

# Solving for X. How to Assess Cultural Values Inherent in the Landscape?

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**Abstract** This paper will explore the variety of issues pertaining to the valuation of cultural values within an ecosystem services assessment framework. It will not be comprehensive, but rather focus on three aspects that provide some promise of future advances in the area. These are different ways of inquiring local communities about those values, the creation of tools to incorporate those values into storytelling and, finally, to use mental maps as a form of data collection regarding those values.

**Keywords** Cultural values, cultural landscape, public participation, citizen science, cultural heritage.

## Introduction

The Ecosystem Services concept is an attempt to quantify the value of the different dimensions of an ecosystem, from clean air to lush forests, etc. It was based on the expert panel convened by the WHO, World Bank, and various sections of the United Nations, including UNESCO, which drew up the Millennium Ecosystem Assessment (World Resources Institute 2003; Costanza et al. 2017).

As a paradigm it is still going strong, with thousands of articles published each year relying on it. On a theoretical level, however, it has some pitfalls which, since they were not overcome during the frenzy of drawing up methodologies of the 2000s, have become glaring absences in the 2020s. None more than the Cultural Ecosystem Services, which includes the cultural values of the landscape and how they constitute an asset for the people. A variety of different methodologies have been proffered to cover the valuation gap (Hirons, Comberti, and Dunford 2016). Some of the most recent attempts (Romanazzi et al. 2023) demonstrate that there is always a preference for objectifiable and non-participatory methods, despite overall recommendations to include public participation in planning (Council of Europe 2000, 2005). Below are

three areas in which to consider obtaining greater valuation information from local community participation.

## Asking around

Cultural values are held by the people that witness and live with them. They can be taught as knowledge, but not retained as values until they are appropriated by the subjective. In order to understand those values and be able to begin to assess them, one needs to tap into the perception of said individuals. So, naturally, asking them is the expensive, complicated, and very hands-on methodology required to do so. Surveys, interviews, town halls, workshops, and any combination of these, constitute a myriad of possibilities that can be daunting. Most research projects cannot even begin to contemplate these sorts of activities for the time, resources, and strategies required. A natural consequence of this is that, despite the evident benefit of scientific soundness, research strives to limit as much as possible this methodology by using and developing indirect indicators.

A problem with this is often the voices of the local communities end up being sidelined much like during the heyday of ivory tower science. This is not only problematic because it ignores the recommendations on public participation mentioned above, but also because it tends to reinforce the subaltern status of many communities. There is much awareness regarding this problem, and this text merely aims to recognize and associate it with the issue of finding out the value of culture for people, even those who are traditionally marginalized. There are many, recent attempts at incorporating the cultural values of indigenous people in the ecosystem service valuation (Normyle, Vardon, and Doran 2023).

An interesting possibility for solving the logistical and methodological challenge of asking people what they know, is to tap into their willingness to contribute to things for free. Crowd-sourcing is a marvelous invention of the web 2.0, whereby people add information for the sole purpose of contributing to something greater than themselves, or through gamification (e. g., Google Maps). This can be used, and has recently, for assessing cultural ecosystem services (Langemeyer et al. 2023).

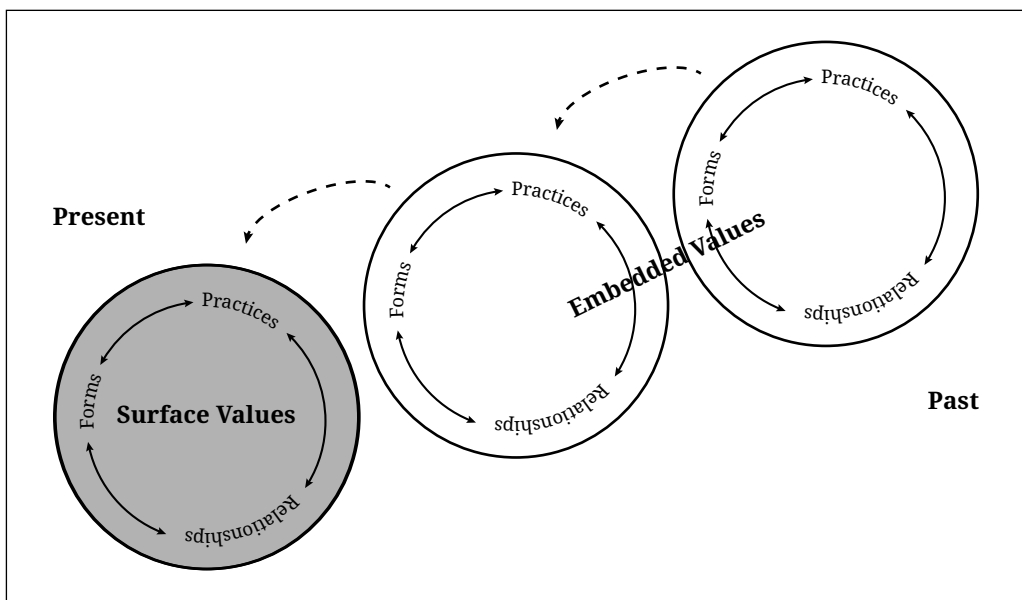
## Telling a story

One of the classic requirements of public engagement with cultural landscapes is the artifice of storytelling. This concept has evolved from a more top-down knowledge transfer tool (Wynn 2005) to become a deliberative stimulant for conflicting views of heritage (Bulken, Minca, and Muzaini 2015), as well as incorporating indigenous stories to contrast colonialist visions (Fernández-Llamazares and Cabeza 2018).

There is a new niche of research being carried out currently regarding the storytelling role of digital tools. As often happens, the technology that allows virtual and

augmented reality has quickly become cheaper and more advanced. This has led to a variety of possibilities that are still lacking scientific support. As a result, there is a progressive rise in research carried out regarding the impact that these sorts of experiences have on public perception and awareness (Millard et al. 2020; Floch and Jiang 2015).

Storytelling can be the creation of simple narratives that help explain things that happen. When dealing with cultural landscapes, the dimension of time needs to be the mold upon which to cast the present. This idea is behind the Cultural Values Model (Stephenson 2008), where embedded values of the past are, in turn, creating values in the present.



**Figure 1** The Cultural Values Model shown in its temporal dimension, and how it affects the values perceived by people (Reproduced from: Stephenson 2008, 136, Fig. 5).

Making use of these digital enhancement techniques and storytelling can help incorporate and become self-reinforcing mechanisms of cultural value education for local communities. And this is, as of yet, almost unexplored territory in science.

## Drawing it out

As any pedagogue or psychologist will tell you, there is something powerful about a blank piece of paper. It provides the space to express yourself, and the freedom to do so in any way.

The concept of mental or cognitive mapping is inextricably linked with cognitive psychology. It is usually a term that refers to how information is organized within the brain, by creating a topology of concepts and relations. It has also, however, been impressed with a veneer of spatiality thanks to environmental psychology, where the space is not just the topology within the map, but also in geographical space (Kitchin 1994). It is this second branch, often, though not always, termed mental mapping, which has become an interesting possibility for understanding cultural values in landscape, particularly through the work of geographers. The educational and self-reflective value of these freehand maps has been pointed out (Hayes 1993). Indeed, the analysis of these mental maps has been found to be an excellent way to understand the human dimension of multifunctional landscapes (Soini 2001), and thereby deal with the differences and contradictions that may arise.

In my own classes I use this technique to first ask my students to draw their hometown, the place where they live, and then later invite them to evaluate what they drew, and how that can be an expression of those things they value, their cultural heritage, and also how those things express who they are—their identity. This technique has proved to be formidable in getting across the point of the importance of heritage, and how the landscape is an expression of one's identity—all with simple drawings done in class.

A simple premise like this one can be made more interesting by, for instance, asking specific things: “what is important to you?” or “what heritage do you know?”. These questions, and the blank piece of paper, force people to rely on their own cognitive maps, and their own experience and perception. And by asking many people the same questions, quantifiable, objectifiable, and subjective information can be extracted and analyzed, ideally for later stages in the study.

Allowing local communities to express what their landscapes are in order to assess things like the cultural values they consider to possess has been surprisingly little used. As a technique all it requires is to ask people to draw their landscape, or their town, or their valley, then analyze the results. Perhaps a follow up question about what was drawn, or even a synthesis map derived from all the others, can be ways to ascertain what is merely subjective, and what can be considered, objectively, to be the cultural values of the community as a whole.

## Conclusions

Sometimes, by shying away from more complicated interventions to avoid different types of costs, we fail to understand that the data needed is there, but we need to generate it. We cannot always rely on what is available if we truly want to break free from the structuring constraints we inherit by using datasets, which were not meant to elucidate this type of information. We need to try to go beyond.

The pretense that there is a methodology that is perfect for every case study is beyond the intent of this paper. But it is important to point out that all methodologies

have drawbacks that must be recognized and addressed. This paper began with the goal of exploring how we can figure out the value of cultural assets within an ecosystem services framework. While this has been explored in many ways by different scholars, it has not been holistically addressed the way current society, and the public policy recommendations, strongly suggest.

The local communities are not only the subjects of science, but they are also the data providers, the testing ground, the stakeholders, the prime consumers and consultants and, after all, the people most interested not only in their area, but also in what can be done about the challenges their area may be facing. For any researcher who believes in action research, they are the ultimate goal of science. In today's context, all science needs to be action-based in order to maintain its relevance to society, so the alternative is not really an option, rather a retreat into the tower.

## References

- Bulkens, Maartje, Claudio Minca, and Hamzah Muzaini. 2015. "Storytelling as Method in Spatial Planning." *European Planning Studies* 23 (11): 2310–26. <https://doi.org/10.1080/09654313.2014.942600>.
- Costanza, Robert, Rudolf de Groot, Leon Braat, Ida Kubiszewski, Lorenzo Fioramonti, Paul Sutton, Steve Farber, and Monica 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. <https://doi.org/10.1016/j.ecoser.2017.09.008>.
- Council of Europe. 2000. "European Landscape Convention." ETS 176. <https://rm.coe.int/16807b6bc7>.
- Council of Europe. 2005. "Convention on the Value of Cultural Heritage for Society (Faro Convention)." ETS 199. <https://rm.coe.int/1680083746>.
- Fernández-Llamazares, Álvaro, and Mar Cabeza. 2018. "Rediscovering the Potential of Indigenous Storytelling for Conservation Practice." *Conservation Letters* 11 (3): 1–12. <https://doi.org/10.1111/conl.12398>.
- Floch, Jacqueline, and Shanshan Jiang, eds. 2015. "One Place, Many Stories: Digital Storytelling for Cultural Heritage Discovery in the Landscape." In *2015 Digital Heritage International Congress*, 503–510. Granada, Spain. <https://doi.org/10.1109/DigitalHeritage.2015.7419566>.
- Hayes, David A. 1993. "Freehand Maps Are for Teachers and Students Alike." *Journal of Geography* 92 (1): 13–15. <https://doi.org/10.1080/00221349308979119>.
- Hirons, Mark, Claudia Comberti, and Robert Dunford. 2016. "Valuing Cultural Ecosystem Services." *Annual Review of Environment and Resources* 41:545–74. <https://doi.org/10.1146/annurev-environ-110615-085831>.
- Kitchin, Robert M. 1994. "Cognitive Maps: What Are They and Why Study Them?" *Journal of Environmental Psychology* 14 (1): 1–19. [https://doi.org/10.1016/S0272-4944\(05\)80194-X](https://doi.org/10.1016/S0272-4944(05)80194-X).
- Langemeyer, Johannes, Andrea Ghermandi, Bonnie Keeler, and Derek van Berkel. 2023. "The Future of Crowd-Sourced Cultural Ecosystem Services Assessments." *Ecosystem Services* 60:1–4. <https://doi.org/10.1016/j.ecoser.2023.101518>.

- Millard, David E., Heather Packer, Yvonne Howard, and Charlie Hargood. 2020. "The Balance of Attention: The Challenges of Creating Locative Cultural Storytelling Experiences." *Journal on Computing and Cultural Heritage* 13 (4): 1–34. <https://doi.org/10.1145/3404195>.
- Normyle, Anna, Michael Vardon, and Bruce Doran. 2023. "Aligning Indigenous Values and Cultural Ecosystem Services for Ecosystem Accounting: A Review." *Ecosystem Services* 59:1–13. <https://doi.org/10.1016/j.ecoser.2022.101502>.
- Romanazzi, Giuliano Rocco, Romina Koto, Annalisa de Boni, Giovanni Ottomano Palmisano, Marilisa Cioffi, and Rocco Roma. 2023. "Cultural Ecosystem Services: A Review of Methods and Tools for Economic Evaluation." *Environmental and Sustainability Indicators* 20:1–13. <https://doi.org/10.1016/j.indic.2023.100304>.
- Soini, Katriina. 2001. "Exploring Human Dimensions of Multifunctional Landscapes Through Mapping and Map-Making." *Landscape and Urban Planning* 57 (3-4): 225–39. [https://doi.org/10.1016/S0169-2046\(01\)00206-7](https://doi.org/10.1016/S0169-2046(01)00206-7).
- Stephenson, Janet. 2008. "The Cultural Values Model: An Integrated Approach to Values in Landscapes." *Landscape and Urban Planning* 84 (2): 127–39. <https://doi.org/10.1016/j.landurbplan.2007.07.003>.
- World Resources Institute. 2003. *Ecosystems and Human Well-Being: A Report of the Conceptual Framework Working Group of the Millennium Ecosystem Assessment*. Washington/D.C: Island Press. [http://pdf.wri.org/ecosystems\\_human\\_wellbeing.pdf](http://pdf.wri.org/ecosystems_human_wellbeing.pdf).
- Wynn, Jonathan R. 2005. "Guiding Practices: Storytelling Tricks for Reproducing the Urban Landscape." *Qualitative Sociology* 28 (4): 399–417. <https://doi.org/10.1007/s11133-005-8365-2>.