Climate Economics of Cultural Heritage

Andreas Papandreou

Professor

National and Kapodistrian University of Athens







Very limited attention on Climate Change and Cultural Heritage to date

- The Fifth IPCC pays very limited attention to cultural heritage in its appraisal of the impacts of climate change or in its discussion of adaptation to climate change.
- Previous reports had no mention of cultural heritage
- The academic literature on climate change and cultural heritage is very young and limited, though growing.
- No paper on this theme has been published in an economics journal.
- Economists, however, have been engaged in issues of culture and cultural heritage.

Parallels between cultural and natural capital

- Economics advanced from a focus on man-made capital, human capital to natural capital and cultural capital
- Close parallels between cultural and natural capital:
 - both have been inherited from the past,
 - both yield use and non-use benefits
 - both impose a duty of care
 - diversity is key to both (think of the invisible networks that hold cultures together and give meaning to people's lives)

Climate change: three questions across three dimensions

- 1. Why does the economy fail to protect our climate?
- 2. What level of climate change should we aim for?
- 3. What policy tools to achieve our climate change goals?

Three dimensions

- 1. Mitigation
- 2. Adaptation
- 3. Resilience to low carbon transition

Climate change and cultural heritage: three questions across three dimensions

- 1. Why would an economy fail to provide the level of protection needed?
- 2. How can we set priorities in distributing resources for protection of cultural heritage from climate change impacts?
- 3. What tools or instruments for cultural heritage sustainability can we envisage?

Three dimensions

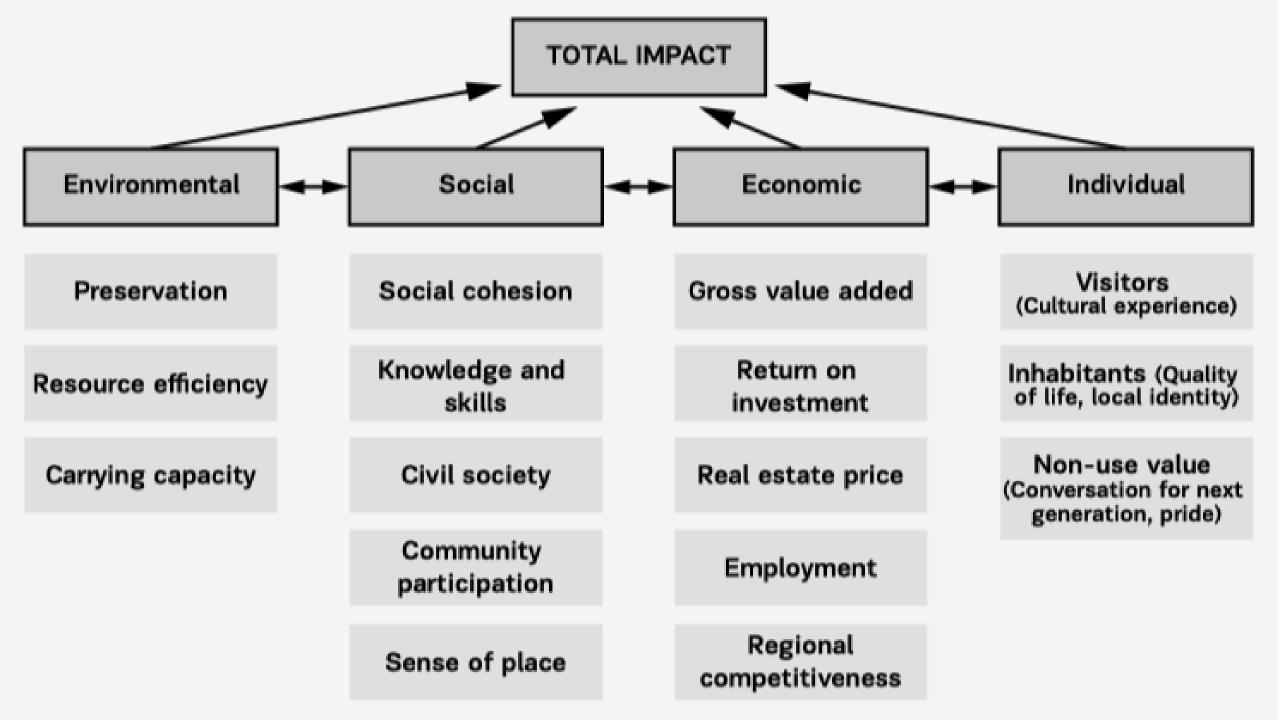
- 1. Mitigation
- 2. Adaptation
- 3. Resilience to low carbon transition

1. Market/institutional failure

- Climate change is greatest instance of market and institutional failure
 - Atmosphere is a global commons
 - Technological innovation and diffusion has a public good character
 - Climate action requires global cooperation
- Cultural heritage and resources are also public goods (local and global)
 - Private actors lack incentives to protect
 - Climate change compounds failure: increases risk of serious irrevocable damage
 - Strain on competing resources for adapting and mitigating
 - Negative feedback: climate change wreaking economic havoc and eroding social capital, displacement of people and conflict

2. Prioritizing action (how much to protect)

- Climate change: Cost benefit analysis to determine timing and strength of climate action
- Economists have looked at using valuation techniques for cultural heritage and resources
- Typical breakdown of values for nature and culture:
 - Use value: sum of visitor value (WTP to visit) and amenity values of residents (as reflected in property prices)
 - Non-use value: altruistic value (others may enjoy) bequest value (for future generations)
 - Existence value: benefit from knowledge heritage is being conserved per se



2. Economic valuation techniques: critique

- "Nowadays, people know the price of everything and the value of nothing."
 - Oscar Wilde, The Picture of Dorian Gray
 - As an attack on consumerism spot on but as a factual statement not quite
- 1. Cultural value is different from economic value: aesthetic value, spiritual value, social value (sense of identity and space), historic value, symbolic value and authenticity value (its genuineness).
- 2. Heritage should be treated like human life and therefore 'priceless".
- 3. Cultural values are best reflected by individuals as citizens rather than as consumers in the marketplace. Citizen preferences are not revealed in the market place. Voters may think about common good.

2. Economic Valuation techniques: reply

- 1. Cultural values are determinants of economic value rather than distinct, i.e., they are *motives* for value. The ultimate 'common' yardstick of for all values are individual preferences. This permits decisions about what and how much to protect.
- 2. 'Priceless' assumes no prioritization but ranking always takes place: no nation conserves each and every heritage asset.
- 3. Using a political process for capturing 'citizen' preferences may lead to influence by special interest groups. Advantage of using standard economic valuation is transparency of decision making.

2. Even economists need to be humble

- 1. Economists are increasingly recognizing that preferences are subject to social influence. Education is certainly a key element in valuing cultural heritage.
- 2. Cultural values are fundamentally social in nature, they are built on common meanings, history and identity.
- 3. Perhaps we could devise techniques that better reflect concerns, e.g., ask communities how much they are WTP, undertake deliberative polling

3. Economic instruments for protecting cultural heritage

- In the case of climate change numerous economic schemes have been suggested for incentivizing mitigation mostly involving a carbon price
 - Key point is that economists are good at thinking about incentives to make policies more effective and less expensive
- Cultural heritage in its tangible form is usually supported by public funding, listings, use constraints, rules and legislation
 - Would be interesting to think of better incentive schemes
 - Congestion prices? Culture bonds? Crowd funding?
 - Cultural entrepreneurship (social business)
 - Cultural GDP
 - Incentivize education in humanities and innovative citizen education

Cultural sustainability

- Economists were first to realize shortcomings of Adam Smith's invisible hand especially when considering environmental and social dimensions
- Sustainable development involves
 - Integration across economic, social and environmental domains
 - Intergenerational equity
- Sustaining social capital is at the core of SD and cultural capital is at the core of social capital
 - There is no economy without the values of trust, cooperation that sustain our institutions (think of loss of trust in money)
 - Cultural heritage both tangible and intangible lies at the core of our social capital, reaffirming ideals, values and identity.
 - A cultural renaissance (in terms of values, norms and lifestyle choices) will be needed for the low carbon transition

Holistic approaches are a challenging necessity

- Climate KIC Greece has just started a project of "Deep demonstrations of net-zero emissions, resilient maritime hubs"
- Multiple systems collide in ports: shipping, energy, waste, tourism
- Port authorities from Valencia (Spain), Piraeus (Greece), Rotterdam (Netherlands), Turku (Finland) and others to demonstrate sustainability in action
 - Shipping emissions challenge
 - Ports as hubs of trade and employment
 - Coastal areas with depopulation and mass cruise ship tourism trying to preserve local natural and cultural heritage

Thanks and references

IPCC. (2014). Climate Change 2014 - Impacts, Adaptation, and Vulnerability Part B: Regional aspects. Cambridge University Press.

Lopez, M. F., & Ross, S. A. (2016). Literature review: climate change and cultural heritage conservation.

Mergos, G., & Patsavos, N. (2017). Cultural heritage and sustainable development. Εκδόσεις Πολυτεχνείου Κρήτης.

Provins, A., Pearce, D., Ozdemiroglu, E., Mourato, S., & Morse-Jones, S. (2008). Valuation of the historic environment: The scope for using economic valuation evidence in the appraisal of heritage-related projects. Progress in Planning, 69(4), 131-175.

Towse, R. (2011). A Handbook of Cultural Economics. Edward Elgar Publishing.