Rediscovering the bucolic tale: The role of place embeddedness in fostering sustainable practices

In a world that has exceed already many planetary boundaries, limits beyond which the earth system is irremediably compromised (Steffen et al., 2015), sustainable practices represent a solution to the growing resource scarcity and play a fundamental role in human's survival in the future. Given the importance of this topic, scholars are giving more and more attention to what prompt organizations to implement environmentally sustainable practices (Foley et al., 2011; Tilman et al., 2011, 2002). However, most of the conversations regarding sustainable practices focused on either the organizational perspective (Bocken et al., 2014) or the natural environment (Foley et al., 2011; Tilman et al., 2011, 2002), and, despite it seems reasonable to think that sustainable practices emerge from the relationship between organizations and the environment they inhabit, the connection between the two has barely been explored (Guthey et al., 2014).

A perspective investigating the relationship between organizations and the natural and social environment they are embedded in is still fairly novel in the sustainability literature. Building on a long tradition of research in human geography and environmental psychology, an emerging stream of research proposes the existence of a relation between organizational embeddedness into the place where the activities are located, i.e. the manager or owner's strong connection and emotional attachment to that place, with higher sustainability practices of the firm (Guthey et al., 2014; Shrivastava & Kennelly, 2013; Whiteman & Cooper, 2000). Although the relationship between deep physical and cultural engagement with a specific place has often been theorized to create greater commitment to sustainable management practices (Guthey et al., 2014; Shrivastava & Kennelly, 2013), this relationship has been barely tested empirically. The few empirical studies considering the relationship between place embeddedness and sustainability have used mostly qualitative methods (cfr. Whiteman & Cooper, 2000; Whiteman & Guthey, 2009). Moreover, there is not an agreement around the main mechanisms behind this relationship. While some research suggests that higher environmental knowledge is the key driver (Whiteman & Cooper, 2000), other authors stress the importance of dependency from the natural resources (Shrivastava & Kennelly, 2013). The emotional component of this relationship has been less considered, despite most of the authors explicitly mention the emotional connection to place as crucial. This mixed evidence suggests a high level of complexity and the need of further unpacking how embeddedness in the place where the activities are located leads to more sustainable managerial practices.

This article examines the relationship between attachment to place and agricultural sustainable practices using both quantitative and qualitative data, with a specific focus on providing a better understanding on whether and how place embeddedness leads to more sustainable practices. Agriculture is an important setting because of the urgency to provide food for the growing population without compromising biodiversity and resources for the future (Pimentel et al., 2009) and because of its strong connection to the natural environment (Shrivastava & Kennelly, 2013). Insight into this process is important in order to reveal a strong potential but unexplored driver for the implementation of sustainable practices. As a theoretical foundation, we apply the insights from practice theory to understand how sustainable agricultural practices can be affected by place embeddedness, introducing a novel perspective in the field. Practice theory focuses on the everyday actions of practitioners, underlining the interaction between individuals' action and their material surroundings, including the natural and social elements (Orlikowski, 2000). Given our interest in how embeddedness shapes producers' practices, and our focus on producers' relationship with the environment they are embedded in, we argue that adopting a practice-oriented lens will bring a new perspective in the field, able to shed further light on the relation between place embeddedness and sustainability of practices.

To empirical examine the relationship between place embeddedness and sustainable agricultural practices, we develop a mixed-methods study, based on a large amount of data on cocoa farmers in Brazil. Our study follows a QUAN-QUAL structure. We collected data on a representative sample of 2,800 agricultural producers (owners of farms), based on mapping 9,500 small producers in the region (farm size below 100 ha), gathering wide-ranging data in a multi-year panel study. Producers were visited every year from 2015 to 2019, and they were asked to answer the questions included in a comprehensive survey. Through the analysis of this data, we found empirical quantitative evidence that place embedded producers, and especially producers embedded in a pristine environment, implement more sustainable practices, specifically for what regards the use of agrochemicals and the soil preservation. In order to understand *how* place embeddedness affects practices, we designed a qualitative study. A subsample of 38 cocoa producers was purposively selected for qualitative data gathering, based on their physical presence and membership in the community where the farm is located. In-depth long interviews with these producers (24 hours of interviews in total) and with 6 experts (5 hours of interviews) have been conducted by the first author in March and April 2019, on top of field observations and notes (180 pages). All the qualitative data were coded following the Gioia's method (2013) through NVivo, to move from first order themes to 32 second order concepts and finally to 6 aggregate dimensions.

We used insights from practice theory to interpret the emerging dimensions and the relationships among them and to further develop our theoretical framework. Practice theory posits that a practice exists as a recognizable configuration of three elements—(1) material elements, such as technologies and the stuff things are made of, (2) competences, such as skills and knowledge, and (3) meaning, such as the symbols or constructs that are used to make meaning of a practice (Shove et al., 2012). Distinguishing these three elements gives us a conceptual framework to better understand how sustainable practices are shaped by place embeddedness. We developed a model describing three different trajectories through which each constituent of place embeddedness (i.e. cohabitation, identity and attachment) shapes sustainable practices. Each of the three trajectory affects mainly one of the three elements of practice. First, through a higher knowledge and awareness deriving from cohabitation with the elements of the place, affecting the *competence* element of sustainable practices. Second, through an identification with the elements of place that leads to an emotional connection and a higher care, shaping the *meaning* associated with sustainable practices, from work-related practices to a way of taking care of affections. Finally, attachment to place influences the access to the natural elements and resources, ultimately affecting the *material* element of sustainable practices. Using this novel perspective, we argue that place embeddedness affects the implementation of sustainable practices by influencing at the same time each of the three elements needed for sustainable practices to be enacted.

We contribute to the literature on place embeddedness not only by providing quantitative data to test its relationship with sustainable practices, a relationship often theorized but lacking empirical data in support, but also by shedding new light on the mechanisms behind it. First, we introduce a new perspective, the practice theory lens, to understand in a deeper way how place embeddedness is able to affect the practices implemented within organizations. Second, through our qualitative analysis, we found a strong emergence of the emotional component, an emotional bond with the elements of place that leads to higher care and affection. This last dimension has been less explored in the literature, while we argue that it is extremely important in explaining the relationship between place embeddedness and sustainability. We also aim to contribute to the literature on practice theory. We show that the physical environment, as much as the social environment, can shape not only the material elements needed to enact certain practices, but also the meaning associated with them, and can diffuse the competences required to implement them. The findings have important implications because they underline the importance of the physical environment, and not only the social one, in promoting sustainable practices, suggesting that it can be altered to foster their diffusion.

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