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Swiss Regional Nature Parks: Sustainable Rural and Mountain Development Through Transformative Learning?

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Swiss regional nature parks are intended to be model regions for sustainable regional development in rural areas. It is often claimed that achieving sustainable development requires a transformation. One approach

whereby parks could foster this is through transformative learning (TL). This article discusses attachment development (AD) of local people to a park from the perspective of TL. AD and TL have many similarities, and a transformation can be achieved through AD.

Furthermore, TL theory offers a theoretical concept for explaining characteristics of AD. Several essential aspects have to be secured: an initial “emptiness” is needed as a “disorienting dilemma” to start the process. Further, there must be enough time and openness for processes and results. If these aspects are given, AD not only enables a transformation, but also increases the park’s success.

Keywords: regional nature park; transformative learning; park attachment; park acceptance; protected area; education for sustainable development.

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Introduction

Swiss regional nature parks are considered to be “innovative regions for sustainable regional development” (BAFU 2018: 71; all quotes from German sources were translated by the authors of this article) in rural areas. Almost every regional nature park in Switzerland is located in an area that can be classified as mountainous to some extent (Netzwerk Schweizer Pärke 2020). These parks address problems typical of many mountain regions, such as depopulation and structural changes in agriculture (eg Müller-Jentsch 2017). According to the Swiss policy for sustainable regional development, the aim of a regional nature park is to make a region sustainable by developing a diversified regional economy and appreciation of the region’s natural and cultural qualities, as well as “a new regional identity and long-term societal prospects” (BAFU 2018: 71).

What kind of process is needed to achieve this? Schneidewind (2018: 36) stated that sustainability is a “transformation challenge.” Nothing less than a transformative process is necessary to achieve sustainable development (eg WBGU 2011; Sommer and Welzer 2014). On the other hand, Kandler and Tippelt (2010: 710) argue that “education is the path to sustainability.” This corresponds to the United Nations Educational, Scientific and Cultural Organization’s “Framework for the implementation of Education for Sustainable Development (ESD) beyond 2019” (UNESCO 2019: Annex I, 5), which offers guidance on achieving the Sustainable Development Goals (SDGs). In particular, it supports SDG 4 and Target 4.7,

where “transformative action” is a main focus (UNESCO 2019: Annex II, 4).

Taking up this understanding of achieving sustainable development in a societal context, the present article aims to identify how a learning process can support transformation toward more sustainable regional development. It focuses on the specific case of regional nature parks. We use Mezirow’s theory of transformative learning (TL) (1978) as a framework for analyzing a process of change triggered by the creation of a regional nature park that explicitly had sustainable development as a goal.

In Switzerland, a park’s formation and operation must be a bottom-up process because “a park of national importance is based on a regional initiative and is created in a democratic and participatory process” (BAFU 2020b). It is possible that once agreement has been voiced, people develop an attachment to the park and consequently also begin to identify with its sustainable development values. Hunziker (2018) analyzed the process of how attachment of local people to a park can develop. In the present article, we revisit those results from the perspective of TL and try to understand a park’s potential for fostering a transformation toward sustainable development.

Research objective

The original study on attachment development (AD) (Hunziker 2018) dealt with the following questions:

- How does the local population identify with a regional nature park?

- How does an attachment to a park develop?
- What is the significance of such an attachment for the success of a park?

In this article, we explore the following additional questions:

- Can the AD of local people to a regional nature park be part of a TL process toward sustainable development?
- What are the main drivers and obstacles of AD in terms of a TL process toward sustainable development?

Theoretical background

Swiss regional nature parks

According to the Ordinance on Parks of National Importance (ParkO), regional nature parks are located in rural areas of high natural, cultural, and landscape value and also include settlement areas (ParkO Art. 19; Swiss Federal Council 2018). Legally, the goals of this category are the “preservation and enhancement of nature and landscape” and “encouraging sustainable business activities” (ParkO Art. 20f; Swiss Federal Council 2018). The parks follow the goals of the “weak sustainability plus” model, which ascribes equivalence to the dimensions of ecology, economy, and society and is based on the capital stock model. This, in conjunction with “weak sustainability,” means that there is a certain capital in each dimension. One stock can be dismantled as long as it is compensated in another stock. “Plus” means that there are critical limits that must not be undercut (SDC and ARE 2004).

The establishment of new parks in Switzerland follows a bottom-up approach. The attempt and initial effort to establish a park must originate in the region where it is to be created (ParkO Art. 25 2007; Swiss Federal Council 2018). The initial idea comes from citizens or the community. They must then gain approval from the other citizens, because support for the park has to come from a majority of the local population at the final public vote before the operation phase can begin.

A great deal of research has been conducted into the reasons why citizens accept or reject the creation of a park (eg Frick and Hunziker 2015; Backhaus et al 2016; von Lindern et al 2019) and how attachment to a park is achieved (eg Hunziker 2018; von Lindern et al 2019). Attachment is seen as a strong and sustainable base of acceptance, because the connection between people and the park is founded on a stronger, more emotional bond (Hunziker 2018). Consequently, park attachment is related to the concept of a sense of place (Hunziker 2018) and how this influences the development of self-identity. This is described by Hunziker et al (2007: 51): “through the creation of places people visualise, memorise and thus stabilise constitutive human goods such as the sense of belonging, social integration, purposes that give meaning to life (values) and the sense of self.”

The original study analyzed AD to a regional nature park at 2 case study sites (Hunziker 2018). Different understandings of what a park could be for the people or mean to them were identified and categorized into different levels of understanding. The understanding of a park developed and changed over time: 3 main processes of understanding development were identified, shown in

Figure 1. Most people involved in the successful park project engaged in an AD process. People developed their understanding of the park through engagement with the topic and increasing personal experience. Their understanding developed from an absence of knowledge about what a park could be, into superficial and rational knowledge (eg the park as an economic or nature conservation instrument), and finally into a very individual and emotional understanding of the park (Hunziker 2018). This resulted in a deep emotional bond, seen as attachment to the park.

People with specific personal or professional backgrounds had previous knowledge, which influenced the further development of their understanding but finally hindered the AD process (Hunziker 2018). External processes also influenced the development of understanding, which again influenced the potential for an AD process (Hunziker 2018). These findings will be further explained when discussing the results from the perspective of TL.

Transformative learning

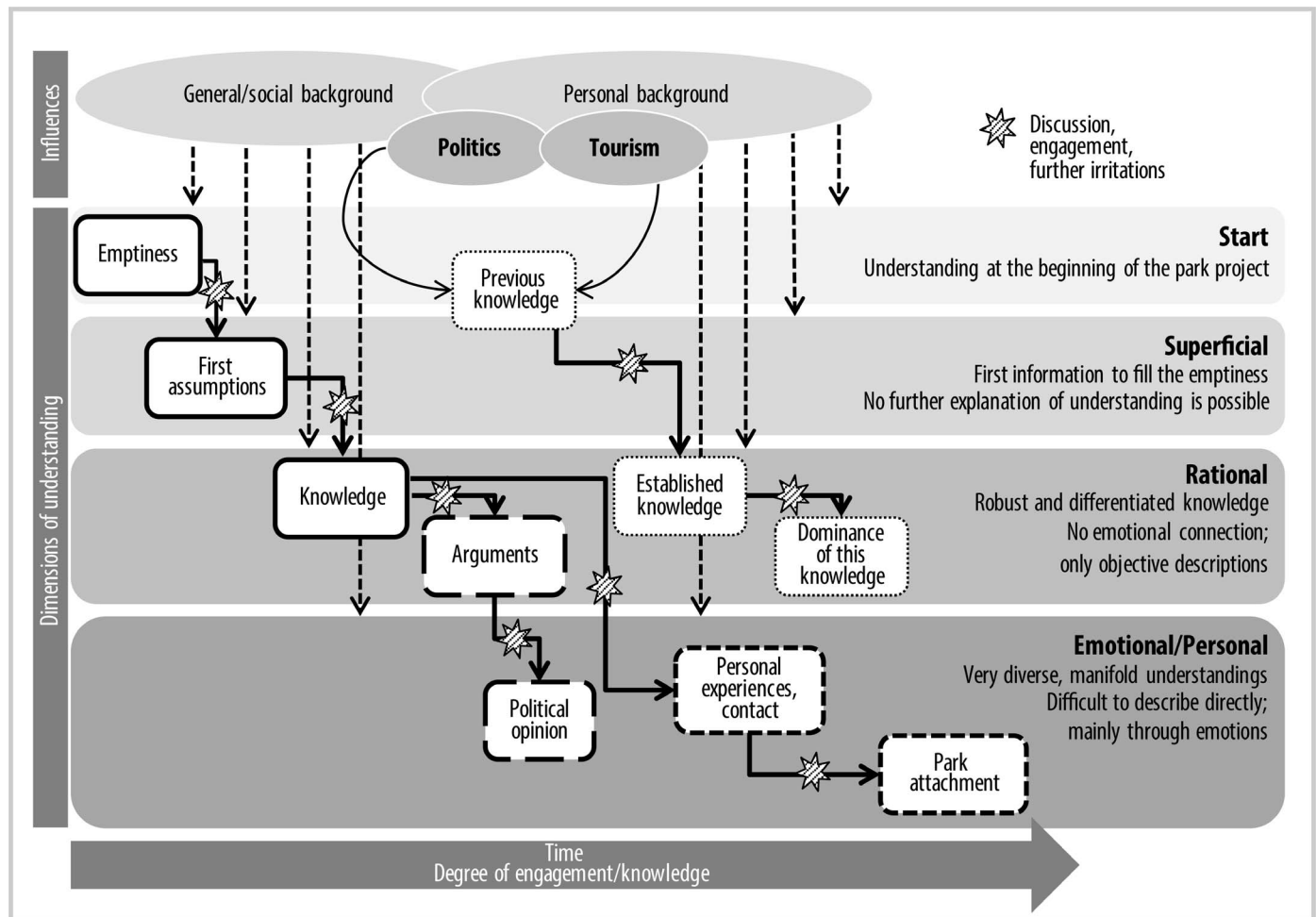
Mezirow's (1991) theory of TL is increasingly discussed in the context of education for sustainable development (eg Getzin and Singer-Brodowski 2016; Singer-Brodowski 2016). As Lange (2012: 197) states: “The need for transformative learning theory to inform sustainability education and to help build sustainable communities is critical.” But what does TL mean? TL is the process by which an experience acquires a new, more comprehensive meaning through reinterpretation of this experience by a reflective discourse.

This reflective discourse is a major element of TL. It is a “specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief” (Mezirow 2012: 78). Previous assumptions are questioned and examined from different perspectives. The aim of the reflexive discourse is to arrive at the best possible collective judgment by critically assessing the assumptions made so far. To make a common judgment through a multiperspective discussion means that every participant has to be open to integrating different perspectives into their own values. However, participation in critical reflection is not equally desirable and possible in every culture and society. This free and full participation in discourse should be, at least in theory, an important prerequisite for democracies (Mezirow 2012: 82).

To find commonality, individuals will probably have to change or extend their existing framework. This is why Mezirow (1991) notes that TL is often about relearning, unlike additional learning in an existing framework. Most adult learning situations are about values, perceptions, ideals, and social norms. TL refers to transforming a problematic frame of reference—“meaning perspectives” or “meaning schemes”—to generate opinions and interpretations that are justified and relevant to our lives (Mezirow 2012). The steps included in TL are presented in more detail in Box 1.

The starting point of the TL process is an *irritation*, a *crisis*, or a *perturbation* (Maturana and Varela 2009). Very often, such starting points are significant events in our lives, like diseases, the death of a relative, or job loss. They put people in a situation that they cannot control with their previous experience. Yet, as Mezirow (1991) notes, an

FIGURE 1 The three main processes of understanding development: AD process (dashed frames), process where AD was hindered by individual backgrounds (dotted frames), and process where AD was hindered by politicization (broken frames). The figure shows how the understanding develops from a starting point through superficial understanding to deeper levels of understanding, depending on the specific process. (Source: Hunziker 2018)



BOX 1: The essential steps of TL

The process of TL (after Mezirow 2009: 94) involves the following steps:

- **Critical reflection** about our assumptions and the assumptions of others.
- **Determination of whether something is true** through empirical methods (instrumental learning).
- Participation in a **rational discourse** to arrive at a justified and shared conviction (communicative learning).
- Action on the basis of the **changed perspective** until new arguments require reassessment.
- Acquisition of a **new disposition** to reflect more critically on our own assumptions and those of others, to seek confirmation of our transformative insights through rational discourse, and to act on the decision made.

irritation can also consist of several smaller events such as regularly confronting different points of view (Schapiro et al 2012).

The concept of TL has been criticized as being too idealistic (Fuhr 2018). The process of TL needs fairly ambitious conditions (Mezirow 2012): equal opportunities, no compulsion, correct and complete information, an openness to alternative perspectives, and the ability to weigh the evidence and arguments objectively, to critically reflect on assumptions and their consequences, and to accept the consensus as a legitimate validity test. Mezirow (2012: 81) himself admits that these “are never fully realized in practice.” However, in the context of the present article, referring to the process of establishing and running a park, 2 key connections show that this is an ideal starting point for TL: The legislator requires extensive citizen participation (Federal Act on the Protection of Nature and Cultural Heritage Art. 23i; Federal Assembly of the Swiss Confederation 2008). Further, in the context of sustainable development, actors with different and sometimes diverging goals come together, which requires a discourse to find a common path.

Illeris (2014: 160) links TL with the development of the self-identity and states that for the creation and development of self-identity, TL processes are made and

TABLE 1 Information about the 2 case study sites (Hunziker 2018).

Parameter	Beverin Nature Park	Neckertal region
Coordinates	46°37'36.101"N, 9°24'28.181"E	47°21'44.540"N, 9°08'08.645"E
Geographical location	Southeastern Swiss Alps	Eastern Swiss Prealps
Park perimeter	413 m ² ; 2 valleys in different political and touristic regions, 11 communities	100 m ² ; 1 geographical valley and political region, 4 communities (+2 partially)
Result of public vote	"Yes" to the park	"No" to the park
Initiator	Right-wing local politician	Local liberal politician
Year of first idea	2001	2010
Year of vote	2011	2014
Supporters	Broad spectrum: diverse political orientations, employers, farmers, tourism representatives	No single stakeholder group; mainly politically left-wing oriented, newcomers, nature conservationists, tourism representatives
Opponents	No clear opposition, single persons	Strong opposition, organized by local right-wing politicians
Central characteristics of park development process	Long process with several approaches, no division of opinions among political lines	Park mainly a political issue; extreme division of the population in "yes" or "no" to the park

"meaning perspectives, frames of reference, and habits of mind are substantial parts of the identity." Consequently, he argues that TL is a part of the development of self-identity. However, self-identity is a much broader concept than TL, because it also includes emotional and social aspects (Illeris 2014). This connection of TL with the concept of self-identity provides a basis to link the AD process described in this article with TL. As described above, park attachment can be seen as a part of sense of place, which again influences the development of self-identity (Hunziker et al 2007; Hunziker 2018).

Methods

The data on the development of attachment to a park come from 2 case study sites (Hunziker 2018): the Beverin Nature Park, a region with an existing regional nature park, and the Neckertal region, where the local population refused to allow a park project to go ahead (Table 1).

The grounded theory methodology of Corbin and Strauss (2015) was chosen for the study as a qualitative approach. To collect data, 12 problem-centered interviews (Witzel 1985)—6 in each region—were conducted with residents of the communities in the planned park perimeter, focusing on the different connections (eg personal, emotional, professional) and attitudes they had toward the park project. The sampling was undertaken as a continuous process and combined with snowball sampling—focusing on reaching maximum and minimum contrasts—until theoretical saturation (Mey and Mruck 2009). Different people were interviewed, including men and women, young adults to seniors, natives and newcomers, with different professional backgrounds (tourism representatives, politicians, craftsmen, entrepreneurs, farmers) and political orientations. The interviews were recorded and immediately afterwards transcribed verbatim. For the analysis, categories were created from the data, without pre-given categories, using open, axial, and selective coding (Mey and Mruck

2009). These were then processed using a code system. Based on this, the essential factors for reconstructing the AD process (the different understandings, its different levels, and the sequences of understanding development) could be identified, linked, and processed into the resulting concept (Hunziker 2018).

To analyze AD as a TL process, a literature review was conducted on TL, using Mezirow's (1991) approach as a basis and starting point. The results were processed to make them applicable to the findings of the AD study and to achieve comparability between AD and TL. The process of TL was outlined, including preconditions and influences, and the characteristics listed. With this background, the findings of the study (Hunziker 2018) with respect to the AD process were interpreted and discussed from the perspective of TL.

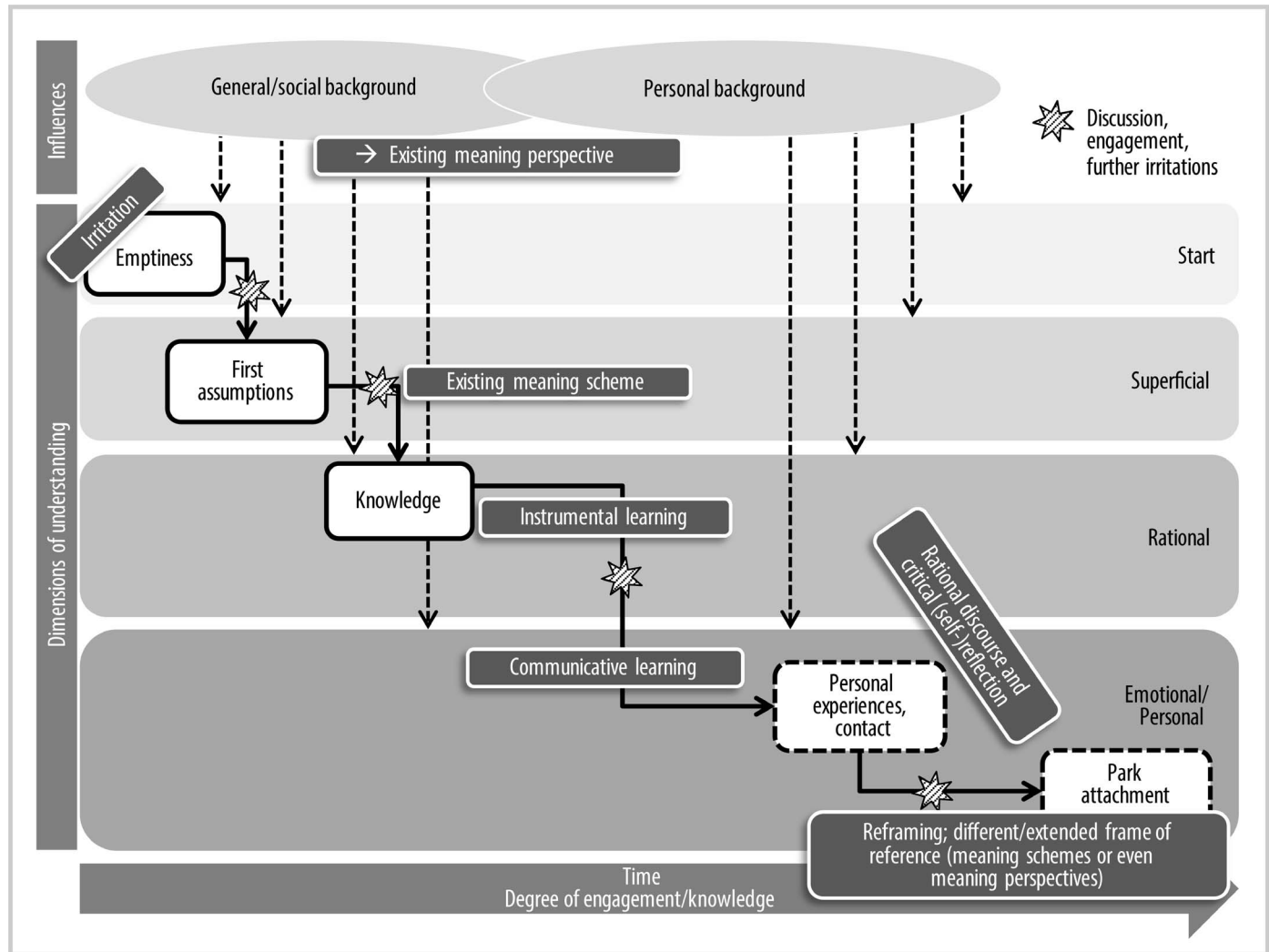
Results

The process of AD from the perspective of TL

Figure 2 shows the process of AD based on the 2 case studies, complemented with corresponding elements of TL. The most important aspect of AD is the starting point for forming a regional nature park: most people did not know what a park was exactly or what it meant for them, and in particular they were irritated by the name *nature park* (Hunziker 2018). This lack of knowledge led to a feeling of uncertainty and "emptiness": "Somehow, a nature park is something in a vacuum that no one can really hold on to. It's intangible" (Interview 9, Hunziker 2018: 32). This can be interpreted as an initial "irritation," described by Mezirow (1978) as the starting point of a TL process.

Triggered by this irritation, people began to engage with the idea of a park to understand what it could mean to them. First, "official information" (eg definition and purpose of a park based on the law) given by the park initiators provided superficial knowledge. This was further deepened by the people themselves searching for a more detailed understanding, as they did not yet feel satisfied. Interviewee

FIGURE 2 Process of AD with corresponding elements of TL (dark gray boxes with white frames). (Source: Hunziker 2018, modified and translated by the authors)



10 (quoted in Hunziker 2018: 35) described this increase in knowledge: “Before, it may have been a watered-down version of a national park. Since the effort of the management and the association, actually, if you use it properly, it’s a good tool to get the region moving.” As this understanding consists primarily of objective facts, in TL theory, this phase corresponds mainly to “instrumental learning” (Mezirow 2009: 91). However, this knowledge still lacks an emotional connection (Hunziker 2018).

The desire to find a personal connection leads people to further engage with the park. They start to think actively and get into discussions with other people (Hunziker 2018). At this point, they are exposed to differing opinions and interpretations of the park and are acquainted with different perspectives. The influences of other perspectives can be seen in further developed understanding where the arguments and needs of others are integrated: “The nature park is a great opportunity for the farmers, tourism, local innkeepers. . . if one thinks further and in a networked way . . . the industry can benefit as well, because when hotels are built, they may have to be renovated etc” (Interview 7, Hunziker 2018: 34). Dealing with different opinions, based on experiences and value systems, as well as contact and

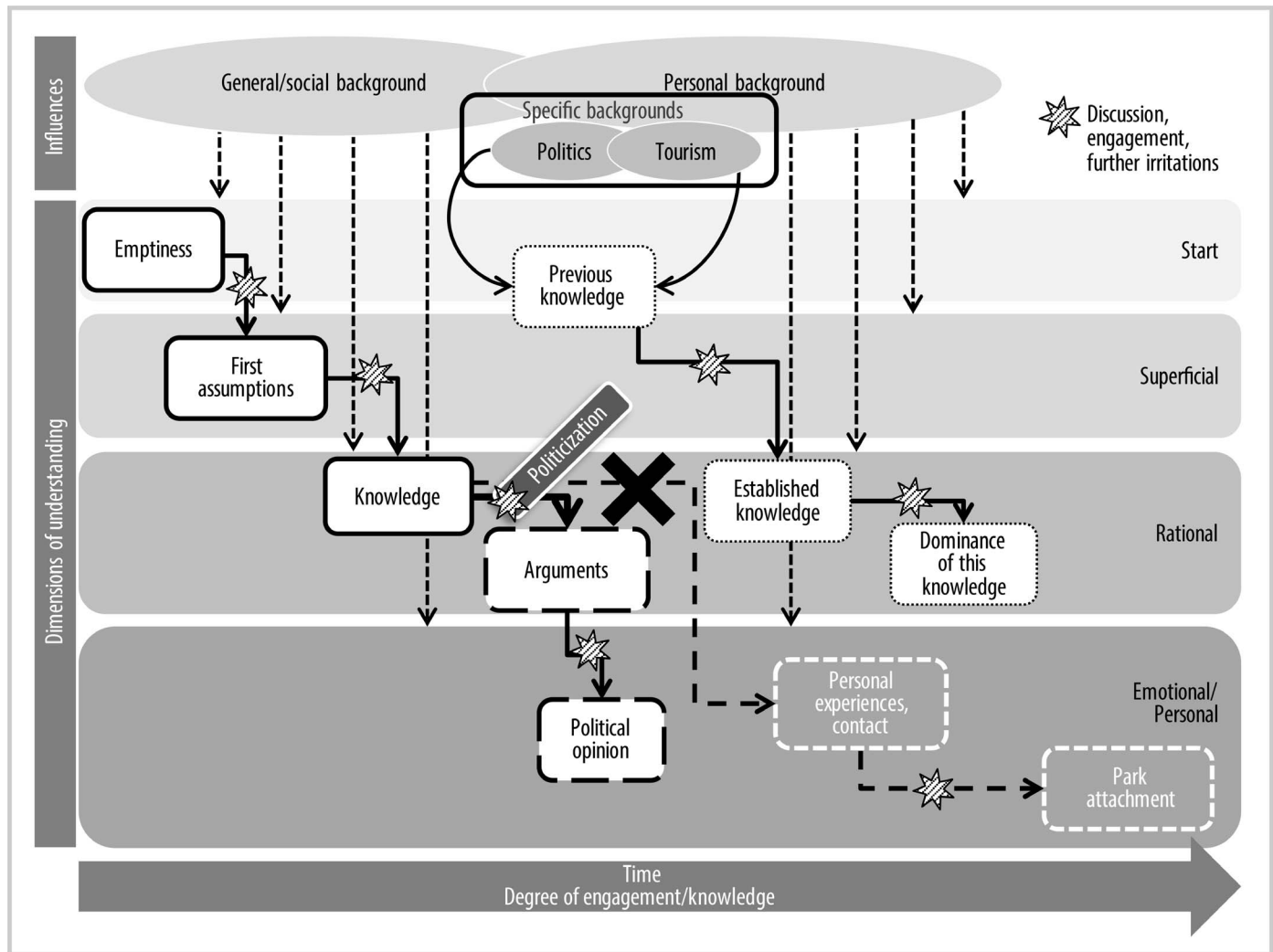
discussions with other stakeholders is part of a communicative learning process (Mezirow 2012).

Over time, people develop their own thoughts and ideas and try to identify benefits, such as, for example, Interviewee 4 (quoted in Hunziker 2018: 55): “If you want, you can do something . . . I asked . . . whether it would be possible to realize a project and I did that . . . I was actually able to participate directly and personally and use the park as a development tool.” At this point, the transformation process is clearly visible, as people develop and try out new ways of thinking and acting (Mezirow 1978).

By participating and engaging with the park, people start to perceive it in a very applied way and develop their own individual understanding. Most importantly, they realize that they can participate in shaping the park, that is, they feel a “sense of agency” (Kegan 1994, cited in Mezirow 2012: 78)—one of the “greatest yearnings in human experience.” Consequently, people feel that they have become a part of “their” park and have an emotional connection to it that is much stronger than a rational, nonpersonalized understanding of the park (Hunziker 2018).

This new “normal” situation bears similarities to the outcome of a TL process: new competencies are built

FIGURE 3 Attachment processes hindered by either individual backgrounds (black dotted frames) or politicization (black broken frames). (Source: Hunziker 2018, modified and translated by the authors)



alongside new roles and relationships that people enjoy (Mezirow 1978). Thus, perspectives concerning the park change.

Drivers and obstacles of AD and similarities with TL

People's backgrounds were shown to be decisive with regard to the potential of developing an attachment to the park. This can be explained with TL theory: contrary to the described "emptiness," people with a background in tourism, or sometimes politics, already had an idea of the park as they had come into contact with the park professionally (Hunziker 2018). Consequently, there was no irritation that might have triggered a deeper engagement with the park. Therefore, an attachment to the park could not develop in these cases, as illustrated in Figure 3 (process with black dotted frames that starts from specific backgrounds) and in Interview 8 (Hunziker 2018: 56): "I mean, I know all the basics. So, the complete ... marketing, or all the tasks they have ... that's in the various brochures and in the statutes and so on."

Further, enough time is needed to engage with the topic and develop a personal understanding, which is consistent

with the process of TL (Arnold and Siebert 2003). In the Neckertal region, the time span was significantly shorter than for the Beverin nature park (Table 1).

Individual understanding can vary widely, and so an openness in the park's design is also needed to provide different starting points for engagement with the park and the development of an understanding (Hunziker 2018). That is, the park should not only promote, for example, economic aspects, in order not to prescribe a certain kind of understanding and hinder the development of other understandings and consequently an AD. To prevent this from happening, a self-guided process has to be guaranteed, something that is also essential for a TL process (Arnold and Siebert 2003).

If these preconditions are not secured during the whole process, AD is hindered, for example, through "politicization" (Figure 3; process with black broken frames) (Hunziker 2018). In this case, the vote concerning park formation—that is, the political opinion—becomes the key issue, rather than the individual understanding of the park. People try to find their political opinion as quickly as possible to participate in the debate and convince others.

Consequently, central preconditions are not met. People are under pressure to voice their opinion and are influenced by others. The AD process is hindered, which is illustrated in Figure 3 at the point of “politicization” (the hindered steps of the AD process are indicated by the boxes with dashed white frames; the thicker arrow illustrates the process of politicization).

In addition to these preconditions, an attachment to the park is also heavily fostered through its connection to people's life histories and through the natural elements with which people can identify (Hunziker 2018). Interviewee 10 (quoted in Hunziker 2018: 38) started talking about the park by saying: “It's all about who's at the helm. What kind of philosophy he has, where he comes from, what kind of background he has.” Interviewee 11, however, stated: “In the end . . . it is simply the mountain itself [“Piz Beverin”], I see it every day and you see it practically from all [parts of the park] . . . These values make up the park, emotionally” (quoted in Hunziker 2018: 43). These elements, however, are not reflected in a similar way in TL theory.

Discussion

The discussion of the AD of local people to a park from a TL perspective showed that a transformation of people's thinking and actions is possible through a park. The park initiators promote the park and foster learning. However, in the end, people have to get involved with the park and interact with it themselves to develop a depth of emotion. Very few people would consciously describe this process as a learning process, but this is in keeping with Mezirow (2009: 94), who admits that “most TL takes place outside of awareness.” Many other similarities between AD and TL were seen, with the most important being the starting condition. The finding that a certain “emptiness” is necessary as a trigger at the beginning of the AD process has not been mentioned in previous research in this context (Hunziker 2018). However, in TL theory, researchers agree that this point—known as a “disorienting dilemma” (Mezirow 1991)—is the essential starting point for a TL process. The main drivers—enough time, openness, and self-guidance—are also emphasized. Regarding the central obstacle of “politicization,” an explanation could be provided by TL theory (Arnold and Siebert 2003). Consequently, TL provides a theoretical background for the findings of the AD process, confirmed by the connection of TL to the concept of identity made by Illeris (2014).

Nevertheless, essential differences were also found, such as the importance of personal life histories and natural elements, which are not mentioned in TL theory. However, these findings fit well into Illeris' (2014) critique of TL, where he argues that TL is too narrow and should include emotional and social aspects.

When an AD process takes place as described, the potential for transformation is high. However, whether or not sustainable development can be achieved without AD was not included in this analysis. Where the longer process of discussion ended in acceptance of a park, it could be argued that, due to the alignment of the park with the values of sustainable development, a change in this direction can be reached. Yet, as a transformation is needed in the way people both think and act to really achieve sustainable development

(WBGU 2011), a deeper engagement with the topic is required (Mezirow 1991). It is possible to indicate acceptance without any emotional or particularly strong bond to the park (Frick and Hunziker 2015; Hunziker 2018), so an AD process does not necessarily take place. Nevertheless, irritation can also consist of several smaller events (Mezirow 1991). Thus, TL could take place in particular projects initiated or supported by the park as well. The clash of values and opinions (Schapiro et al 2012) when starting a collaborative project requires a deep reflexive debate to find a common way forward. This could lead to a change of the frame of reference. The precondition for this process is participation rather than attachment. However, since participation is much rarer than attachment to a park (von Lindern et al 2019), it is less significant as an approach to transformation.

Further, it should be considered that a transformation in itself does not necessarily imply a transformation to more sustainable development. However, based on the assumption that the values and operation of the park follow the lines of sustainable development, with the goal of the parks being “to be model regions of sustainable development” (BAFU 2020a), a transformation toward sustainable development is likely. But can the park management force people toward sustainable development? The Beutelsbacher Konsens (Scherb 2007) declares that teachers are not allowed to impose their opinions on students. We argue that this consideration can be overruled. The park management brings together people with different interests, who in a reflexive discourse come to a widely supported conviction. The park is acting as an enabler and not as an opinion leader.

Further empirical research is needed to ascertain the conditions under which the processes of TL and AD can lead a (mountain) region to become more sustainable. Indeed, the present study is based on a reinterpretation of existing results on AD (Hunziker 2018). TL was not included as a conceptual starting point in designing the original empirical study, nor was the question whether AD leads to more sustainable behavior in the context of the study. However, the results do show that reflecting on AD and TL processes together can be linked to the question of transformation toward the sustainable development of a region. It would also be useful to engage in a longitudinal study with a larger sample than the original 12 interviews with local people, to get a better sense of systemic interactions within and beyond the region.

Conclusion

By showing how AD can be conceived of as a TL process, we offer a perspective on how park development can help achieve a transformation toward sustainable development in rural and mountain regions. To trigger this process, an initial “emptiness” needs to be instilled at the beginning of the process, and those responsible for the process should not be tempted to fill this void immediately with rational information. Only then is the condition given for the “disorienting dilemma” (Mezirow 1991) that will be the starting point for the TL process. Further, enough time should be provided for people to engage with the park in their own individual way. The openness and self-guided

manner of the process should be secured to provide enough space for people to develop their own, new understanding. With these aspects, not only can a transformation be reached, but also the park's success can be improved by the strong bond of attachment (Hunziker 2018).

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