A framework for assessing the relational accessibility of protected areas

Maria Bonaventura Forleo[*], Nadia Palmieri

Department of Economics, University of Molise, Via F. de Santis, 86100, Campobasso Italy

ARTICLE INFO

ABSTRACT

Human - nature relationship concept has recently been reconsidered, emphasizing the benefits humans beings receive from ecosystems. This study moves from the awareness of the importance for organizations that manage protected areas to design strategies and actions aimed at improving the relatedness between the natural world and people, and between individuals. Starting from this premise, the study proposes a voluntary framework of relational accessibility, with the aim of improving the visitor-organization relationship and the human-nature relatedness, and thus creating value for the organizations themselves. After defining the relationship concept, the approach and the content of the framework are set, based on multidisciplinary fields and approaches. The framework follows a cyclical approach and consists of a set of general and specific requirements and guidelines. To support the definition of the framework, relational accessibility is investigated within a specific protected area, through a focus group and a direct survey with children. The framework is then defined in more general terms, so that it can suitable for application to other environmental and organizational contexts. The relational accessibility framework is discussed with the managing board of the study site and compared with other sustainability tools. The implementation of the relational framework within the management system of protected areas could increase the social and economic value of these areas, while at the same time pursuing environmental goals.

© 2018 Elsevier Ltd. All rights reserved.

1. Introduction

Human - nature relationship concepts have been recently reconsidered, underlining the importance of the benefits that humans directly or indirectly receive from ecosystems (Dick et al., 2011). Exposure to the environment is associated with a range of important affective and cognitive benefits for humans (Bratman et al., 2015) and it improves the relationship between humans and the natural environment (Browning et al., 2013; Flint et al., 2013); furthermore, it can be a strong predictor of the pro-environmental behaviour of people (Krasny and Delia, 2015). According to Leung et al. (2015), the relationship between natural resources and resource users consists of five fundamental spheres: a) utilitarian; b) spiritual/cultural; c) political; d) economic; e) recreational and/or aesthetic. For McCool and Freimund (2016), the multiple types of relationship between an individual and the wilderness can be characterised by experiential, cultural, spiritual, developmental, utilitarian, and scientific connections.

Protected areas are among the privileged places that provide people with opportunities to interact with nature (Dudley, 2008). The contribution that nature makes to human well-being provides new opportunities for the management of protected areas and requires new approaches in order to effectively achieving the objectives of the Convention on Biological Diversity and the Sustainable Development Goals (IUCN, 2014). A supplementary agreement to the UN Convention on Biological Diversity (CBD) —i.e. the Nagoya Protocol-provides a legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources. Article 20 of the Protocol encourages "the development, update and use of voluntary codes of conduct, guidelines and best practices and/or standards in relation to access and benefit-sharing". The UN 2030 Agenda for Sustainable Development (UN, 2015), through its Goals and targets, proposes "a vision of a world in which humanity lives in harmony with nature and in which wildlife and other living species are protected" (Chapter 9). Within the text of the Agenda, the term "access" is declined in multiple

---

* Corresponding author.
E-mail addresses: forleo@unimol.it (M.B. Forleo), nadia.palmieri@unimol.it (N. Palmieri).

ways, such as a matter of justice, equity, universality, affordability and safety; among others, Goal 11 of the Agenda provides for a "universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities".

The term accessibility involves multiple scientific fields and disciplines; therefore, it refers to different concepts. In fact, it originates from architecture and is commonly associated with the possibility for people with reduced or impaired sensory, physical, or mental capacity (with disabilities whether temporary or permanent), to access and to move independently in physical environments (and is therefore called physical accessibility). Subsequently, the term has been applied in other environments, i.e. the ability to autonomously access information, cultural content and digital resources and to reduce the web accessibility divide. As far as protected areas are concerned, accessibility is a concept based mainly on a physical approach, and is referred to people with different abilities (Ministero dell'Ambiente e della Tutela del Territorio, 2003). In this study, the adjective "relational" when attached to the term accessibility, aims to mark the distance from the above concepts, even though the connections remain strong. The study borrows the concept of relational accessibility from Bravo and Monzeglio (2010), who argue that the accessibility of a context should not be understood in physical terms, i.e. as access to a space for particular individuals. Rather, relational accessibility should be intended as full accessibility for each individual, which should enable to gain experiences based on the relationships people form within spatial and organizational contexts and with other individuals, and, by doing so, to provide benefits from experiential, cognitive and emotional spheres.

This study moves from the awareness of the importance of organizations managing protected areas to design strategies and actions aimed at improving the relatedness of the natural world and people, and between individuals. Starting from this premise, the study proposes a voluntary framework of the relational accessibility of organizations that manage protected areas aimed at improving the customer-organization relationship and the human-nature relatedness, and by doing so creating value for the organizations themselves.

The study intends to enrich the toolbox of sustainability frameworks developed for the evaluation of management effectiveness of protected areas by focusing on relational accessibility as a value that encompasses different perspectives linked to the social sphere, and that may positively affect the environmental and economic issues involved in the management of natural areas.

In defining the structure and the content of the framework, we have referred to some literature developed in the managerial sciences and in other multidisciplinary fields that can be related to the subject matter. Moreover, to support the definition of the framework, insights have been drawn from a case study related to one specific protected area, the Garden of Apennine Flora (Molise, Italy).

The study is organised into three parts. In the first part, a comprehensive review was performed to frame the relationship concept within a multidisciplinary approach and to highlight the relevance of relational accessibility in protected areas management. After the description of the materials and methods applied in the study, the second part reports findings from a direct survey with schoolteachers and children in order to catch a demand perspective about the relational accessibility of protected areas. The third part presents the relational framework and the opinions from the management board of the study site about the relevance, usefulness and feasibility of its implementation. A comparison of the proposed framework with other sustainability frameworks is discussed before drawing general conclusions.

2. The relationship concept in a multidisciplinary approach

Recently, public and private organizations have begun to recognize the connections and inter-dependencies between the economic, environmental and social dimensions of the sustainability framework (Lozano, 2015). However, much research has focused on the economic and environmental dimensions, overlooking the critical social dimensions (Gomaa and Sakr, 2015). Some authors have argued that social sustainability is a concept in chaos (Vallance et al., 2011), about which there are still uncertainties regarding its definition in policy discourse or practice (Bacon, 2012), and in criteria and measurement systems (Landorf, 2011). Various disciplines and approaches relate to social and environmental aspects within a sustainability framework (Vallance et al., 2011).

Among these various disciplines and approaches, environmental sociology explores several forms of relationship, interaction and interdependence, between human society and the environment (Hannigan, 2014). Such interactions include the ways in which human life influences the environment, as well as the ways in which environmental conditions influence human activities.

A relational approach is also found in the relational sociology that assumes that each society emerges from a context of relationships and generates a system of relationships (Donati, 2011). Moreover, individual identity is mediated by relationships with others, in a multidimensional and reticular network. Crossley (2011) argued that relations are lived trajectories of interactions within networks that comprise multiple relations that are mutually transformed through their combination. When these relationships are impeded (due primarily to individual psychophysical characteristics), they cause precarious living conditions and/or instability. The systemic-relational approach conceives of humans beings as being contained in a system of relationships within which they act.

In psychological and sociological literature, the concept of relationships is often analysed in negative terms, and relates to difficulties defined as relational discomfort or as relational disability, according to their intensity and characterization (Curatola, 2009). Relational disability has a stable character and development, and it needs special services according to the severity of the relational difficulties. In contrast, relational discomfort (affective-emotional, socio-relational and cognitive-intellectual) is casual, temporary and manageable; it may depend on the individual as well as the global context, and its management does not need specialised assistance or expert services. Recent literature has studied extensively the topic of relatedness but predominantly in relation to underage individuals, due to the fact that some of the determinants of relational difficulties occur within the first developmental stages of an individual.

The relational approach is also found in economic and managerial literature, which emphasizes how relationships add value to companies and require a systemic approach. Maintaining business-customer relations is notoriously important both in businesses that produce goods and in those that offer services. Moreover, this distinction is overcome in the Service-Dominant Logic (Vargo and Lusch, 2008) according to which the creation of value is always a collaborative and interactive process that is achieved through multiple exchanges of relationship, and through the engagement of customers as co-creators of value (Golinelli, 2010; Gronroos, 2008; Vargo, 2009).

The focus on relationship management and customer-centred orientation is at the core of the customer relationship management (CRM) approach that has seen several developments in the management literature since the beginning of the last decade. Despite various definitions (Nguyen, 2012), it can be summarised as