

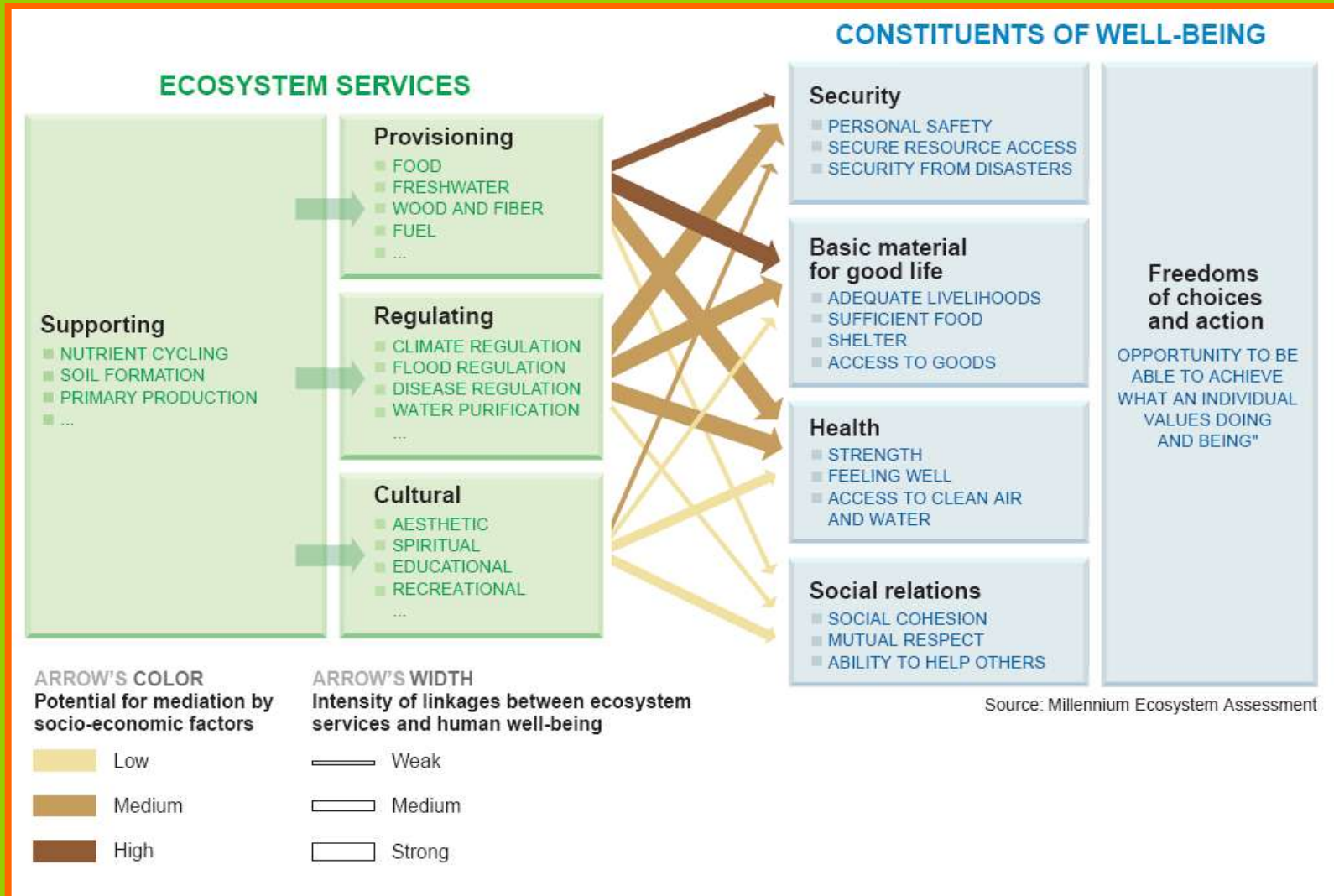
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Historical reflections of the evolving relationship between urban settlement and ecological processes

Anderson, P.M. (UCT, ACC) and O'Farrell, P. J. (CSIR)



Ecosystem services theory



Ecosystem services theory

- However, limited engagement with
 - **Longer temporal scales** and
 - Conspicuously a historical
 - no socio-ecological system can be understood on the basis of a single time-shot
 - **ecosystem disservices**
 - ‘lack of attention to ecosystem disservices may seriously hamper environmental management in general, and urban green management in particular’
 - **urban context**
 - Cities as ecological systems
- A case study of the City of Cape Town

Early exploitation

- **San hunter-gatherers**

- Table Mountain as a significant provisioning site for plants, animals and water
- management of natural environment

- **Khoi herders**

- Significant shift in use of natural resources
- More intensive exploitation
- Management of natural environment
- Cultural services - *Camissa*

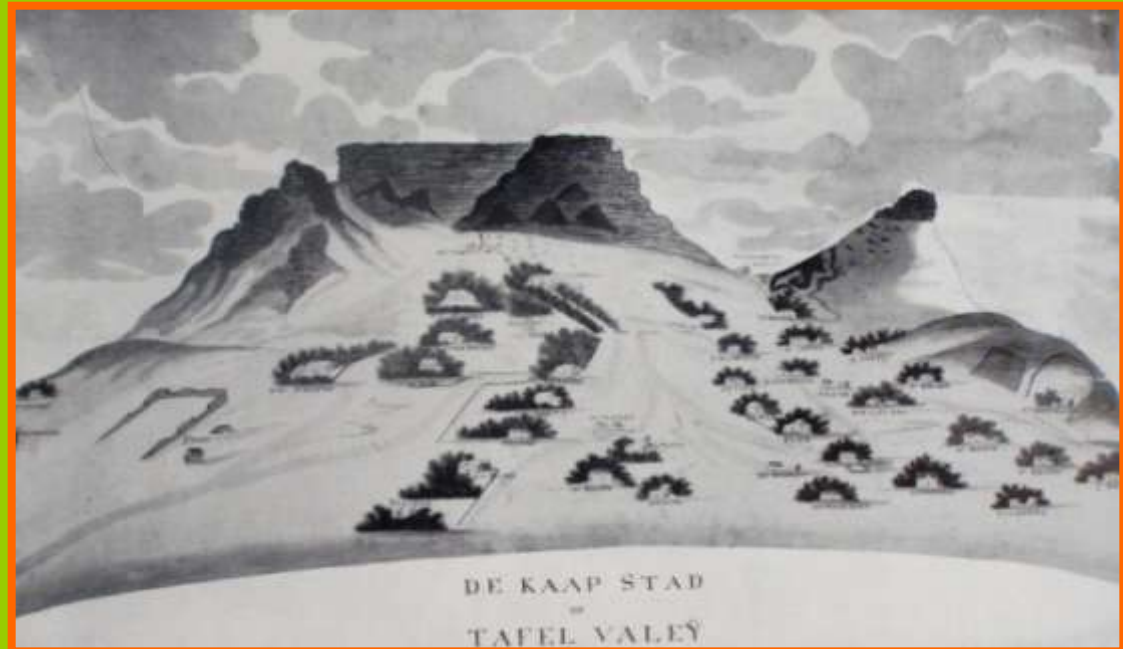
- **Resource conflict suggesting early over-exploitation**

Over exploitation

- **Establishment of a provisioning station**
- **Era of intense over exploitation**

- **Water for ships and irrigation**

- **Wood for construction, ship repair and fuel**



Undated print 1700s (Luckhoff 1951)

Over exploitation

- Emergence of cultural sense of place



Plate made by Chinese for Dutch East India Company
(Luckhoff 1951)



1752 painting by Sagar (Luckhoff 1951)

Over exploitation

- Challenges of disservices
- 1656 carnivore extermination
- Boundaries, exclusion areas



- positive engagement with ecosystem services and negative engagement with ecosystem disservices

Interruption

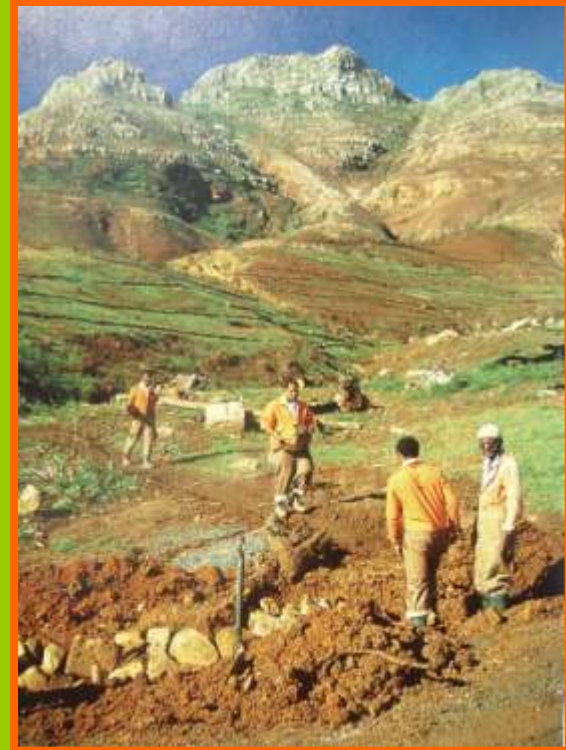
- **Permanent settlement with greater agriculture**
- **Altered fire regimes, ploughing and erosion**
- **Attrition of supporting services**
- **British rule, extraction and introductions**
- **Afforestation**



(unknown1914)

Management

- Emerging aesthetic and cultural dimensions
 - The value of the view
 - Table Mountain as a national monument
 - Table Mountain as a National Park (cultural and ecological services receive due recognition)
- The case of *Camissa*



So what does this tell us?

- Ecosystem services mean different things**
- Current developmental disparities as an allegory**
- MA models do not adequately engage with multiple feedback loops and shifting, or multiple, dominances in drivers**
- The need to face up to some ecosystem disservices which may be critical to ecological functioning**

Parting shot

- “...the transmutation of the self-interest of rich countries and classes into **an enlightened ‘solidarity’ with little precedent in history.**” (Davis 2010: 37)



- What would a single ecological culture look like?
- How uncomfortable are we prepared to get?



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33°56'03.13" S 18°27'12.39" E elev 47 m

Eye alt 505 m