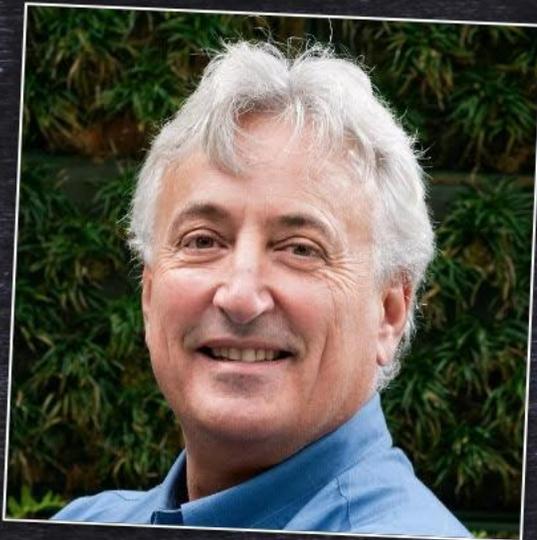


We  respect  fully disagree

**Monetary valuation: pragmatic conservation
or commodification of nature?**

Friday 17 February, 1-2.30pm
Oxford Martin School



Bob Costanza



Kate Raworth



Erik Gómez-Baggethun



Creating ecosystem service markets



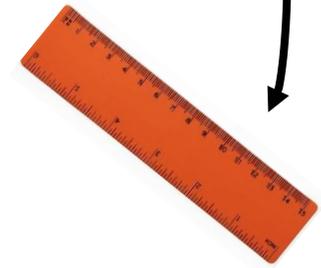
Commodification of nature



Care for the living world



Identifying ecosystems functions



Quantifying ecosystem functions



Identifying ecosystems services



Quantifying \$ value of ecosystems services



Assigning property rights



We respectfully disagree



Valuing Natural Capital and Ecosystem Services

Papers mentioned in this presentation can be downloaded from: www.robertcostanza.com

Robert Costanza

- Professor of Ecological Economics
Institute for Global Prosperity
University College London
- Editor in Chief, *The Anthropocene Review*



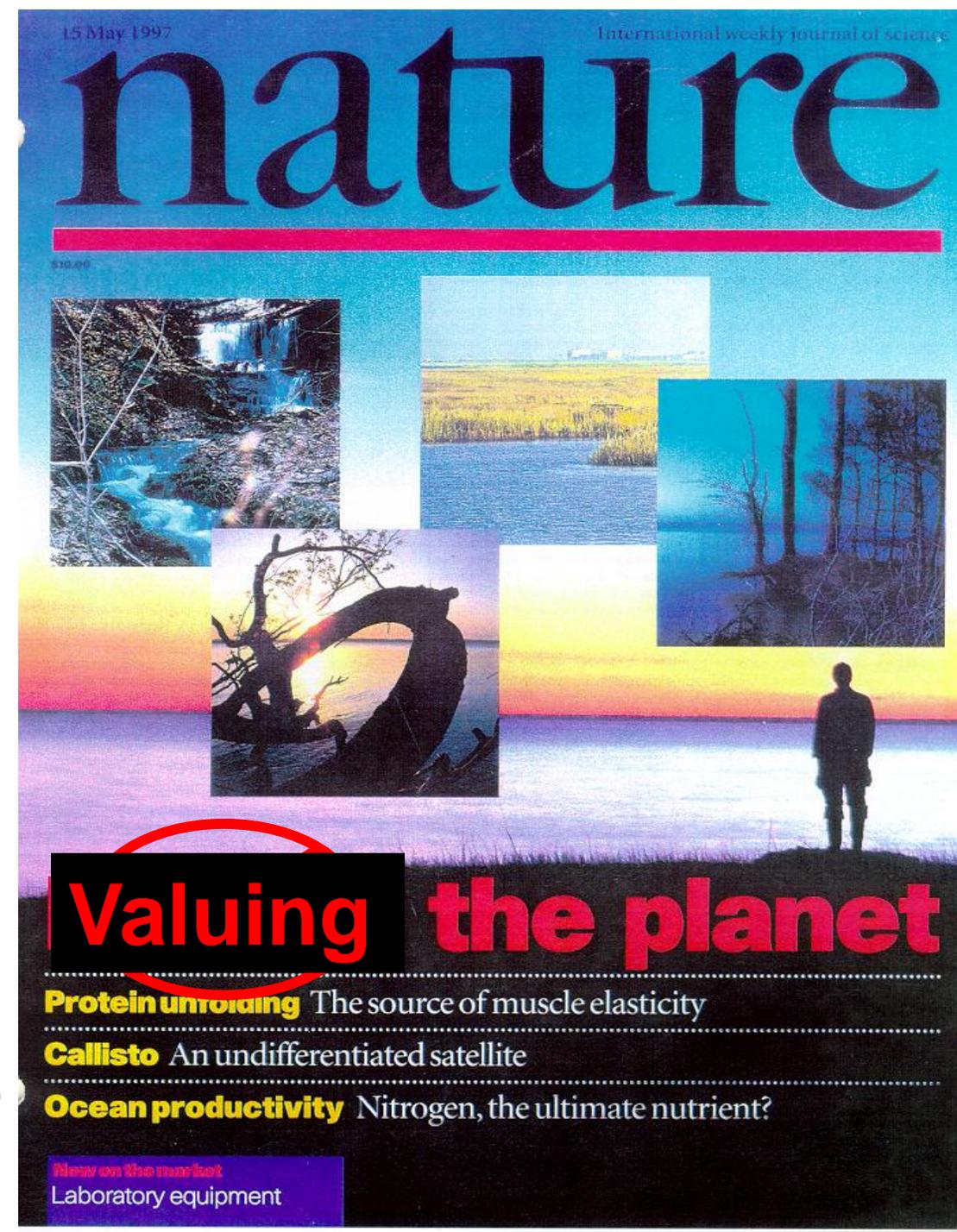
NATURE VOL 387 15 MAY 1997

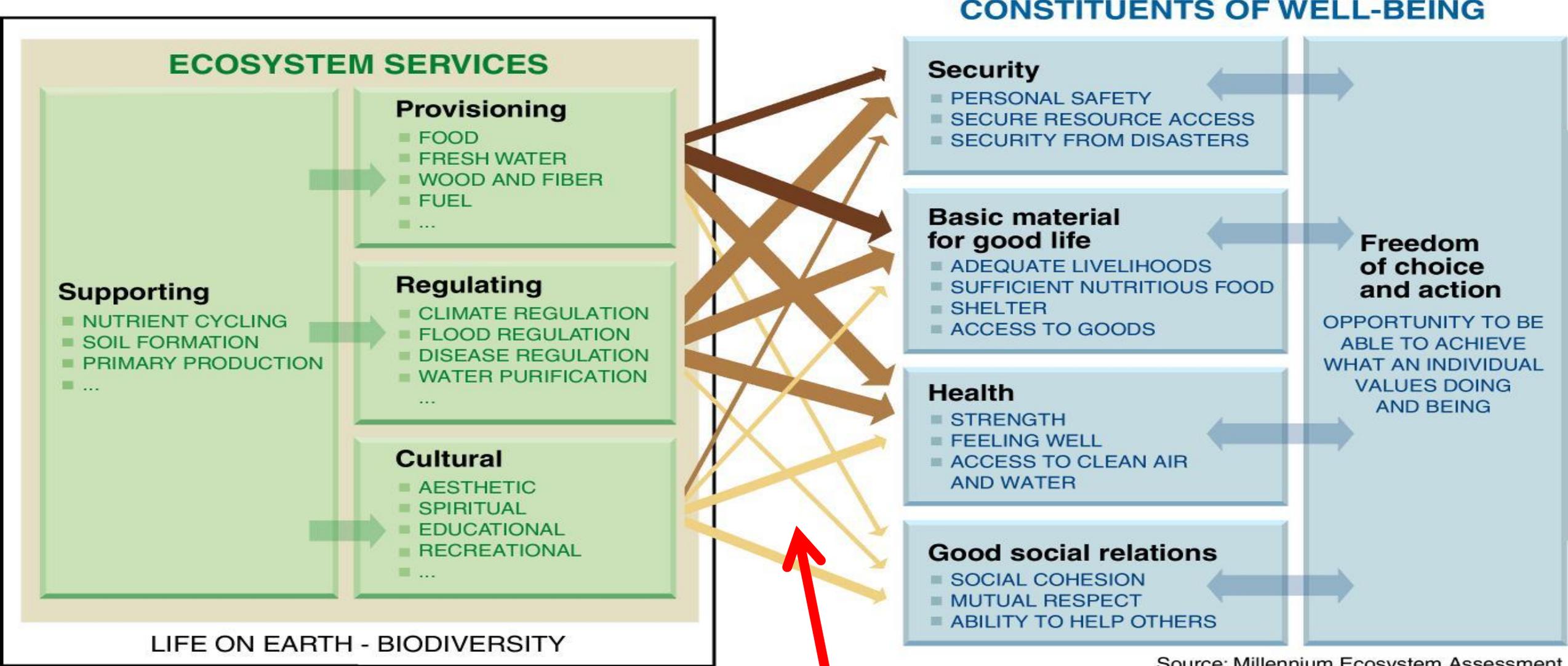
The value of the world's ecosystem services and natural capital

Robert Costanza, Ralph d'Arge, Rudolf de Groot, Stephen Farber, Monica Grasso, Bruce Hannon, Karin Limburg, Shahid Naeem, Robert V. O'Neill, Jose Paruelo, Robert G. Raskin, Paul Sutton & Marjan van den Belt

For the entire biosphere, the value (most of which is outside the market) is estimated to be in the range of US\$16–54 trillion per year, with an average of US\$33 trillion per year.

2nd most cited article in the Ecology/Environment area according to the ISI Web of Science with more than 11,000 citations – which puts it in the top 0.01% of all papers ever published.





ARROW'S COLOR
Potential for mediation by socioeconomic factors

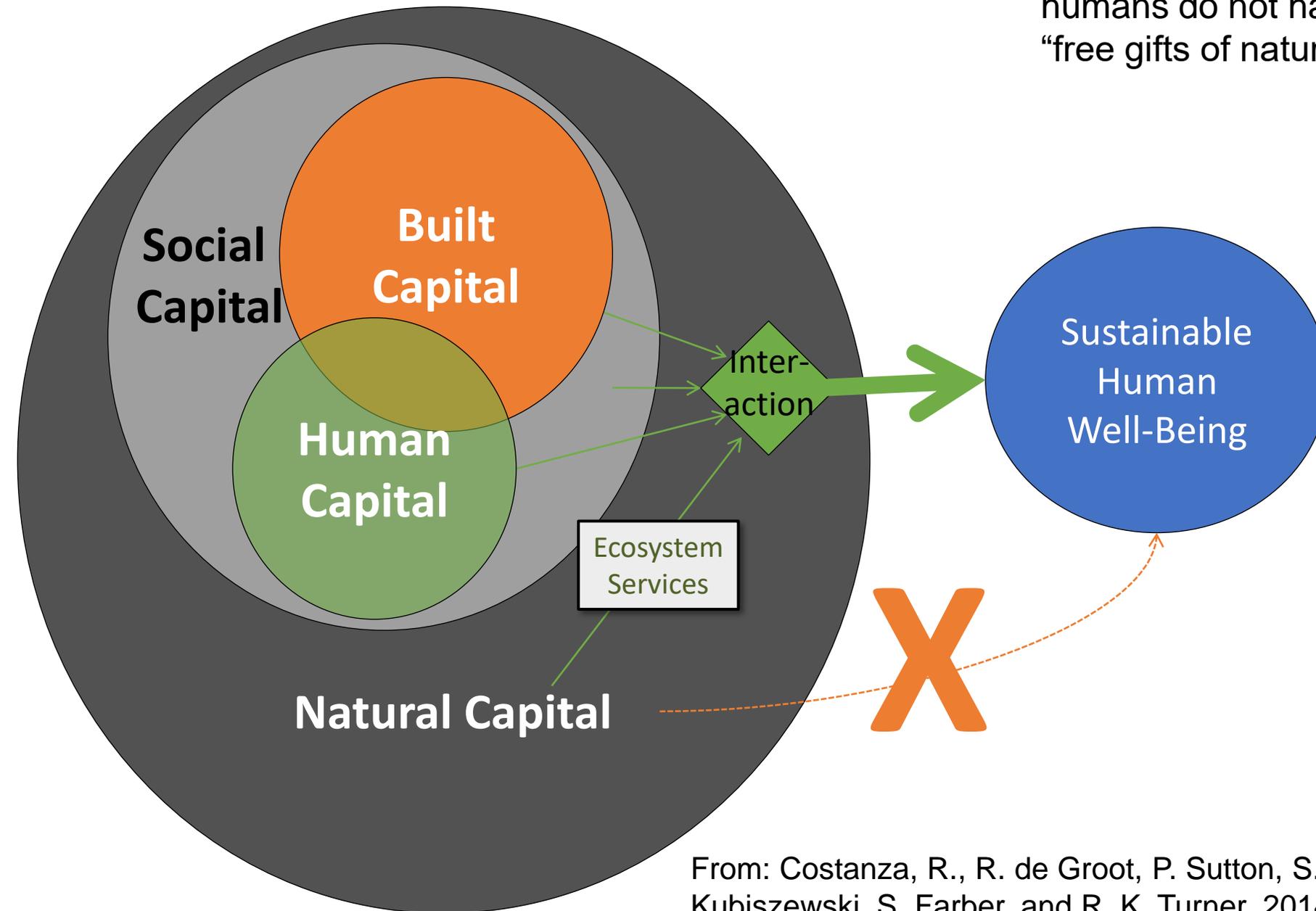
- Low
- Medium
- High

ARROW'S WIDTH
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong

Missing: Interaction with other forms of capital

Natural Capital is everything in the world that humans do not have to produce or maintain – the “free gifts of nature”.



From: Costanza, R., R. de Groot, P. Sutton, S. van der Ploeg, S. Anderson, I. Kubiszewski, S. Farber, and R. K. Turner. 2014. Changes in the global value of ecosystem services. *Global Environmental Change* 26:152-158.

Some mistaken identities concerning ecosystem services and valuation

- Economics \neq “the Market”
- Valuation \neq Privatization, Commodification, or Trading
- Expressing values in monetary units \neq Market or exchange values

Also, we cannot avoid valuation:
decisions about ecosystem are implicit valuations

Use of Valuation	Appropriate values	Appropriate spatial scales	Precision Needed
Rising awareness and interest	Total values, macro aggregates	Regional to global	Low
National income and well-being accounts	Total values by sector and macro aggregate	National	Medium
Specific policy analysis	Changes by policy	Multiple depending on policy	Medium to high
Urban and regional land use planning	Changes by land use scenario	Regional	Low to medium
Payment for ecosystem services	Changes by actions due payment	Multiple depending on system	Medium to high
Full cost accounting	Total values by business, product, or activity and changes by business, product, or activity	Regional to global, given the scale of international corporations	Medium to high
Common asset trusts	Totals to assess capital and changes to assess income and loss	Regional to global	Medium

An Introduction to
Ecological Economics Second Edition

Integrated Questions/Goals:

- Ecologically Sustainable Scale
- Socially Fair Distribution
- Economically Efficient Allocation

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John H. Cumberland
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Richard B. Norgaard
Ida Kubiszewski
Carol Franco

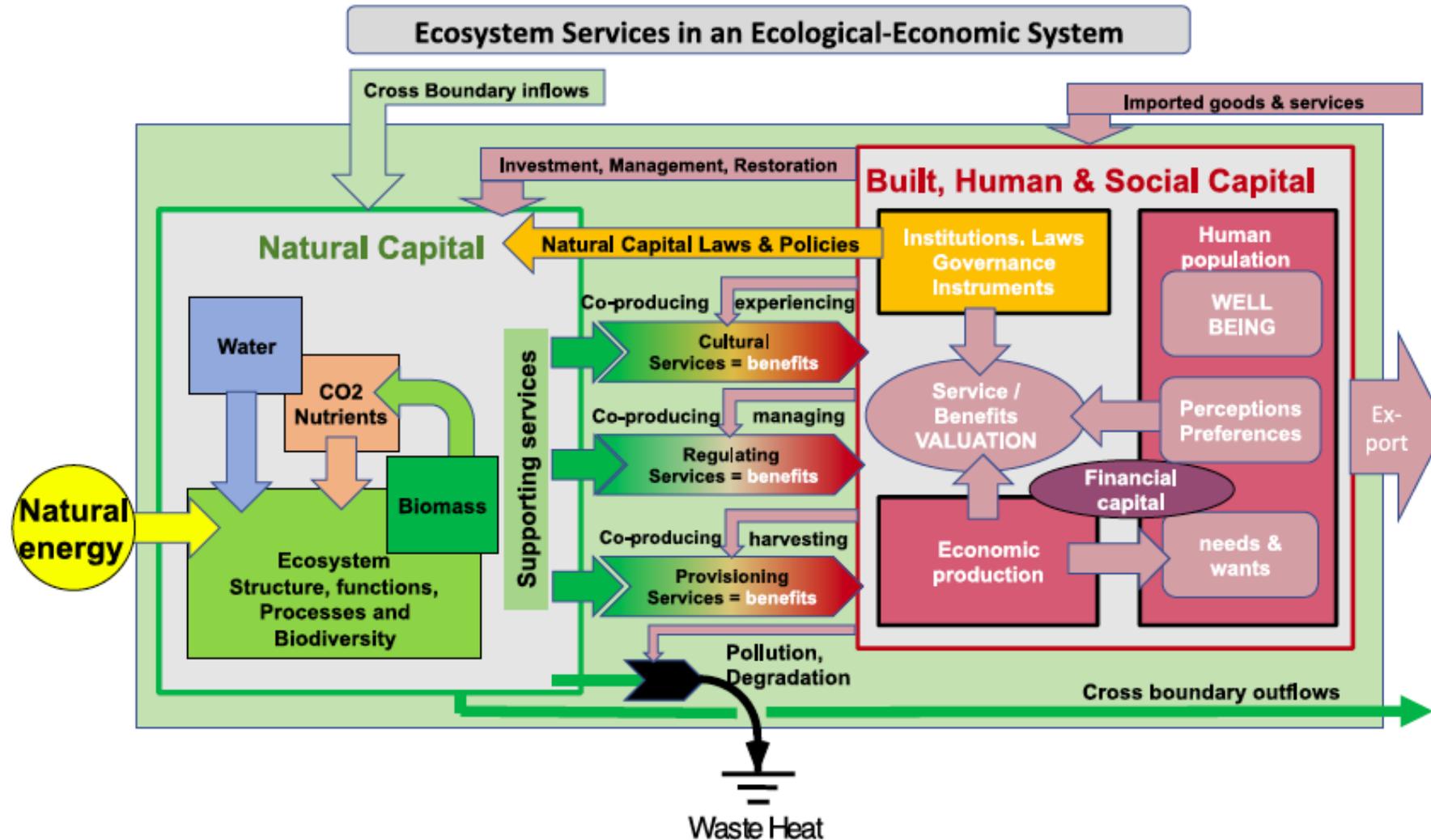
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Table 6. Valuation of ecosystems services based on the three primary goals of efficiency, fairness, and sustainability (From: Costanza, R. 2020. Valuing natural capital and ecosystem services toward the goals of efficiency, fairness, and sustainability. *Ecosystem Services*. 43:101096)

Goal or Value Basis	Who Votes	Preference Basis	Level of Discussion Required	Level of Scientific Input Required	Specific Methods
Efficiency	<i>Homo economicus</i>	Current individual preferences	Low	Low	Willingness to pay
Fairness	<i>Homo communicus</i>	Community preferences	High	Medium	Veil of ignorance
Sustainability	<i>Homo naturalis</i>	Whole system preferences	Medium	High	Modeling with precaution

Beyond the cascade:

a dynamic system capturing the complex interactions needed to produce ecosystem services at the regional scale, driven by the flows of energy, matter, and information through the system.



From: Costanza, R., R. de Groot, L. Braat, I. Kubiszewski, L. Fioramonti, P. Sutton, S. Farber, and M. Grasso. 2017. Twenty years of ecosystem services: how far have we come and how far do we still need to go? *Ecosystem Services*. 28:1-16.

Thank You

Papers mentioned in this presentation can be downloaded from: www.robertcostanza.com

Ecosystems support all life on Earth. The healthier our ecosystems are, the healthier the planet - and its people. **The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change and prevent a mass extinction. It will only succeed if everyone plays a part**



Monetary valuation of nature

Pragmatic conservation or commodification?

Erik Gómez-Baggethun
Professor of Environmental Governance



'We respectfully disagree' seminar series

Friday 17 Feb 2023, Oxford Martin School, United Kingdom

New environmental pragmatism

Many environmentalists and economists advocate economic valuation as a pragmatic strategy to communicate the value of nature in a language that reflects dominant political and economic views



Spash, C. L. (2009). The new environmental pragmatists, pluralism and sustainability. *Environmental Values*, 18(3), 253-256

Gómez-Baggethun, E., & Muradian, R. (2015). In markets we trust? *Ecological Economics*, 117, 217-224.

Valuing nature's services in money?

Classical economists recognized ecosystem services (*avant la lettre*) but believed they should stay outside the circuits of monetization and sale

- **David Ricardo (1772-1823)**

“Natural agents are serviceable to us by adding to value in use; but as they perform their work gratuitously, as nothing is paid for the use of the air, of heat, and of water, the assistance which they afford us, adds nothing to value in exchange” (1817 [2001], p. 208)



- **Jean Baptiste Say (1767-1832):**

“the wind which turns our mills [...] and even the heat of the sun, work for us; but happily no one has yet been able to say, *the wind and the sun are mine, and the service which they render must be paid for*” (1829, p. 250)





Illustration: <http://www.etcgroup.org/content/news-release-who-owns-nature-0>

Monetary valuation and commodification of nature: Can we detach them from one another?

Selling out on nature

[Douglas J. McCauley](#)

[Nature](#) **443**, 27–28 (2006) | [Cite this article](#)

22k Accesses | **478** Citations | **102** Altmetric | [Metrics](#)

With scant evidence that market-based conservation works, argues Douglas J. McCauley, the time is ripe for returning to the protection of nature for nature's sake.

Nature: ecosystems without commodifying them

[Robert Costanza](#)

[Nature](#) **443**, 749 (2006) | [Cite this article](#)

‘Valuing ecosystem services monetary terms is not identical to commodifying them for trade in private markets’

Not easily... because notions of property, ownership, trade and exchange are structurally embedded in money metrics

- ❑ **Money:** a commodity accepted as a medium of economic exchange; the medium in which prices and values are expressed; as currency... it circulates facilitating trade (Encyclopedia Britannica)
- A medium of exchange; [...] the assets, property, and resources owned by someone (Oxford Dictionary)
- Any item accepted as payment for goods and services [...] The primary functions are as a medium of exchange, a unit of account, a store of value (Wikipedia)
- ❑ **Monetary value:** amount that would be paid in cash for an asset or service if it were to be sold (Accounting tools)

Commodification is not a discrete event of institutional change; it is preceded by changes in framing and commensuration

- Commodification

- Describes the **symbolic, discursive** and **institutional** changes through which a good or service that was not previously meant for sale **enters the sphere of money and market exchange**.
- Sometimes criticized on the grounds that **some things ought not to be for sale** neither governed through the market values and norms.
- **Commodification changes the values** governing the relations between people and nature as these adopt the form and logic of utility and market transactions

Stages in the commodification of nature

1. Utilitarian & anthropocentric framing

Nature as capital, stocks, assets, services



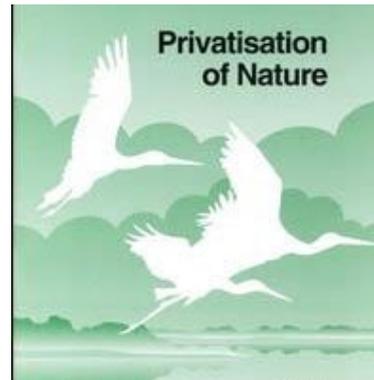
3. Monetization

Nature's value expressed in monetary units



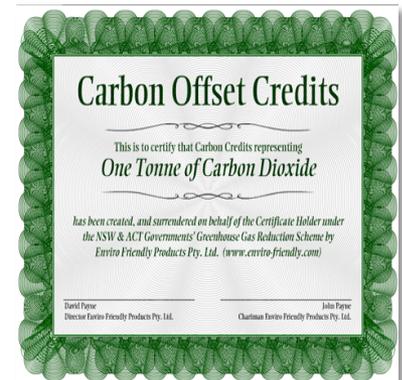
3. Appropriation

Establishment clearly defined property rights (often private)



4. Sale / trade

Wetland banking, carbon trading, biodiversity offsetting



The tragedy of well-intentioned valuation

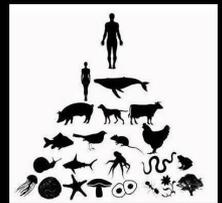
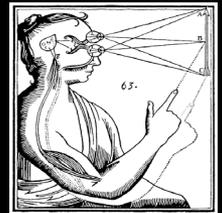
- Concepts like natural capital and ecosystem services set human-nature relations into one of **utility and exchange**, thereby expanding the rationality of the profit calculus into the sphere of biodiversity
- **Monetary valuation** methods frame choices within a narrative of scarcity, efficiency, and profit, often serving as **discursive framing and metrical technology for the commodification of nature**
- Monetary valuations are not deployed in an ideological and institutional void. Attention needed to the political climate and to the inherent **drive of capitalism to expand** by creating new commodities
- Efforts to express nature's value in monetary terms in the name of pragmatism may serve, often against the will of its promoters, market conservationist agendas driving the commodification of nature

Core values underlying utilitarian environmentalism

Communities adopting particular metaphors should be aware of the implications, also in terms of the **moral** and **political** stands embodied in such choices

The Natural Capital framework reflects a worldview, ultimately, anchored in some of the **core foundations** of capitalist Western culture, including:

- **(i) Humans-nature dualism**: Separation of society and nature. Taking out agency from non-human entities
- **(ii) Anthropocentrism**: underpins right to own (and destroy) nature and the exclusion of non-humans from the community of justice
- **(iii) Utilitarianism**: Underpins self-interest calculus as ultimate driver; frames human-nature relations in terms of costs & benefits



Is it time to leave utilitarian environmentalism behind?

Lines of thinking and action towards reframing and overcoming our truncated relationship with nature:

- ❑ A departure from prevailing ontological conception, moral framing and legal coding of human-nature relationships; a shift **from a morality of utility to a morality of care**
- ❑ A reallocation of **property rights**, restricting the scale and scope of rights to privately own (and destroy) non-human life
- ❑ The extension of the community of justice to non-human entities, including rights of nature, environmental personhood and guardianship, based on principles of **sustainability, responsibility, reciprocity, and interconnectedness**

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Thanks

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