



A role for archaeology in climate change adaptation

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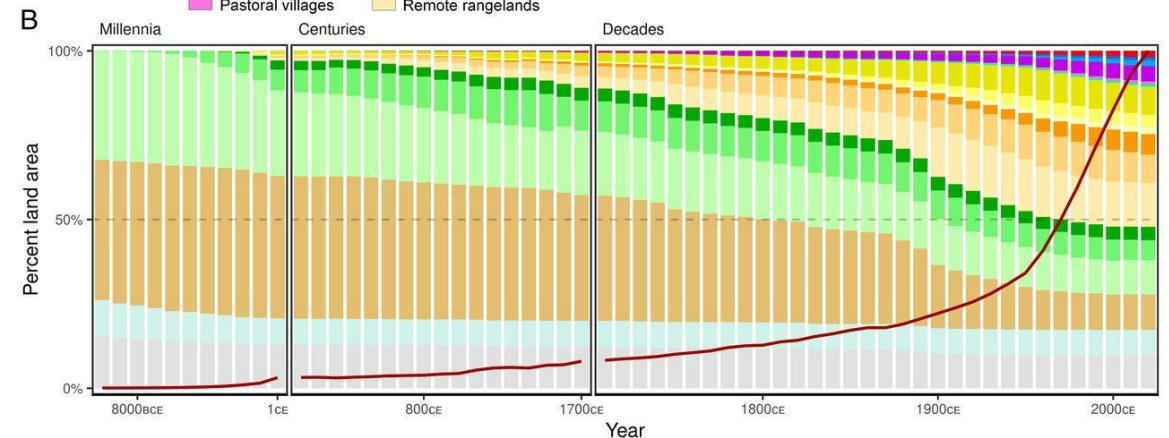
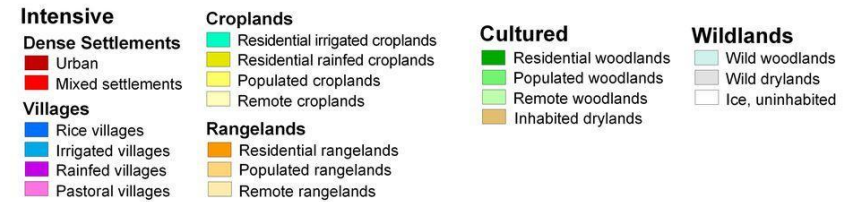
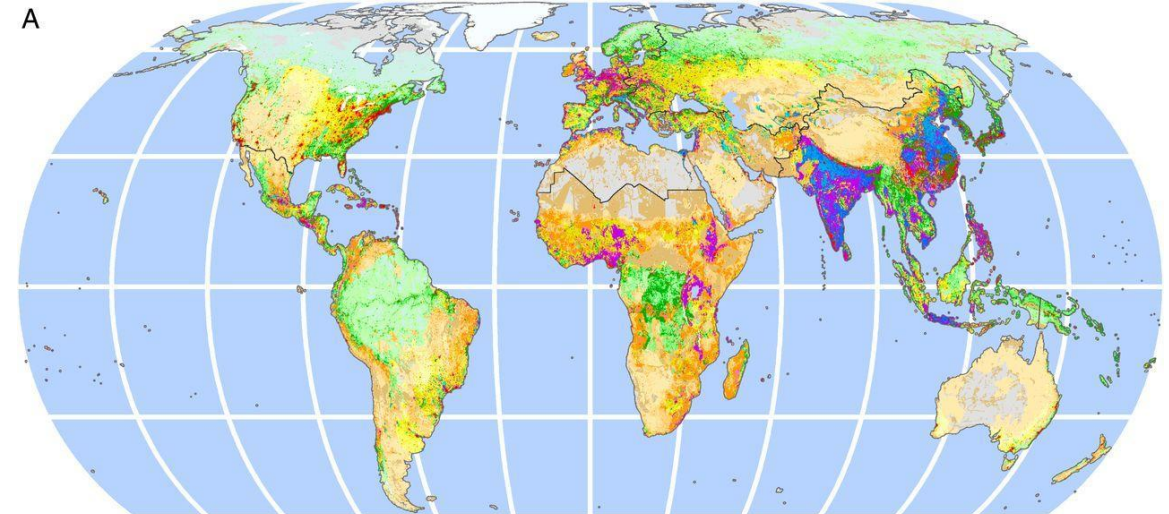
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For human adaptation, the archaeological record is the most extensive (and inclusive) source of information we have

- Need to move beyond “lessons” from specific case studies, which need not travel to other contexts
- One example: Ellis et al. 2021 PNAS—wilderness has been rare for a long time, so the biodiversity crisis is due to recent expansion of the world economy
- Evidence of sustainable management by indigenous societies before that



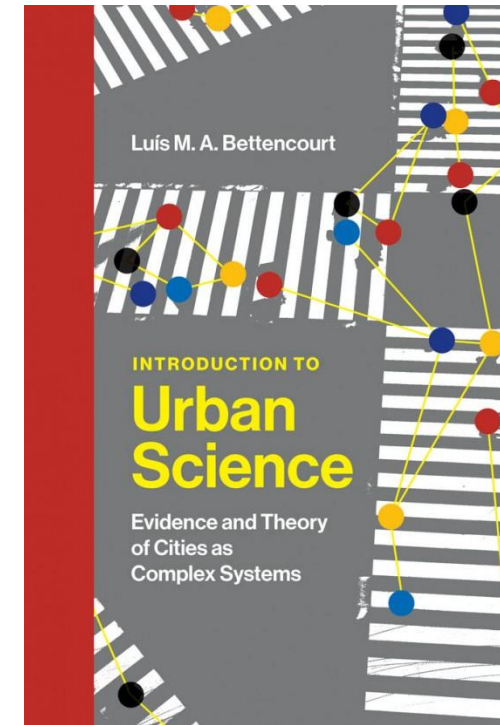
For adaptation to climate change, cities are not a problem, but a key part of the solution

- Most human environmental impact does come from feeding the needs of cities
- But cities have been hubs for innovation, cumulative knowledge, and social development all along
- Cities have also been magnets for people from smaller places, in the past and today
- Their impacts, positive and negative, derive from the concentration of human networks in space
- We need to figure out how to increase the positive while reducing the negative

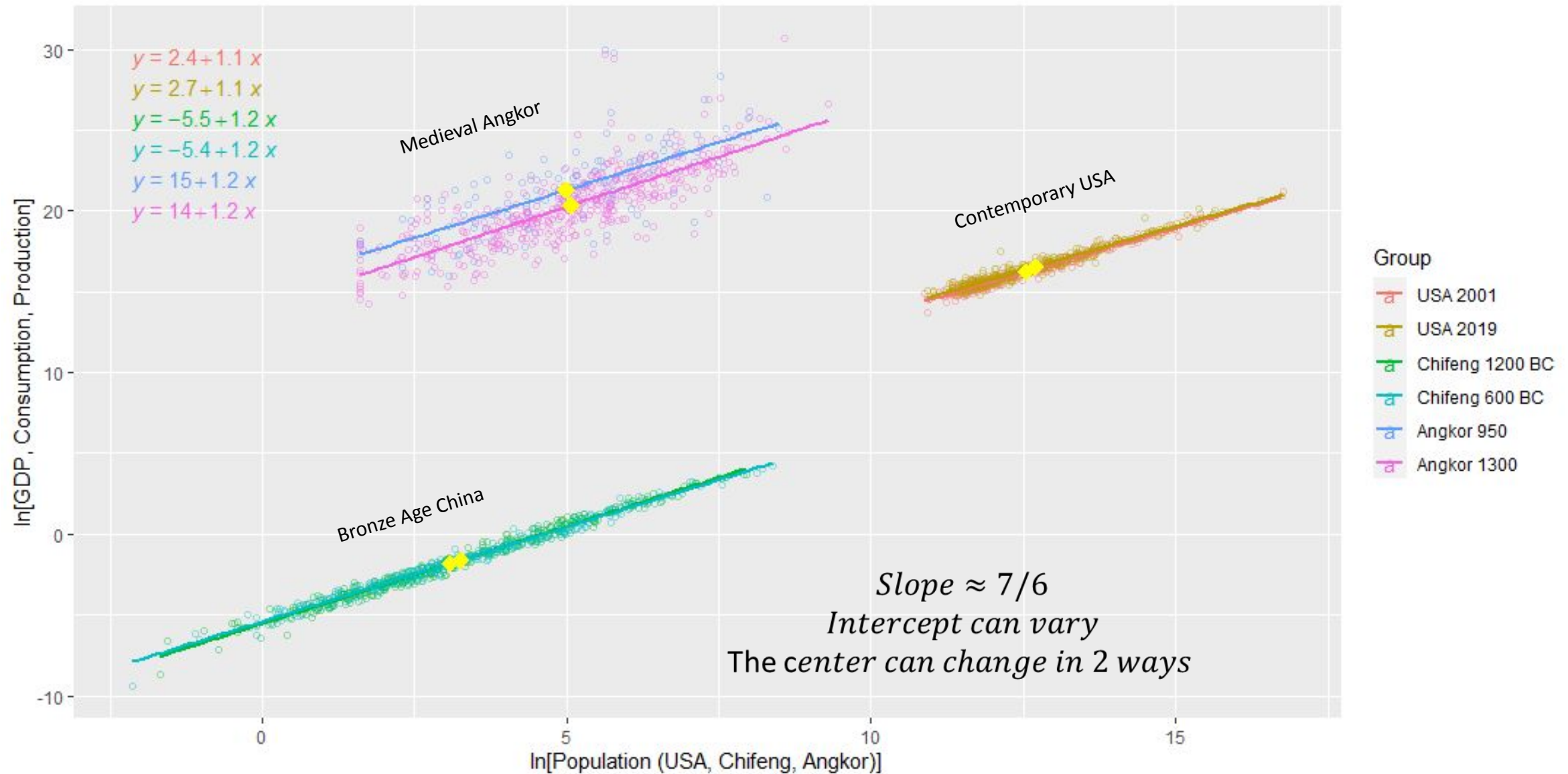


If you focus on the fundamentals, human settlements and networks exhibit predictable regularities

- People
- Movement and Interactions/exchanges
- Of energy, things, and information
- In space and time
- Balancing costs and benefits
- Using built infrastructure
- Integrated across many people
- Emergent properties



These regularities transcend the past and present



Efforts to adapt to climate change must take these regularities into account!

- A good theory that applies broadly and accounts for past and present evidence will also apply in the future
- Proposed solutions that run counter to such a theory will not work
- A good theory will help constrain our imaginations
- One role for archaeology is to help define this theory



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