

Chapter 10

Integrating Inner and External Dimensions for Holistic Sustainability

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ABSTRACT

Over the past century, sustainability scholars and scientists have largely focused on the complex relationships between society, economy, and environment. The authors refer to this approach as external sustainability research, which positions the built and natural environment as key to a sustainable future. Yet, our external environment is a manifestation of deeply held beliefs, values, attitudes, and perceptions of the world—the inner dimensions of sustainability. Within sustainability science, a deeper understanding of the inner dimensions could promote lasting external sustainability measures, strategies, and interventions. This chapter envisions sustainability as a holistic collection of internal and external guiding principles that can be enhanced through practice. First, the authors draw on perspectives from “Western sustainability” and Indigenous philosophies. Next, case studies integrating holistic

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sustainability approaches are shared. They conclude by integrating the primary literature with the case studies and call on sustainability science to more deeply consider the inner dimensions.

INTRODUCTION

Sustainability is often cited as a relatively new concept born from the 1987 Brundtland Report (Brundtland et al., 1987). Yet, the origins of sustainability science go as far back as the 17th century, if not further, when Western imperial European governments mobilized to prevent deforestation. At the time, the rapid consumption of woodland (Europeans removed about 25 million hectares of woodland between 1700 and 1850 – equivalent to the surface of the State of Michigan or a little over the surface of the United Kingdom; Williams, 2003) coupled with a disregard for nature, and an increase in population growth and civil unrest, worried European empires, propelling them to exert resource conservation measures. The term sustainability was officially coined in the early 18th century by Hans Carl von Carlowitz, founder of the Sustainable Yield Forestry principle. He is credited with sketching out the structure of modern sustainability discourse after analyzing connections among forest shrinkage and advances in technology, the propagation of diseases, social unrest, and conservation measures (Caradonna, 2014).

Since then, sustainability has been developing by co-evolving through economic, political and social revolutions that have taken place in Europe and North America; namely the industrial revolution, the social contract, the green revolution, the civil rights movements, and population booms, among others. This trajectory led to its official academic conceptualization in the Brundtland Report and the multiple redefinitions concerned with human progress and development as safeguards to current and future natural resources, social systems, and economies (WCED, 1987; Jones et al., 2011). In parallel over the last two decades, sustainability research has grown with a focus on indicator and criteria development to shape sustainability science. Recent efforts focus on the design of “solutions” in response to a comprehensive list of local and global sustainability challenges (Hartmuth, Huber, & Rink, 2008; Ingold & Balsiger, 2013) (e.g., links between food systems and local economies, connections between over-consumption of natural resources and poverty). Inherently, a trend has continued from the early days of von Carlowitz’s attempts to address deforestation. This is what we refer to as external sustainability in this chapter.

We also observe this trend outside academia, where sustainability science has been presented to the general public as strategic solutions to mobilize pro-ecological movements including recycling, community gardens, and organic foods, or strategies such as shifting to low energy light bulbs or turning to solar panels (Noppers et al.,

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