

On Culture for Sustainable Development: A Case for the Transdisciplinary Approach

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Abstract

Culture is an indispensable, but often taken for granted aspect of humanity's existence. Broadly speaking, looking closer into cultural aspects of sustainability may provide lessons and methods useful for the pursuit of sustainability of urban areas today. This paper aims to provide a brief review of literature and a commentary to inspire this argument. First, I will discuss what transdisciplinarity means for sustainability. Then, I will provide an example of how it enabled a platform for disaster risk and cultural heritage management to address a common sustainability issue. To conclude, I share insights on how the cultural sector can contribute to sustainable development.

Keywords: Cultural sustainability • Trans disciplinary approach • Sustainable development • Culture

Introduction

Culture is an indispensable, but often taken for granted aspect of humanity's existence. The sustainable development goals (SDGs) launched in 2015 included cultural heritage for the first time in the international development agenda. However, culture remains an aside in the discourse surrounding sustainability, which is dominated by its more popular social, environmental, and economic pillars. Unfortunately, this triple bottom line has become the face of sustainability efforts in literature and in practice despite its lacking empirical foundation [1].

Broadly speaking, looking closer into cultural aspects of sustainability may provide lessons and methods useful for the pursuit of sustainability of urban areas today. This paper aims to provide a brief review of literature and a commentary to inspire this argument. I refer to culture as the amalgamation of tangible and intangible aspects of our beliefs, values, behavior, and attitudes. First, I will discuss what transdisciplinarity means for sustainability. Then, I will provide an example of how it enabled a platform for disaster risk and cultural heritage management to address a common sustainability issue. To conclude, I share insights on how the cultural sector can contribute to sustainable development.

Literature Review

Transdisciplinarity in sustainability science

Sustainability Science has grown into its own discipline in the past decade [2]. It deals with "wicked problems" that evolve and produce more problems as solutions are implemented [3]. Scientists have encouraged viewing issues of sustainability as "complex adaptive systems" requiring a systems approach to designing solutions for such emerging problems [4, 5]. Consequently, sustainability is said to welcome theoretical and methodological contributions from all disciplines that may help [6]. While Sustainability Science has benefited from an abundance of contributions from the natural and social sciences, there is plenty of room for the arts and humanities to contribute its conceptual, theoretical, and methodological body of knowledge [7, 8].

The accommodation to address sustainability issues from varying academic disciplines and the inclusion of government, nonprofit, enterprise, and real-life experiences characterizes the transdisciplinary approach [9-13]. This approach acknowledges that cooperation is necessary among all stakeholders with ownership to the issue. Their expertise determines their role and level of involvement in a sustainability project. More case studies and empirical investigations using transdisciplinary approach to solve sustainability issues at their local contexts are needed. Hence, the following project utilizes transdisciplinary approach to address the issue of risk in a historic city.

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Applying transdisciplinarity to cultural heritage risk

Our study pioneered the implementation of pre-disaster recovery planning to a historic district in the Philippines [14]. Pre-disaster recovery planning is an emerging approach to disaster management, which aims to plan post-disaster activities prior to the event itself [15-18]. Intramuros, a historic walled city located at the heart of Metro Manila in the Philippines, contains the World Heritage Church of San Agustin, several national treasures and cultural properties characterized by the colonial past of the Filipinos. Two fault boundaries, The Manila Trench fault to the west and the Marikina Fault to the east threaten Intramuros with liquefaction, seismic and tsunami risks. The case of Intramuros presents a complex sustainability issue in need of concerted and joint investigations with civil servants, disaster managers, heritage conservators, engineers, and scientists. Our team saw the opportunity to apply a transdisciplinary approach in Intramuros.

Our team took advantage of our international and interdisciplinary network [19]. The study was possible through a tripartite agreement of the University of Tokyo, the International Council on Monuments and Sites Philippines, and the Intramuros Administration (the local governing body). In addition, the tripartite party invited local universities, national councils for culture and disaster risk reduction and management. The result was a series of assessments that lead to a workshop consisting of various stakeholders in the case study. One of the achievements of this approach is the platform it provided for stakeholders to meet and discuss the issue for the first time.

On Challenges, opportunities and beyond

The study faced several challenges. First, the roles, responsibilities, and funding contributions of each member of the party needed to be clarified from the beginning, which took time. Synchronizing and organizing schedule to conduct assessments and attend the workshop were difficult due to the busy target participants who were civil servants and employees. On one hand, we needed to assess the vulnerability of the building in Intramuros, and on the other, the need to assess the historical value of the structures. This required consensus among several individuals in designing, implementing, and evaluating the methods for the assessments. In spite of these, there were a number of opportunities that observed by the completion of the project.

The study provided the first coming together of disaster and heritage managers of the country using Intramuros as a case. In addition, residents who are often excluded in closed door discussions were present during the workshop. They were able to use the workshop as a venue to express interests and values they give for their own livelihood and use of the historic district. These kinds of collaboration and discussion among stakeholders bring to light voices and opinions that would have otherwise been neglected in official meetings as mentioned by the participants themselves. At the same time, the workshop also allowed for a venue to explain and address the concerns of decision makers that would not have been possible in a purely bottom-up approach.

In addition, heritage conservators and cultural academics presented a value assessment for the participants. The document

brief contained several analyses of spiritual, historical, educational, and architectural significance of the place covering why Intramuros is valuable to the Filipino people. Residents said they take those for granted while disaster planners admitted the lack of experience they had when dealing with cultural heritage in vulnerable areas. The cultural sector may have further contributions to sustainable development, which may not have been fully explored yet.

Discussion

Our study demonstrated how designing research to facilitate diverse stakeholders can serve as a platform for conversation. Lack of communication and use of technical verbiage can obscure understanding and reduce speed of solving sustainability issues. Science alone and precision in simulations were not enough to address the issue. It required negotiation, explanation, and communication of the values and intangible aspects of Intramuros to better understand how the community can move forward with a solution that is acceptable for all concerned.

For some time, cultural heritage as an academic discipline has received wide criticism for being elitist. Being "cultured" has even received negative connotations in the past, and this may have alienated the sector in general to participate in the international development agenda [20, 21]. This narrative is changing today. There is growing support for further integration of culture-its theories and methods into the discourse of sustainable development.

Sustainability can be understood as an attempt for people to attain their desired wellbeing without compromising another's ability to do the same at any given place and time [6, 22]. As such the very pursuit of sustainability is highly subjective. What is wellbeing for someone anyway? To what point shall one be satisfied? For decades, the academic community has forwarded science – that is, precision and accuracy-to pursue such wellbeing and sustainability by taking careful consideration into the social, environmental, and economic implications of their research projects. There may be a gap in current literature with much attention to efficiency. The arts, humanities, and certainly cultural sector have valuable opportunity and role in humanity's attempt to sustain our species. "Efficiency is great, but it is not sufficient," said William Clark, one of the most cited proponents of sustainability science, when I interviewed him in February 2020.

Cultural sector practitioners and managers can participate in building theoretical and empirical research by offering their perspectives on sustainability issues. For example, there is an ongoing debate on how to conceptually position culture for sustainable development. Some argue that culture may be viewed as another pillar for sustainability, while others interpret it as an integrated aspect of sustainable development. Still others argue that culture subsumes the social, environmental, and economic aspects of sustainability [23-25]. Regardless, empirical research here is scarce, and investigations on climate change, urban planning, biodiversity, sea level rise, and resilience from their perspective and methods is a good place to start.

Conclusion

In this brief article, I argued that culture plays an underserved role in our understanding of sustainability despite its inseparability from our day to day. For example, I have observed how a historic city was instrumental to the coming together of risk planners, engineers,

heritage conservators, and sustainability scientists to attempt to pre-plan for an impending disaster in a historic city. I move forward by exploring the merging of culture and sustainability science through the following projects. I am developing a workshop to investigate the application of cultural mapping as a human-centered approach to smart and sustainable city planning. Our team is exploring how place attachment of migrant entrepreneurs is addressing the super ageing issues of a town in rural Japan. Parallel to this, we are investigating how place attachment is shaping youth perceptions on out-migration from their rural town in South Africa. In our pursuit of sustainability, scientists ask, "Who sustainability is for," and "for what purpose is it Spangenberg and Kates?" I encourage the interested to also ask, "What role does culture play in our pursuit of sustainability?"

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