižek, *For They Know not What they Do* (1991)

E.G., FETISHISM IN SCIENCE

As the new commodities began to confront each other as equivalents, the IPCC (for example) began to count clearing of long established forests to burn wood or to grow energy crops as a 100% reduction in energy emission – despite the associated large releases of carbon.

Nature magazine (2009): So the [accounting] flaw itself has spread from the Kyoto Protocol to other countries ...

Steven Hamburg, EDF Chief Scientist and member of the IPCC special report on land use change and forestry: Right...and to the current climate bill in the [US] House [of Representatives].



Q. Why did it take so long to identify this flaw?

Hamburg: Well, it's *one of those things* ... we sort of made a *sweep of the hand* ...it was *just one of those things*, we just ... nobody did the critical thinking, we all said it's roughly right. The problem is, it's NOT ... [but] *these things happen ... it was momentum* ... we know that we need to assign the credit according to the net emissions, but then how you assign the credit is really a political economy question.

Steven Hamburg, Chief Scientist, EDF



MORE FETISHISM IN SCIENCE ...



Stephen Schneider

“Policy analysts [need] probability estimates to assess the seriousness of the implied impacts; otherwise they would be left to work out the implicit probability assignments for themselves ... a policymaker concerned with ‘avoiding dangerous anthropogenic interference in the climate system’ would propose stronger policies and measures if there was a 39% chance of exceeding the 3.5–7 C warming ‘threshold’ than if the figure was 23%.”

“There is a danger that Schneider’s position might lead to a dismissal of uncertainty.”



Arnulf Grubler



*Nebojsa
Nakicenovic*

... BUT WHO CAN BLAME SCIENTISTS?

“I would give you the piece of advice, not to provide us with too many moving targets, because it is already a very, very complicated process. And I need your assistance to push this process in the right direction, and in that respect, I need fixed targets and certain figures, and not too many considerations on uncertainty and risk and things like that.”



Anders Fogh Rasmussen,
Ex-PM of Denmark,
speaking to climate scientists,
March 2009



OK, but what are the *consequences* of stuffing politics, climate history, uncertainty, particularity and exploitation into a little black box?



Predictable, really ...



THIS IS ALREADY OBVIOUS WITH FOOD MILES ...

“As an exporting country, we feel that air freight has been unfairly picked out as being the prime contributor to carbon emissions and that the concept of ‘food miles’ as indicative of environmental sustainability is misleading,” Mr Joseph Muchemi, Kenyan High Commissioner in London, said in a statement sent to *Business Daily*.”*

*Nairobi, 7 November 2007



BUT EVEN MORE OBVIOUS
IN CARBON TRADING ...

*Let's get empirical
with a dozen quick
examples ...*

Example (1): Under CO₂ fetishism, the question “What causes climate change?” tends naturally to become: “What *physical location* do the pesky molecules come from?”

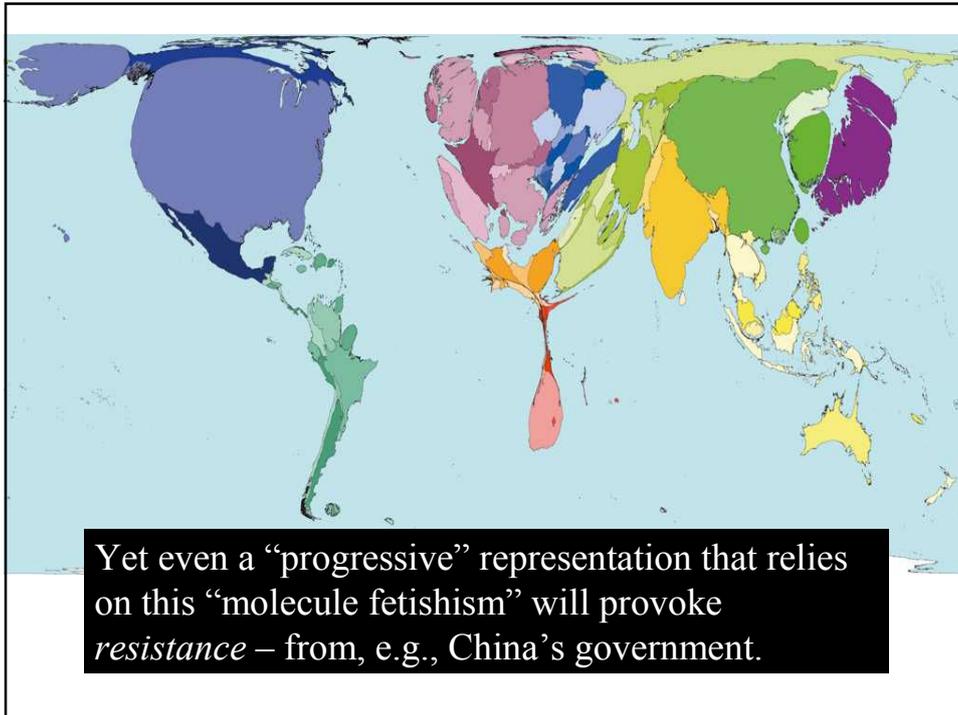


The natural answer: “nation-states” or “geo-bodies.”*

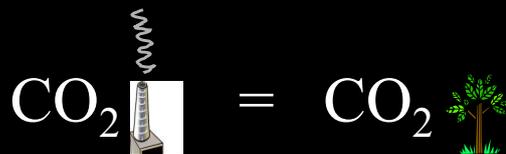
Thongchai Winichakul
University of Wisconsin



**Siam Mapped* (1994)



Example (2): Treating molecules as causes of global warming tends to encourage treating



But although fossil carbon is *chemically* identical to biotic carbon, the two carbons are different in terms of *climate history*.

... remember where carbon is stored and how the different carbons interact with the climate ...

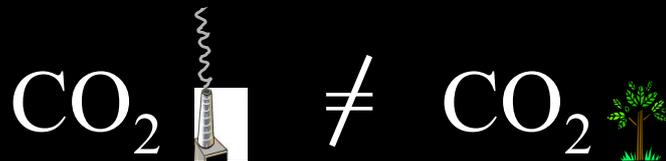


Active Carbon Pool

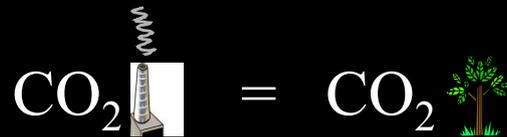


*Fossil Carbon
Pool*

In other words, “climate thinking” (as opposed to “chemical thinking”) recognizes that



What's more, the equation



is on the verge of unleashing staggering conflict, not only because using agrofuels as an equivalent for oil entails gigantic land takeovers, but also because using forest conservation as an equivalent for phasing out fossil fuels does the same ...

*Extreme molecule fetishism invades the
London School of Economics...*



Nicholas Stern

Emissions from forested land are responsible for 20% (17%, 12%, ... etc) of global warming!

... as well as governmental budgeting deliberations ...



Nicholas Stern

Therefore we should concentrate at least 20% (17%, 12%) of our climate mitigation efforts on conserving forests!!

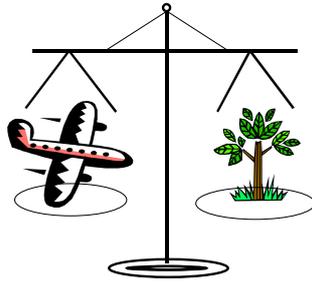
... thus interfering with climate solutions ...



Nicholas Stern

Especially since REDD* would be so cheap!!

*Reducing Emissions from Deforestation and Forest Degradation



“From both a political and an economic perspective, it would be easier and cheaper to reduce the rate of deforestation than to cut back significantly on air travel. It would also have a far greater impact on climate change and on social welfare in the developing world. Possessing rights to carbon would grant new power to farmers who, for the first time, would be paid to preserve their forests rather than destroy them.”

Michael Specter, *The New Yorker*, February 2008

“Frankly, the debate [over offsets] just makes me want to scream,” Sandor told me. “The clock is moving. **They** are slashing and burning and cutting the forests of the world. It may be a quarter of global warming and **we can get the rate to two per cent simply by inventing a preservation credit and making that forest have value in other ways.** Who loses when we do that?”

Michael Specter,
The New Yorker,
February 2008



Richard Sandor,
commodities trader,
derivatives trader,
carbon trader,
economics professor

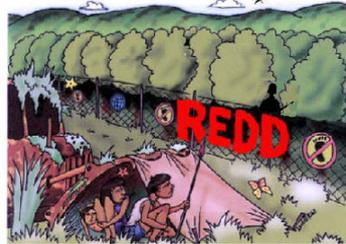
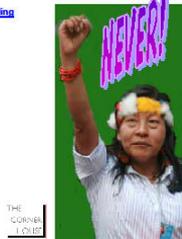
... a predictable response from Ugandan villagers to the carbon traders who had conspired in the seizure of their land to plant exotic trees to absorb Dutch power plant CO2 emissions ...





**WE WANT YOUR LAND
FOR OUR CLIMATE FRAUD!**

Download: www.inearth.org/carbontrading



Reaping Profits *from*
Evictions, land grabs
Deforestation *and*
Destruction *of* biodiversity

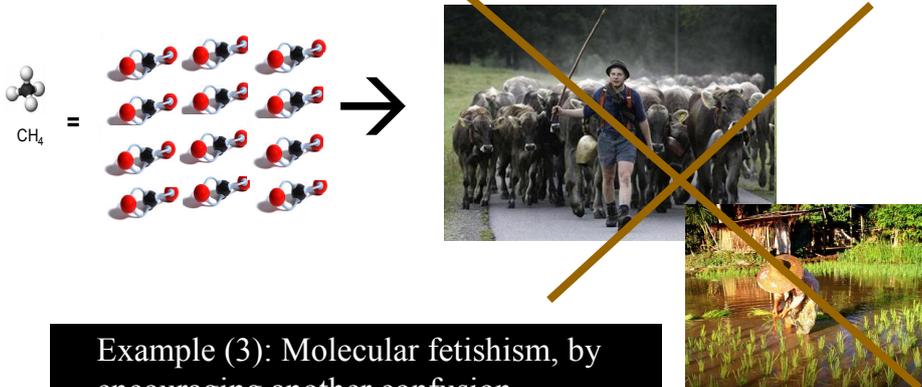
+Plus Industrial Plantations, GMO Trees & Protected Areas
[REDUCING EMISSIONS FROM DEFORESTATION AND DEGRADATION]



“People who live with the forests don’t want REDD.”



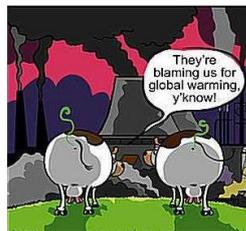
“We conserve forests because forests are life, not a commodity.”



Example (3): Molecular fetishism, by encouraging another confusion – between fossil-origin carbon dioxide and biotic-origin methane – again shifts the burden of tackling global warming to social sectors that are sure to resist, including food producers.



Robert Goodland



Domesticated animals cause 32 billion tons of carbon dioxide equivalent (CO₂e), more than the combined impact of industry and energy. ... replacing livestock products with better alternatives would ... have far more rapid effects on greenhouse gas emissions ... than actions to replace fossil fuels with renewable energy.

Example (4): the Clean Development Mechanism's need to find a single number representing a project's "carbon savings" (= transferrable pollution rights) requires that a single counterfactual without-project historical trajectory be identified.

7

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5

This entails behaving as if
“people cannot choose a
future different from the
one others have chosen for
them,”* which in turn
provokes popular
resistance ...

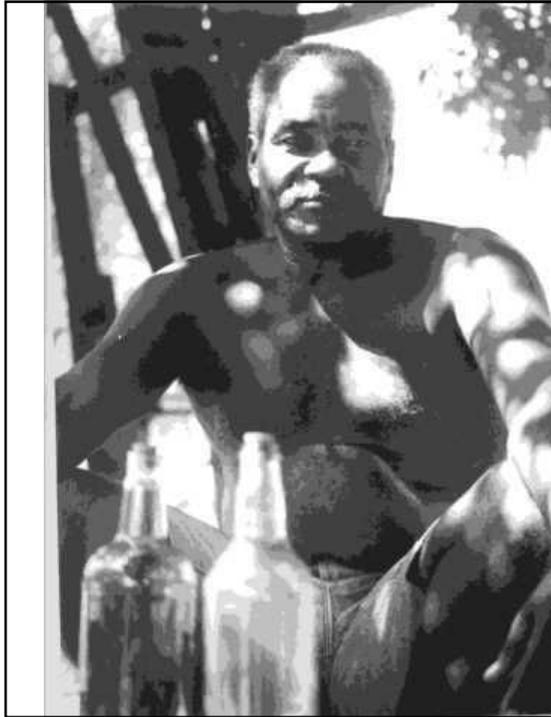


Herbert Docena, University of California
**The CDM in the Philippines: Rewarding Polluters*,
www.focusweb.org/philippines/content/view/334/7/

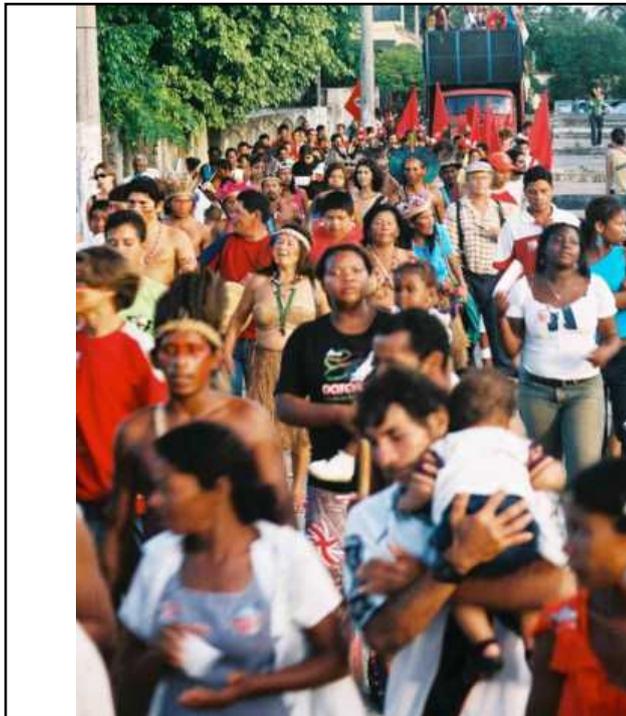
Take a look at the Plantar carbon project in Brazil ...







Jorge, former Plantar worker: “When I started working at Plantar I was OK. One day I fainted after lunch. I was already applying the insecticides, fungicides. Then there were headaches, weakness. My superior told me, ‘I am firing you because you do not know if you are sick or not.’ Six or seven people died. Plantar said it was heart failure. Now I don’t dare eat the fish from the streams here.”



Demonstration against *deserto verde*, Espirito Santo, Brazil, 2005.

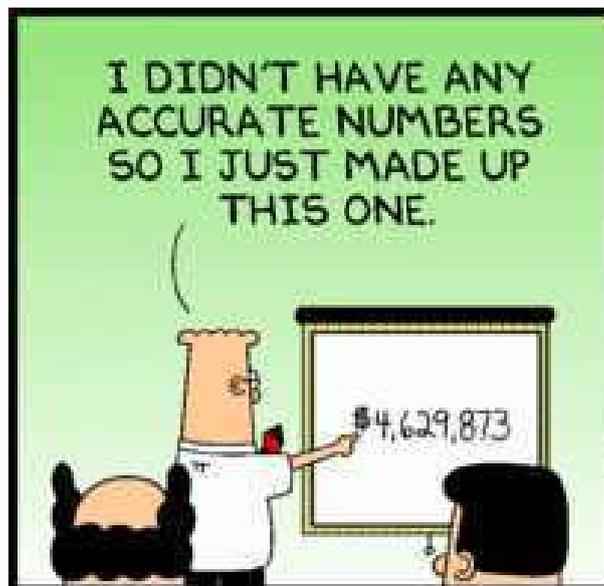


“The argument that producing pig iron from charcoal is less bad than producing it from coal is a sinister strategy . . . What about the emissions that still happen in the pig iron industry? What we really need are investments in clean energies that contribute to the cultural, social and economic well-being of local populations.”

Letter from 50 trade unions, local groups and academics, Minas Gerais, Brazil

Example (5): the same equivalence (“Hypothetical reduction = real reduction”) puts great political power in the hands of technical specialists, with no viable procedure for verification possible ... with predictable consequences ...

7 0 5



STUDIES HAVE SHOWN
THAT ACCURATE
NUMBERS AREN'T ANY
MORE USEFUL THAN THE
ONES YOU MAKE UP.



HOW
MANY
STUDIES
SHOWED
THAT?

EIGHTY-
SEVEN.



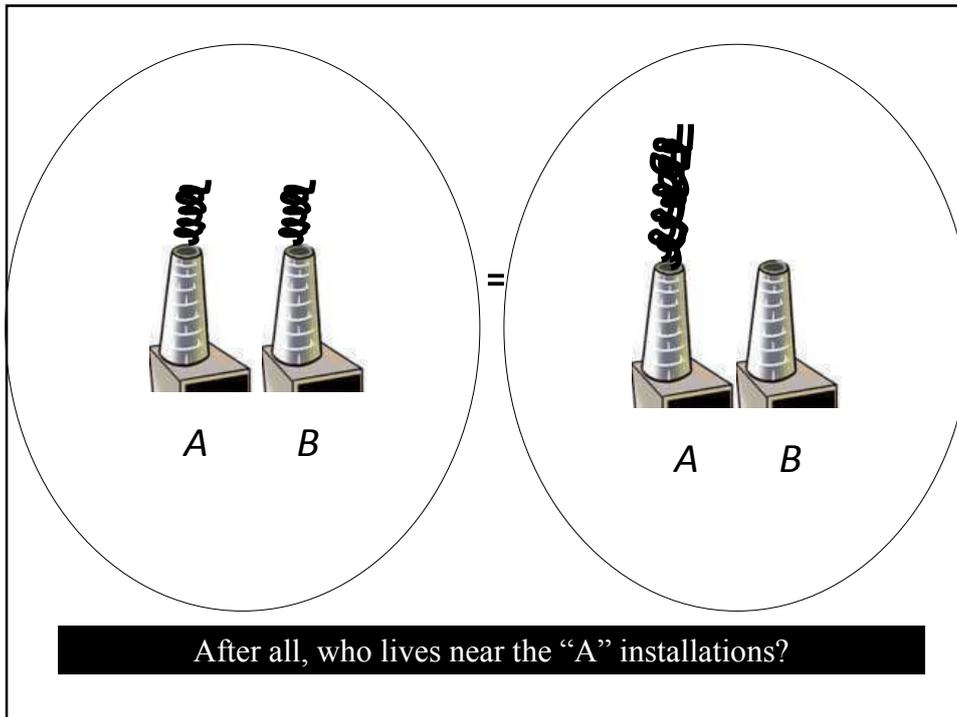


Example (6): Cap and trade's "Place A = Place B" equivalence provokes resistance among the communities where pollution piles up ...

"Our people are sick and dying from the refineries. Trading schemes knowingly concentrate pollution, exacerbating existing 'hot spots' in our communities of color."

*Dr. Henry Clark,
West County Toxics Coalition, Los Angeles*



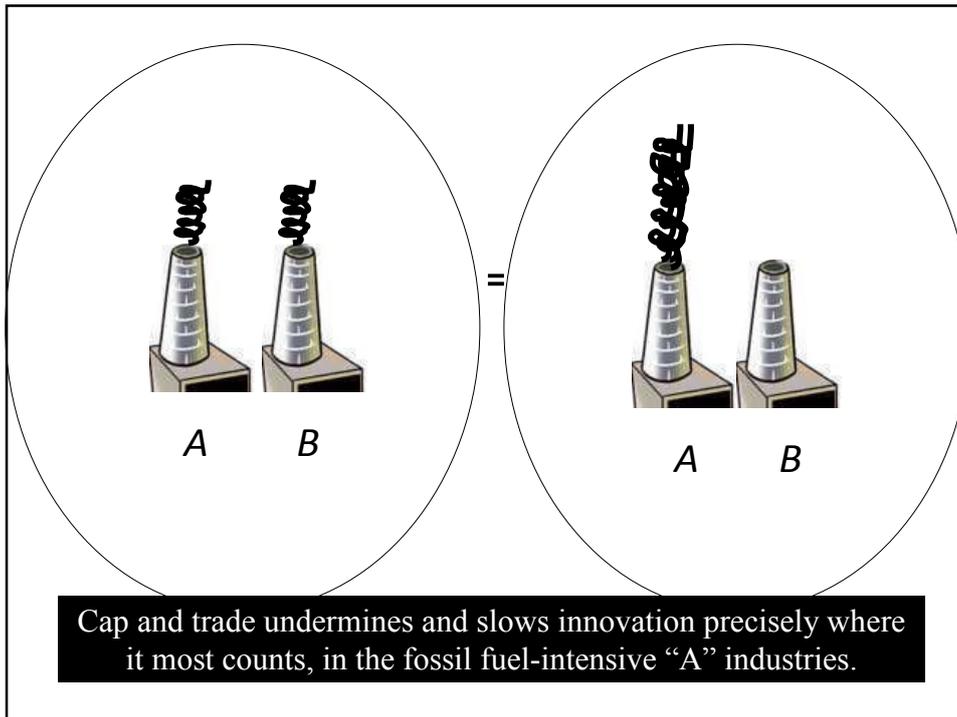


Example (7): CO₂ fetishism’s trajectory- and technology-blindness selects for counterproductive economic policy measures, such as EU biofuels policy.



“[L]owering cost does not increase incentives for valuable innovation ... [there is] a tradeoff between short-term cost effectiveness and investment in ... long-term economic and environmental progress.”

David Driesen,
Syracuse Law School, 2008



And similarly with offset trading ...

With offsets, “an electric utility burning coal will not have to reduce the emissions at the plant site. It can just keep burning coal.”

Rick Boucher, US Congressman and coal advocate, 29 August 2009



“When Greenpeace says the only reason American Electric Power wants to [invest in a forestry offset project in Bolivia] is because it doesn't want to shut down its coal plants, my answer is, ‘You bet, because our coal plants serve our customers very cost-effectively.’”

Michael G. Morris
Chief Executive
American Electric Power
15 October 2009



AND REMEMBER RHODIA'S KOREA PLANT ...

Does Rhodia's offset trade reduce overall greenhouse gases?

- ✖ No. Customers buy Rhodia's credits only so that they can continue to invest in fossil fuels.

Does the trade help Korea escape fossil fuel dependence?

- ✖ No. At best, it's irrelevant; at worst, it encourages the country to build more dirty industries so that it can make money cleaning up later. Rhodia already makes 35 times more money selling carbon credits than it does from the adipic acid market.

Does the deal promote green innovation?

- ✖ No, the technology Rhodia uses dates from the 1970s.



“We are at a cross-roads.
We can invest in a clean
energy future, *or* we can
condemn the planet staying
chained to a hopeless fossil
fuel future ... ”



*Angela Johnson Meszaros,
California Environmental Rights Alliance*

Example (8):

INSTITUTIONAL BLACK-BOXING
of carbon dioxide equivalency calculations
ABSORBS UNKNOWNs,
leading to confusions, blowbacks ...

2007: Consensus estimate of HFC-23's
GWP rises from **11,700 to 14,800**. Cash
equivalent of the change at the scale of
HFC-23 offset market to 2012 on January
2008 prices: **\$927,000,000**.

¹

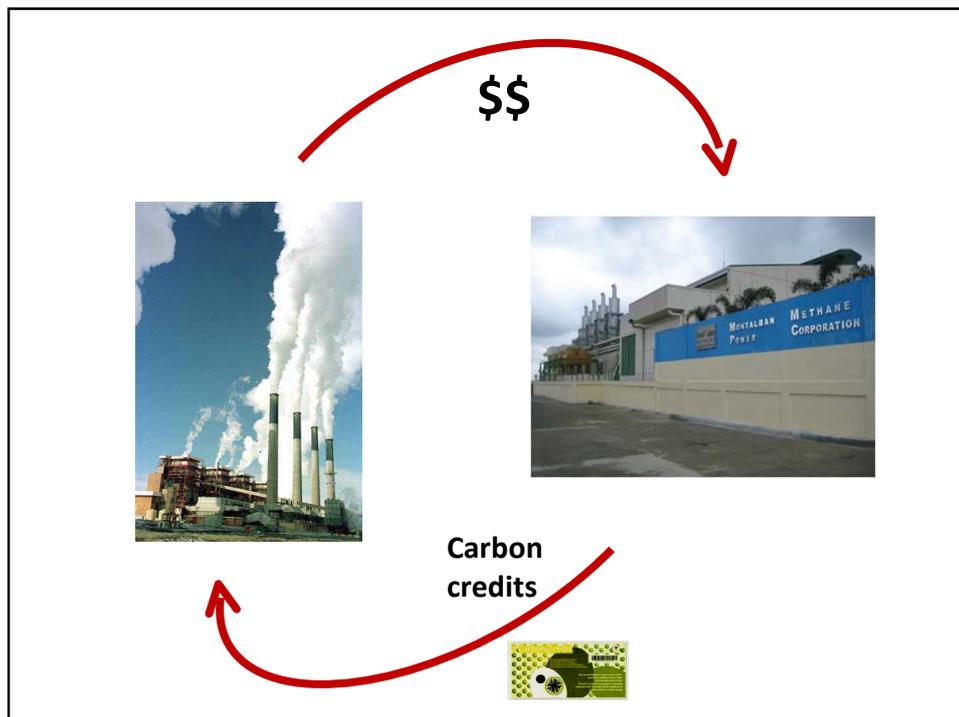
Source: Donald MacKenzie, "Making Things the Same," 2009

Example (9):
CO₂ fetishism
facilitates the
degradation of
the rule of
environmental
law ...



*A landfill
project
near
Metro
Manila
that burns
methane*

...



But **REPUBLIC ACT NO. 9003**

... already requires garbage segregation at source and recycling at the village level, as well as the development of outlets for composting and recycled materials ... orders all open dumps to be closed and converted into “controlled landfills,” and eventually replaced with “sanitary landfills” that would capture methane.

REPUBLIC ACT No. 9003

... covers the Montalban site but
is not being enforced there ...



The “‘gas control and recovery system’ that Montalban is installing and claiming credits for is the type of system that should already have been installed under the law as a minimum requirement for the landfill to operate in the first place.”

Herbert Docena



“Contrary to the law’s intent, Montalban’s owners claim that the volume of garbage will neither be reduced nor will its methane be captured.”



“The project’s ‘baseline’ assumes that Republic Act 9003 will remain unenforced ... Composting is dismissed as much more expensive compared to landfills without any supporting calculations (that includes the relative environmental and social costs of landfilling) and without pointing out that the law calls precisely for the development of local compost markets and supply chains in order to make it more commercially viable.”

~~REPUBLIC ACT No. 9003~~

*A legal sanction is supplanted by a price,
a fine by a fee.*



Further, “as CDM revenues in the country grow, so will the ‘perverse incentive’ to *not* implement these laws or introduce required regulation ... the CDM set-up can result in a ‘regulatory chill’ in which government officials willingly give in to the lobbying of companies to fail intentionally: They may hesitate to implement or pass new laws affecting the CDM projects’ ability to claim credits—not just for the sake of the companies but for themselves.”

Meanwhile, “in Nigeria, gas flaring is already prohibited and companies like Chevron and Shell have been paying a penalty for non-compliance. So, oil industry offset projects ... claiming to reduce gas flaring assume non-compliance.”

*Asume Osuoka,
Gulf of Guinea Citizens Network*



“Eni-Agip, an Italian transnational oil corporation, attempts to disapprove Nigerian law in its presentation to the CDM, maintaining that ‘whilst the Nigerian Federal High Court recently judged that gas flaring is illegal, it is difficult to envisage a situation where wholesale changes in practice in venting or flaring, or cessation of oil production in order to eliminate flaring will be forthcoming in the near term.’ ... what is lacking in Eni-Agip’s argument is the analysis of their own role in promoting instability and local dislocation, or how new gas infrastructure projects would contribute to exacerbating local tensions.”





“Carbon trading reflects one of the worst forms of neoliberal fanaticism and attempts at re-legitimizing corporate rule experienced in past decades.”



Similarly, back in Europe, the office of European Commission president Jose Manuel Barroso in 2009 blocked the publication of a revised EU action plan on energy efficiency that included a proposal to make a 2020 energy efficiency goal binding ***because increasing the share of renewables to 20% and improving energy efficiency by 20% would risk a fall in carbon prices.***



Senior commission official Jos Delbeke said “a strong carbon price should be the starting point” for emission reduction policy. ***“We must keep cap and trade firmly on the rails.”***



Ultimately, the unverifiability and perverse incentives associated with CO₂ fetishism make regulation of the carbon offsets market impossible, transforming *governance* into *corruption*.*

*L. Lohmann in *Carbon & Climate Law Review* 3 (2) (2009) or <http://www.thecornerhouse.org.uk/pdf/document/Athens%2010.pdf>.

Example (10): CO₂ fetishism facilitates “spatial fixes” that substitute “divide and rule” for climate solutions.



Bringing back an indigenous fire management system in arid Northern Australia ...



... to replace catastrophic wildfires ...



... with milder, fertility-
enhancing, controlled burns ...



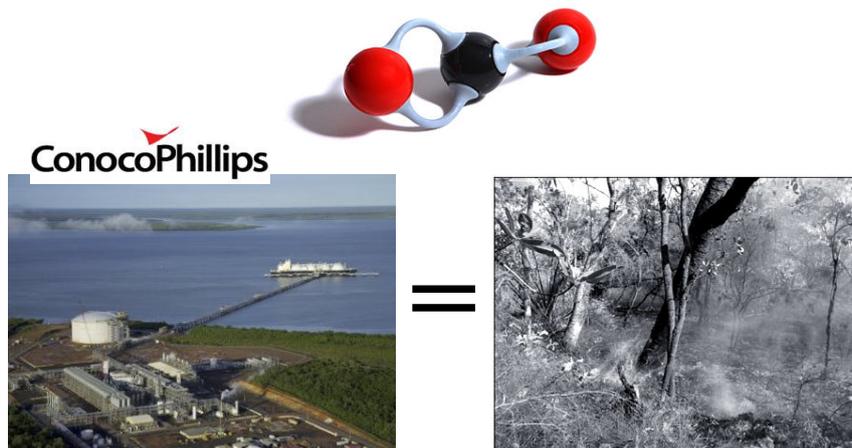
The late 'Lofty' Bardayal Nadjamerrekand his wife Mary Kolkiwarra, senior custodians of traditional knowledge who have been helping bring back customary forms of fire management on the West Arnhem Plateau.

... and some of the team ...



But who is paying for
this ... and, more
importantly, with
what conditions?

The logo for ConocoPhillips, featuring a red checkmark above the word "ConocoPhillips" in a bold, black, sans-serif font.

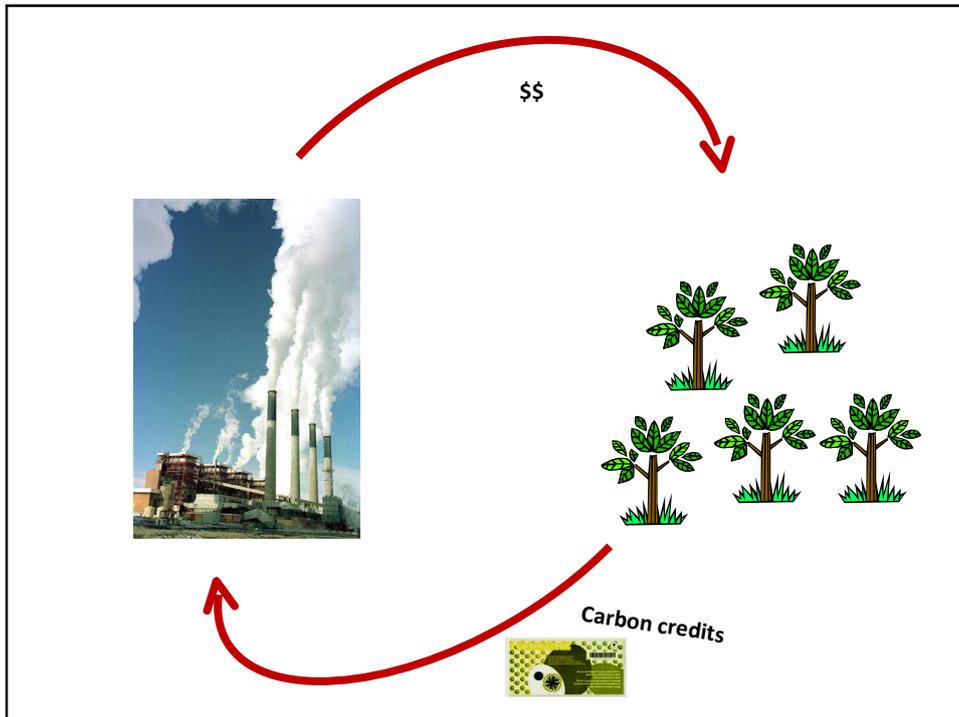


The idea: no need to stop
emissions from a natural gas
refinery if you can ...

... implement indigenous
fire control somewhere else
... *because* " $CO_2 = CO_2$ "

Yet every time such a forest community provides pollution licenses for fossil fuel-dependent corporations, it will be potentially harming communities elsewhere who are suffering from the fossil fuel extraction or pollution for which those corporations are responsible ...

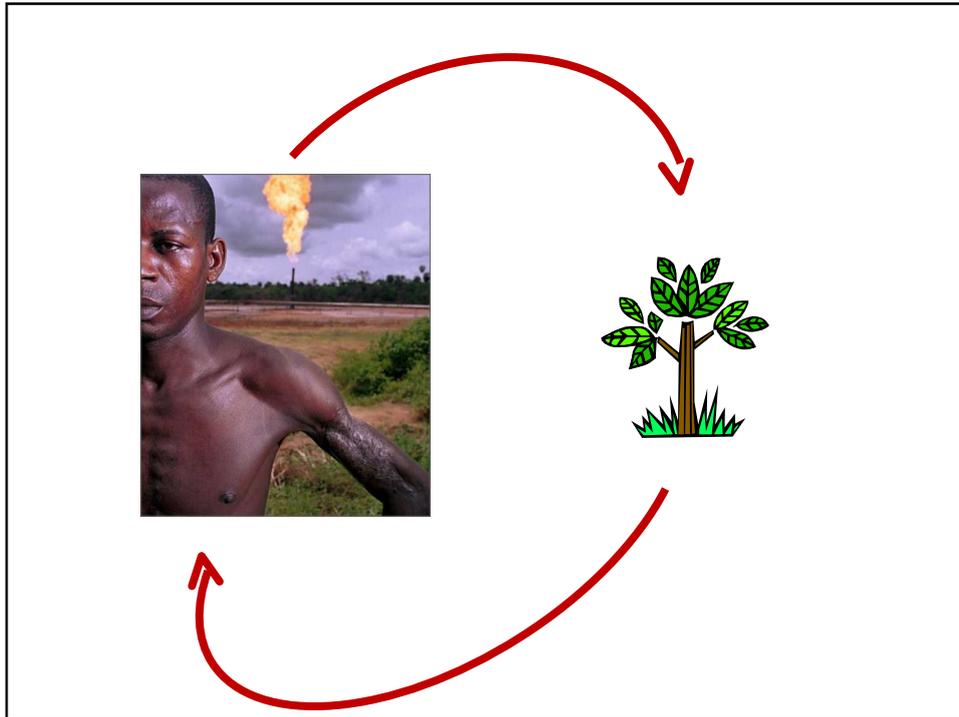
By licensing ConocoPhillips' continued pollution and extraction, the West Arnhem Indigenous project harms Indigenous communities affected by ConocoPhillips operations elsewhere, for example in North and South America.



“Indigenous Peoples who participate in carbon trading are giving [oil companies] a bullet to kill my people.”



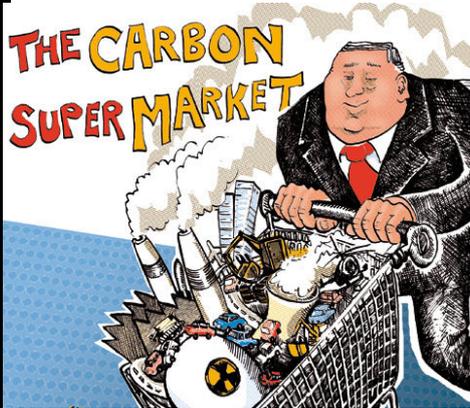
*Casey Camp-Horinek,
Ponca indigenous nation
US*



Example (11): CO₂ fetishism conceals the resource grabs associated with privatization of the earth's carbon-cycling capacity, as in the EU Emissions Trading Scheme:

<i>% of world carbon dump (IPCC) given to biggest European corporate polluters, Phase 1</i>	<i>Yearly value of gift to big polluters @ €30/t</i>
~17-34%	€49.52 billion

Example (12):
The creation of a
“magical” CO₂
commodity
facilitates a new
wave of
financialization
and speculation.



Wall Street:
“Did someone
say *trading*?”



Cashing in on Carbon



22nd October 2008, Jumeirah Carlton Tower, London

This conference “does not really concern itself with broader climate change issues ... It is aimed squarely at investment banks, investors and major compliance buyers and is focused on how they can profit today from an increasingly diverse range of **carbon-related investment opportunities**. ... **Hybrid and complex carbon credit structured products** ... how to identify investor demand for them in the US ... **derivative/synthetic carbon products** ... **carbon linked notes** ... for Japanese retail investors ... **sub-index arbitrage strategies** ... **productising carbon** ... **access channels for producers, ... speculators, proprietary traders and investors**. ... The programme features Sindicatum Carbon Capital, NatSource Asset Management, Natixis Environnement & Infrastructures (European Carbon Fund / European Kyoto Fund), Credit Suisse, Barclays Capital, IDEACarbon, New Carbon Finance, ICF International. ...”

“We’ll have a financial crisis in emissions at some point. There’ll be derivatives and all these unemployed investment bankers will then go work on carbon trading and come up with products which will lead to a crisis. ... You’ll find few economists who disagree.”

Kenneth Rogoff, Harvard,
former IMF Chief Economist
17 October 2009







“Stop iron smelters. Stop coal-fired power plants.
“CDM = Country Disrupted by Merchants.”



“We can get a cooler world only if we tackle the problems of injustice.”

For more information and free books

www.thecornerhouse.org.uk/subject/climate

www.carbontradewatch.org/

www.redd-monitor.org

www.ienearth.org

www.ejmatters.org

www.sinkswatch.org

www.wrm.org.uy

www.risingtidenorthamerica.org

www.ipocafrika.org

www.internationalrivers.org

www.foe.co.uk/resource/reports/dangerous_obsession.pdf

Download *Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power* from <http://www.dhf.uu.se>

or from <http://www.thecornerhouse.org.uk/subject/climate>

or order your free paper copy from

karin.andersson.schiebe@dhf.uu.se