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The Role of Trust in the participatory Establishment of Protected Areas – Lessons learnt from a failed National Park Project in Switzerland

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This article explores the reasons for the local rejection of a proposed national park in Switzerland. Using a mixed methods approach and resorting to qualitative and quantitative data, we follow the thread of trust issues in the participatory planning process of a protected area. Different rationales and discourses, both project-specific but also more general, influenced the opinions of local stakeholders. Connecting these different opinions was the issue of (dis)trust, which weaves in and out of prominent lines of argumentation and informs individual sentiments. The application of a multidimensional trust framework helps to understand the influence of different types of trust on protected area negotiations. We discuss how a focus on rational trust building can help to sharpen the diverse goals of contemporary protected areas with integrated conservation and economic development schemes, as well as enable the emergence of other types of trust to facilitate conservation debates.

Keywords: Decentralized natural resource management, trust, parks and protected areas, Europe

Introduction

Over the last few decades, protected area (PA) planning and management has undergone a change towards more diverse goals and management strategies. Contemporary PAs with a sustainable-use policy follow the idea of connecting nature conservation with economic surplus while respecting local residents and their values (Palomo et al. 2014; Mace 2014). Accordingly, more diverse actor groups—from locals, to NGOs and governmental agencies—are being involved in the planning and management of so-called integrated PAs, which calls for a strong collaboration among these and also further diversifies expectations placed on PAs (Watson et al. 2014; West, Igoe, and Brockington 2006). Participatory approaches that include these stakeholders, and especially local residents, are a prerequisite for equitable planning and management (Franks and Schreckenberg 2016; Martin 2017; Zafra-Calvo et al. 2017).

Integrated PAs are more likely to report favorable outcomes for the well-being of people living in and around PAs, as well as biodiversity protection (Brooks, Waylen, and Borgerhoff Mulder 2012; Naidoo et al. 2019, Oldekop et al. 2016). However, local resistance against PAs and land-use policies might still arise despite predicted positive socioeconomic and ecological outcomes. Land-use restrictions, general attitudes regarding the environment, one's identification with a project or a PA, and participation and communication strategies are often-named influencing factors on attitudes towards PAs (Hubschmid and Hunziker 2018; Job et al. 2019; Michel and Backhaus 2019; Michel and Wallner 2020; Pleger, Lutz, and Sager 2018; Schenk, Hunziker, and Kienast 2007; von Lindern, Knoth, and Junge 2019). Furthermore, local opposition towards PAs is often linked to a lack of trust. Interpersonal distrust from locals towards park managers can foster active opposition towards neighboring national parks (Stern 2008), whereas increased trust through fair planning and management processes makes conservation conflict resolution more likely (Young et al. 2016).

In this article, we engage with a failed national park project in Switzerland. New park policies introduced by the Swiss government in 2007 paved the way for the establishment of integrated national parks. Our case study, called Parc Adula, was based on a local bottom-up initiative and followed a participatory planning process. Although this setting indicated an equitable and promising park establishment, the national park was rejected in a communal (i.e. municipal) vote in late 2016, making this case all the more relevant for adding to our understanding of local opposition to PAs. Previous studies indicate a mixture of reasons for the proposed park's rejection, such as communication challenges and locals' fears of restrictions (Michel 2019b; Michel and Backhaus 2019; Michel and Bruggmann 2019). With an empirical analysis drawing on three different studies, we consolidate different research questions, methods, and data

sets to better understand national park rejection. Through exploratory data analysis, we found (dis)trust as a common thread that weaves in and out of different park rationales and connects the three different studies. Whereas the initial research design did not focus on trust, we incorporate dimensions of trust in our analysis to unravel connections between pro and contra park rationales.

In light of the recent worldwide push towards more PAs, and more collaborative and participatory PA planning and management, similar challenges regarding their management arise in different contexts, especially since more diverse actors are being involved in planning procedures (Arpin and Cosson 2021; Brooks, Waylen, and Borgerhoff Mulder 2012; Payton, Fulton, and Anderson 2005; Watson et al. 2014). Consequently, our results hold implications beyond direct democratic[1] settings.

Conceptual framework

Trust is a fundamental condition for a democratic system to fulfill its purpose. Trust is often defined as a three-part relation, namely that *entity A* trusts *entity B* to do *X* (Hardin 2002, McLeod 2020, Warren 1999). Hence, trust always has a future-oriented component. Whereas traditional societies were built on interpersonal trust based on family ties, a modern democracy relies on an extension of trust to strangers—for example politicians—to enable the coordination of complex and diverse societies (Warren 1999, 3). Tilly (2004, 1) argues that democratic regimes "cannot operate without substantial integration of trust networks into public politics". Such trust

[1] Switzerland is a semi-direct democracy: A representative democracy with strong direct democratic structures that allows citizens of age to express their opinion on decisions taken by the federal parliament and to propose amendments to the Federal Constitution (FDFA 2019).

networks are constantly (re-)created by discursive processes (Tilly 2004; Warren 1999). At the heart of a (contemporary) trust network stands an authentic leader (or several leaders), who communicates a common goal that is based on shared values. Such a person must be "*able to engage others*, to offer involvement, to make it desirable to follow them, because they inspire *trust*, they are *charismatic*, their *vision* generates enthusiasm" (Boltanski and Chiapello 2018, 114–115, emphasis in original).

Trusted leaders have to respect differences in society (Boltanski and Chiapello 2018). Differences are created, unraveled, and explored through dialogue and are the main concern in a participatory process. Besides speaking (or information dissemination), a dialogue must also include listening. Specifically, a trusted leader should *listen out for* viewpoints that might not be expected or dominant in a discourse (Dobson 2014). By shifting the spotlight away from the leader to everyone in the participatory process, *listening out for* can reduce power-asymmetries and acknowledge local knowledge, both fundamental challenges to PA management (Holmes and Cavanagh 2016; Taylor and de Loë. 2012; West, Igoe, and Brockington 2006)

Listening out for may also unravel distrust as a driver of democratic and collaborative processes. Distrust conceptually differs from a lack of trust. Latter "indicates the absence of a specific judgment about trust" (Stern and Coleman 2015, 120). Distrust is, however, accompanied by more negative feelings (e.g., insecurity or contempt) and an expectation of an active misgiving on the part of the trustee (D'Cruz 2019, Hardin 2001). Distrust may hold an important functional role in a democratic process, as it allows to break away from an apparent excess of consensus that hinders progress (see Mouffe 2005, Warren 1999). With regards to contemporary environmental politics and small-scale deliberative settings, Parkins (2010, 835) argues that dissent and

conflict "may in fact be a more important indicator of democratic vitality than consensus and collaboration".

Framing trust in contemporary protected area establishment

The clash of stakeholders in PA planning complicates trust assessment and the extension of trust networks. Different actor groups often show different levels of trust towards government representatives or environmental agencies (Engen et al. 2019). Moreover, as PAs address large, landscape-scale issues they often function across multiple political jurisdictions, whereby trust holds even a higher significance (Lachapelle and McCool 2012, 332). The notion of trust networks, as discussed by Tilly (2004) and Boltanski and Chiapello (2018), corresponds well with contemporary PA establishment, which is shaped by integrated management approaches, economic rationales, and networks of different stakeholders (see Hammer et al. 2016, chap. 22). In particular, a project-based planning asks for adjustable trust networks that can react to short-term changes.

In line with research showing that local people's identification with a region can strengthen PA acceptance, Payton, Fulton, and Anderson (2005) discuss how emotional place attachment is associated with increasing individual trust. Besides interpersonal trust, research has shown that other forms of trust, such as trusting procedures and institutions, play an important role in natural resource management and PA establishment, and in yielding positive outcomes for biodiversity and livelihoods (Coleman and Stern 2018b; Marcus 2016; Stern and Coleman 2015; Young et al. 2016). Therefore, to understand challenges that distrust or a lack of trust in PA planning pose, we need a nuanced approach to trust issues.

Stern and Coleman (2015) synthesize the broad literature on trust in collaborative natural resource management and discuss different components of trust

theory. The authors provide a promising framework for PA research, as they delineate the forms of trust and distrust most relevant to natural resource management (Coleman and Stern 2018a). They define four types of trust that are relevant to collaborative natural resource management (Table 1): Dispositional, rational, affinitive, and procedural trust. The assessment of these types of trust is influenced by different antecedents, which are based on characteristics of trustor and trustee, as well as on contextual factors. Different social environments or institutional contexts "influence dispositions, setting different baselines of trust" (Stern and Coleman 2015, 120). Each of these types of trust may enhance outcomes of a participatory planning process by promoting a more open exchange of information and ideas and by reducing (unproductive) conflict (Lachapelle and McCool 2012).

[Table 1 about here]

As described by Stern and Coleman (2015, 123), *dispositional trust* sets "a baseline prior to forming any other type of cognitive or affective trust assessment". *Rational trust* calls for an actively defined outcome of a relationship (based on costs and benefits). As such, it is largely based on prior experiences or perceptions of competence. Based on these perceptions, the trustor can assess costs and benefits of a trustee's future performance. Rational trust facilitates the formation of *affinitive trust*, which is built upon the perception of benevolence and integrity of the trustees and focuses more on feelings about the trustees (Coleman and Stern 2018a; 2018b). In a participatory planning approach, *procedural trust* develops when stakeholders consider the approach as legitimate. The presence of such a "control system", e.g. participatory planning and direct democracy, can reduce the need for other forms of trust (Stern and Coleman 2015). Procedural trust building is influenced by clearly documented decision-making processes, shared criteria for evaluation, and jointly developed rules for

interaction (Coleman and Stern 2018b; Stern and Coleman 2015). Yet, according to Smith et al. (2013), lower levels of dispositional trust can lead to higher probability of direct participation in natural resource management processes, as those people rather see the need to participate and take influence.

Case Study: Parc Adula

Our research focuses on the Parc Adula national park project in Switzerland. Referring to Yin (2003), Parc Adula serves as both a critical case study by being uniquely set in a direct democratic system, as well as a representative case study reflecting similar challenges to participatory and community conservation schemes.

Parc Adula was projected to become only the second national park in Switzerland, besides the Swiss National Park (established in 1914), and the first of a "new generation" of national parks. Contrary to the Swiss National Park, where the main goals are strict nature protection and research, the "new generation" national parks aim at connecting the protection of natural and cultural landscapes to regional economic development of rural areas. Their establishment is defined by the Swiss Ordinance on Parks of National Importance from 2007 as a bottom-up, participatory process (Pichler-Koban and Jungmeier 2015; Hammer et al. 2016, chap. 7). The Federal Office for the Environment (FOEN) financially supports park planning and establishment and evaluates management plans. The FOEN awards park labels based on the outcome of a communal (i.e. municipal) popular vote, as it is predetermined in Switzerland's direct democratic political system. After ten years, the communes in the park perimeter have to vote once more whether they want to stay in the park (BAFU 2014).

Parc Adula was initiated in 2001 by representatives of 17 communes in southeastern Switzerland, stretching over the cantonal border[2] of Grisons and Ticino (Figure 1). From 2010 onwards, a project management team (hereafter park team) oversaw the planning process, participation, and communication. This especially included negotiations in the affected communes regarding the spatial characteristics of the park. The park team was comprised of local residents, most of whom grew up in the region and held university-level education. One person was a "newcomer" who moved to the region for the duration of the project. As Parc Adula was a pilot project, it faced well-known difficulties that the park team often described as "learning by doing" (personal communication 2015).

The proposed buffer zone aimed for "the maintenance and near-natural management of the countryside … for its protection against detrimental intrusion" (Swiss Confederation 2007). Most negotiations concerned restrictions in the more strictly protected core zone, such as hunting bans, keeping to hiking trails, or regulating farming on alpine pastures. At the beginning of the project, different local actor groups—in particular farmers, hunters, tourism professionals, and landowners—were invited by the park team to discuss different topics related to the proposed park in working groups. Additionally, the park team regularly organized public information events with opportunities for the public to ask questions. This deliberative process led to the composition of a "charta", which consisted of the park regulations and the management plan for the first ten years of the operational park (Michel 2019a; Pichler-Koban and Jungmeier 2015).

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[2] The member states of the Swiss confederation are called "Cantons". Cantonal autonomy as well as cantonal participation in federal processes are the key features of Swiss federalism (see Vatter 2018).

For months, the charta was the main discussion point. After its public consultation, which allowed individuals and associations to issue statements, the final version of the charta was published in September 2016 (Reutz, Gruber, and Forster 2016; Backhaus et al. 2018). Figure 1 shows the results of the popular vote in November 2016. Voter participation was comparably high with approximately 60 percent (although varying between communes), whereas mean nationwide voter participation is usually between 40 and 50 percent (BFS 2018). Since a major part of the core zone would have been located in communes that rejected the park, the project was no longer feasible.

[Figure 1 about here]

Up to this day, no other national park has been established in Switzerland. The unique setting including a popular, communal vote on the establishment of the park, provides us with a profound understanding of local residents' attitudes, since the outcome of the popular vote is not influenced by the same biases as research surveys (e.g., overrepresentation of proponents). Moreover, understanding the reasons for park failure, even though many contemporary approaches were utilized in the project, is invaluable for reflecting on the effectiveness of such processes.

Research design and methods

This article draws on data from three different research studies carried out between 2013 and 2018 (Table SOM 01). Study 1, a quantitative household survey conducted in 2013, aimed at understanding locals' attitudes regarding the new national park project. Study 2 followed an ethnographic approach and engaged with different stakeholders' values. Further, semi-structured interviews with different stakeholders were conducted within the scope of study 3, which took place after the popular vote in 2017 and 2018

with the aim to analyze the reasons for the park's rejection. Study 3 also included a quantitative household survey, which was partly based on the 2013 survey and repeated 10 of its survey questions[3].

The comparison of the two survey samples is provided in Table SOM 02. Note that survey respondents that voted yes on the park proposal are overrepresented in the 2017 survey (66%, N=1,105) compared to the actual popular vote (49%, N=7,694). We explain the low response rate (13%) in study 1 with the mode of sending the questionnaires in a commercial distribution without personal addresses, which decreased motivation to participate. In study 2, households were addressed directly and the emblems of the two cantons were printed on the questionnaire. The nevertheless rather low response rate (17%) is explained by a fatigue related to the park topic, also showing in the overrepresentation of proponents, but is in line with comparable surveys in European PAs (e.g., von Lindern, Knoth, and Junge 2019).

The 2017 survey data was analyzed with a logistic regression analysis using Bayesian modelling[4]. The binary dependent variable consists of the respondents' indication of their voting decision—either "yes" or "no" in the popular vote on the Parc Adula proposal. Five dimensions of potential factors (Parc Adula-specific and more general) influencing the individual voting decision were examined: knowledge about the park project (dimension I), arguments about Parc Adula's impacts (dimension II), its planning process (dimension III), perceptions of the region and general opinions

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[3] The questions of the 2017 survey are provided in Methods SOM 03. For more detailed descriptive statistics of the variables, see Backhaus et al. 2018.

[4] See Pleger (2017) for further explanation on the advantages of Bayesian modelling for the analysis of the acceptance of land use policy measures.

regarding parks (dimension IV), and socio-demographic variables (dimension V)[5]. The dimensions were partly based on the questions and results of the 2013 survey (study 1) and include variables that have been described as empirically relevant for outcomes of public votes regarding land use measures (Pleger 2019). Due to the large number of possible influencing factors, nine separate models applying logistic regression were first calculated including variables of the five dimensions. For instance, a logistic regression analysis was calculated including different pro- and contra arguments used in the voting campaign and statements regarding the park team. By doing so, the relative relevance of voters' agreement with arguments for their voting decision could be determined. In a next step, a comprehensive model was calculated (Table 2). This model includes all variables of the separate logistic regressions for dimensions I to V that had a systematic influence on the voting decision.

The analysis includes data from semi-structured and unstructured interviews and ethnographic fieldwork from study 2, as well as from semi-structured interviews from study 3. In both studies, interviewees were selected using criterion and maximum variation sampling (Patton 1990). We aimed at reaching information-rich cases that were actively involved in or affected by the park project, and tried to capture themes that cut across various backgrounds. In study 2, additional respondents were found with an opportunistic snowball sampling. With these sampling methods, we reached respondents from government offices, local environmental NGOs, park management, and various locals involved in sectors like tourism and agriculture, local politics, and with different interests such as hunting or hiking. Interview data was analyzed by

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[5] The models were calculated in MLwiN 2.35 using MCMC estimation, based on Bayesian estimations (100,000 iterations, burn-in: 50,000-100,000, thinning: 1).

qualitative content analysis (Mayring 2014), moving from inductive to deductive coding based on the inductively established code scheme. The interview quotes used in this publication were translated from either German or Italian to English as verbatim as possible. We use selected quotes as illustrative examples of important perceptions, justifications, and feelings that were frequently mentioned.

Results

Reasons for Parc Adula's rejection are diverse and are based on different values and perceptions that do not specifically adhere to certain actor groups. We first draw attention to the results of the logistic regression analysis using Bayesian modelling based on the 2017 survey from study 3 (Table 2). Findings show that the voting decision is influenced by variables referring to the park project, but also by wider considerations. Latter strongly connect to regional economic development, for example the variables "my region is doing well" and "promoting tourism for regional development". These topics have already been discussed before the national park project started.

[Table 2 about here]

In the interviews in studies 2 and 3, park proponents regarded the national park as an opportunity (but not the sole solution) for regional economic development and to decrease out-migration. Opponents, on the other hand, presented varied justifications against the park project that were often tied to feelings of uncertainty. In the following sections, we will connect the quantitative analysis to the qualitative results from studies 2 and 3.

Arguments for a national park

The local and regional stakeholders mainly perceived and promoted Parc Adula as a regional economic development project. As discussed by Michel and Bruggmann (2019), the park project was shaped by neoliberal discourses, framing the proposed national park as an economic opportunity. Accordingly, the results of the logistic regression analysis show that several variables from dimensions II and IV related to regional economic development influenced the voting behavior (Table 2). The argument that Parc Adula will boost the economy influenced a positive vote. People perceiving their region as doing economically well were more likely to reject the ballot, whereas the opinion that tourism should be promoted for regional development had a positive impact on voting yes on the project proposal.

As illustrated by the following two quotes from 2015 (study 2), the perceptions of the valleys' economic status-quo greatly differed between interviewees. Interviewees of studies 2 and 3, who saw no need for regional economic development support also did not endorse the park project. Park promoters actively communicated possible monetary benefits of a national park and thus tried to outweigh its costs.

> It is wrong to believe that the people are not doing well here and that that's why they should say yes to Parc Adula. I1 (study 2, 2015)
> How can you be against the fact that money is coming to support economy here? I2 (study 2, 2015)

In general, numerous respondents saw the need for an economic upswing in the region, but were undecided on the question of how this change should happen. A similar disparity shows in the discussion whether tourism is the right way for economic development in the region. According to the logistic regression analysis, the variable "promoting tourism for regional development" had a positive influence on the decision

to vote yes. As annual snowfall in lower valleys decreases, many tourist offices try to diversify their offers during the summer months; for example, with thematic hiking routes, adventure parks, and cultural events (interviews 2016, study 2). Winter tourism and alpine skiing are still relevant for a few villages in the area, although the skiing area of San Bernardino in Mesocco valley was closed in 2012 due to financial reasons (Jankovsky 2015). Nevertheless, some local residents interviewed in study 2 feared a "wrong" kind of tourism, i.e. too many tourists or people who do not stay at local accommodations.

Even though the variable "Argument: protection of ecosystems" systematically impacts voting decision in the regression model, the baseline argument of a park as a nature conservation tool was seldomly referred to in the interviews and conversations, or in the park marketing[6]. The focus on regional economic development in the pro-park argumentation was used strategically to speak to the diverse group of local residents, which were assumed to appeal less to nature conservation discourses. This strategy was confirmed by the perception of many local residents that the region's natural landscape does not need additional protection:

> You have to walk up there; it is exhausting to get there. (…) Um, you don't have to preserve this artificially since it [the landscape] would no longer be this way if you could alter it so easily. I3, 2017 (Haggenmacher 2017)

Feeling informed and fears of restriction

Respondents felt better informed closer to the popular vote. Figure 2 displays the 2013

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[6] The variable in the regression model was based on the approval of the pre-given statement "Parc Adula would have helped to sustainably preserve nature". As the interviews were open-ended, the qualitative and quantitative results regarding this aspect cannot be directly compared.

and 2017 survey participants' assessment of their knowledge about the project. Closer to the popular vote, more information events took place and the park project was more visible in regional newspapers and on TV. The results of a chi-square test reveal that respondents in 2017 felt significantly better informed compared those in 2013 (X^2=164.90, N=2299, p< 0.000). Similar patterns show in the qualitative data. Especially in 2015 (study 2), people did not feel well informed and missing communication and information was an important justification against the park (see Michel & Bruggmann 2019).

[Figure 2 about here]

However, feeling well informed does not lead to park acceptance. As shown in Table 2, familiarity with the core zone regulations negatively impacted the voting decision, which means that respondents who describe their familiarity with the core zone regulations as high were more likely to reject the ballot as compared to respondents with low familiarity. Accordingly, descriptive statistics in Figure 3 illustrate that core zone regulations were especially relevant for opponents (39%), less than in the pro-park group (16%). Especially the regulation to stay on the hiking trails and the hunting ban were heavily discussed and used as anti-park rationales. Consequently, the fear to be compromised in one's freedom also influenced the voting decision (see Table 2). The following interview quote by an alpine hut warden expresses these doubts:

> (…) why I am against it, is the trail regulation. I am also a mountain guide. This means that there will be many more restrictions and that won't really work. 99 percent of the people stay already on the [official] trails anyway. But they couldn't, for example, go swimming in a small lake (…). I4, 2015 (study 2)

[Figure 3 about here]

Whereas the core zone regulations were the focus of negotiations early on, the buffer zone came up as an area of concern shortly before the popular vote. Regarding the

buffer zone, communication was more complex and more often criticized:

> There was also a fear of restrictions. It wasn't even about the core zone, because you knew that everything is forbidden there. (…) But the buffer zone, where people live, was not clear. That made the locals insecure. I5, 2017 (study 3)

The park team started to communicate defensively, but was unable to squash rumors, as illustrated in the following quote:

> We have always said that there were no new restrictions in the buffer zone. Then someone comes who claims exactly that – then the fat was in the fire. We were accused of having always lied. We said that we always told the truth. That was very bad. I6, 2017 (study 3)

Trusting the Parc Adula team – and others

Although many survey respondents and interviewees felt well informed at the point of the popular vote, (dis)trust still drove opinions regarding Parc Adula. Trusting the park team was found to have a systematic positive influence on voting yes (Table 2). Whereas the quantitative analysis only includes one item concerning trusting the park team, the qualitative data show more diverse justifications referring to trust. Lack of trust or even distrust towards the park team was often mentioned in interviews. For some, distrust was based on locals' perception of the park team members' different background, although most of them grew up in the area. The following quote by a local resident explains a lack of trust based on different (perceived) values.

> Sometimes it seemed that quite young people with a college degree had to explain things to the local population and farmers and hunters and so, who came from a different world. I7, 2017 (study 3)

For others, distrust was increased by procedural factors, which also influenced locals' perception of the park team. Due to the geographical characteristics of the region,

individual park team members were dispersed in different offices in the valleys. For waverers and opponents of the project, these offices seemed unapproachable.

> The regional offices were for themselves and not with the people. If you want to accomplish something, then you have to go to the local restaurant and not open up offices. I8, 2017 (study 3)

These differences were increased by the multilingual situation. Further, the communication about the park project was often described as technocratic. As shown by Michel and Bruggmann (2019), the different use of language was highly relevant in creating and/or reinforcing boundaries between different actors, resulting in trust issues. This distrust was also recognized by the park team itself, and a problem without solution at hand:

> When an eventuality hasn't been defined yet, it is a reason to be against the project and say "no, we don't trust you". I9, 2016 (study 2)

Some interviewees reacted to these perceptions and feelings of distrust with a call for a "charismatic leader" of the park project:

> The whole project really lacked an ambassador: a strong, credible local personality who would have appeared again and again over the years. I10, 2017 (study 3)

Whereas quantitative data do not show any influence of trusting institutions or procedures on the voting decision, interviewees in studies 2 and 3 described a lack of trust or even distrust in governments. For example, during an information event organized by the park team observed in 2015 (study 2), some local residents feared that after park establishment, the government would always side with environmental NGOs regarding development projects. A pivotal moment for igniting loss of trust was the release of statements concerning the charta by different associations and the Federal

Office for the Environment (FOEN). The Swiss Alpine Club criticized the designated trail network in the core zone, and the largest Swiss environmental NGO raised concerns regarding the insufficient nature protection in the buffer zone (Semadeni and Leugger-Eggimann 2016; Jaquet and Michel 2016). In particular, the reaction of the federal government fed insecurities with local residents, as it criticized certain points of the charta, such as a military zone located in the buffer zone. Although the park team disagreed, the military zone was removed from the park perimeter after a hearing with a federal councilor (Südostschweiz 2016).

The discussions involving the federal government were mentioned by most persons interviewed before the popular vote (study 2) and were also referred to in study 3. Supported by (social) media and comment sections on newspaper websites, rumors spread and some locals perceived power imbalances, since the adjustment of the park perimeter overruled the park team's stance:

> [People] did not trust the FOEN anyway, …[it] was an uncertain partner for the local residents. The 10 years [operational phase] were simply not believed – perhaps a change in the law would have been made so that it would've no longer been possible to vote on it at all. (…) It [FOEN] was always like a lord in the background who at some point decided with a thumbs up or down. I5, 2017 (study 3)

Some of this distrust was based on prior experiences with large projects ending in a popular vote. For example, the canton of Grisons proposed twice to become a candidate for the Olympic Winter Games, which was declined each time in a popular vote—in 2013 and 2017. An interviewee (2017, study 3) explained the emerging distrust in large, cantonal or federal projects, since the first vote seemed not to have been respected enough and a second candidature was nonetheless put up for discussion.

Discussion

As indicated by the results, different expressions of (dis)trust influenced opinions regarding the national park. Especially local residents distrusting higher-level governing bodies is a well-known challenge in PA management and planning, for example when restrictions are perceived as being imposed from the outside (see Engen et al. 2019; Galindo-Pérez-de-Azpillaga et al. 2014; Stern 2008; Wald et al. 2019). Whereas a national park initiated at the grassroots level seems to respond to such issues, similar challenges arise in this case. We will therefore resort to Stern and Coleman's (2015) framework to untangle the nuances of trust in the Parc Adula project.

Regarding *dispositional trust*, which can be informed by prior experiences of participants, we have to acknowledge a general uncertainty as Parc Adula was a pilot project. Yet, with the emergence of more integrated PAs in central Europe and beyond, new experiences with novel forms of coordination on regional scales are gathered (see Hammer et al. 2016, chap. 22). Although these experiences may serve as background knowledge for project managers, local residents were not able to draw on such. However, experiences with other large-scale projects can inform distrust without particular reference to individuals or project-specific procedures, as it was the case with the prior (negative) experience with the two proposed candidacies for the Olympic Winter Games in the case study region. The abovementioned fear of interference of higher governmental bodies further supports dispositional distrust.

We could identify *rational trust* in the expectation of reciprocity and the strong line of proponents' arguments referring to economic justifications of the park project. Other forms of trust were even negligible for non-wavering pro-park actors who based their opinions on rational trust. In this case, the social and spatial distance to park team members was not important.

At times, rational trust also informed a value-based form of *affinitive trust*, as the identification of a common goal led to trust in individual park team members. Affinitive trust involved feelings that were rooted in the perception of similar values and opinions regarding the region's future. Whereas affinitive trust did not seem to impede engaged debates, as discussed by Parkins (2010), we observed that affinitive distrust often hindered a factual debate based on critical scrutiny. Park opponents frequently mentioned distrust in the park team or other park proponents. These arguments were strongly based on differences in heritage and educational background[7], rather than on different core values. Additionally, the perceived lack of a shared identity can increase risk-aversion in a project like Parc Adula (see Lachapelle and McCool 2012). Moreover, a spatial distance between park managers and local residents can further prevent locals to build a relationship based on affinitive trust and to overcome a social distance (Stern 2008). Despite the bottom-up process in the case study, which suggested differently, building affinitive trust was difficult in a setting where cultural diversity is very fine-grained.

Nuances on a local scale impede the effect of a "charismatic leader". In general, continuity and familiarity of a leader (or leaders) and positive personal experiences with these are important for trust building and for extending trust networks (Boltanski and Chiapello 2018; Wald et al. 2019). But in the Parc Adula case, a leader (or leaders) could hardly cut across linguistic and cultural differences. Thus, building affinitive trust based on familiarity should not be a main goal in a PA project that interacts with a diverse local community.

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[7] See Michel and Backhaus (2019) on the influence of stereotypes on park negotiations.

The region's geographical characteristics and the three linguistic areas posed a challenge for park planning. Information about Parc Adula in printed magazines, on the webpage or on social media had to be multilingual. Linguistic nuances sometimes got lost in translation, further enhancing the perceived "otherness" of the park team, hindering affinitive trust building and leading to a lack of *procedural trust*. In general, a participatory process sets a trustworthy control system enabling procedural trust (Stern and Coleman 2015). A control system loses its assuring quality when different park proponents openly disagree. For instance, the debate opposing the federal government and the park team concerning a military zone remaining within the park boundaries was a crucial moment. The final decision intensified insecurities and rumors regarding the government's interference, although the federal government cannot introduce new laws or overrule existing park regulations of the operational phase. This increased distrust in the federal government. The perception of opacity in decision-making joined by a lack of equally shared power undermined the legitimacy of planning procedures that lead to procedural trust (see Stern and Coleman 2015).

Due to a lack of other types of trust, in particular affinitive, this sudden loss of procedural trust could not be buffered. Maintaining different forms of trust is of value, since one strong form of trust may have to balance the lack of another. For instance, Song et al. (2019) discuss how procedural trust associated with fair and transparent processes can compensate for a lack of affinitive trust in maintaining coordination and enabling collaboration.

Regarding this interplay of different trust types, Coleman and Stern (2018b) discuss affinitive trust leading to rational trust as a possible sequencing. However, we do not see its applicability to similar cases to ours. In the case study, affinitive trust was mostly a value-based form fed by rational trust, which indicates a different sequence.

Rational trust regarding the outcomes of a PA project can lead to the perception of similar values, which forms an antecedent for affinitive trust. Procedural trust was not situated in this sequence, but rather served as a stabilizing frame.

This also holds implications for practitioners, since we show that a bottom-up planning approach does not easily lead to affinitive trust towards park managers. As we argue that building affinitive trust is hardly an achievable goal in a project involving more than one community, the sequence of first focusing on building rational trust as a basis for other types of trust is of practical value, especially considering the importance of rational trust for pro-park sentiments.

Building rational trust in an integrated PA can be challenging. Combining ecological and economic goals may be elusive to involved stakeholders. In response, park managers need to constantly *listen out for* unheard voices (see Dobson 2014). In particular, for visions regarding the future of a region. Exchanging ideas about the future can connect stakeholders, facilitate differentiated discussions regarding a park's goals, and promote a stronger sense of belonging to a park region (Michel and Wallner 2020, von Lindern et al. 2019). Moreover, identifying common visions can sharpen the objectives of a PA, reducing uncertainty in participatory planning (Palomo et al. 2011). This strengthens procedural trust, which serves as a stabilizing setting for building rational and affinitive trust. Further, common visions enhance rational trust based on expecting a positive outcome in the future, which can lead to a value-based form of affinitive trust.

Conclusion

Our analysis of the Parc Adula case shows a window of how (dis)trust can influence participatory planning processes and how a lack of trust or even distrust surfaces as a

recurring issue in a bottom-up, participatory national park project. Applying a mixed methods approach proved to be of value to untangle nuances of trust. The framework of Stern and Coleman (2015) helps to differentiate and better understand forms of trust and to unravel how a lack of trust is strongly entangled with anti-park sentiments. In our case study, the expectation of affinitive trust building due to the project's bottom-up characteristics was not met since the study region is very diverse on a small scale. We see the need for more research regarding the diversity of types of trust in PA planning. Particularly aspects such as the sequencing of different types of trust are still vaguely known, despite being an important element of creating well-working, bottom-up participatory planning environments.

To conclude, a participatory process should include an openness to failure, as local visions may not be in line with the objectives of a national park. In this case, the type of nature conservation measure must be re-considered. Dissent must be respected as a vital part of deliberative processes. This openness can be reached in actively incorporating *listening out for* in protected area negotiations. Otherwise, the strength of participatory approaches is lost.

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