

# The question of a common ground: attitudes towards conflict management among stakeholders of protected areas in Iceland and Japan

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## Abstract

The interests of stakeholders in protected areas (PA) can lead to conflicts, which call for attention of managers. Conflict management in PA, calls for a broad view of how to build consensus, with the question if specific management techniques are universally applicable. We use case studies in Iceland and Japan, and examine the underlying human perspectives of parties in terms of conflict, communication, and consensus. Though expected to be different, the results indicated that both cultures valued statement in the survey to 84% similarly. We speculate if this result indicates that the techniques suggested, are applicable to other mountain regions.

**Keywords:** conflict management, communication, Protected Areas, stakeholder, Iceland, Japan

## 1 Introduction

Climate change, loss of biodiversity, and the conflict about how to use natural resources are central topics of a current worldwide environmental debate. For authorities to declared protected areas (PA) is one of the managerial method that can be deployed to preserve the natural environment or define its intrinsic worth or utility for socio-economical benefits. The International Union for Conservation of Nature [IUCN] plays a leading role in defining different categories of PA. Within the last decades a growing amount of land has globally been designated as PA (IUCN 2003a; WDPA 2011), especially due to the introduction of new and better define categories of what PA can constitute of (Locke & Dearden 2005; Phillips 2003). The increase in the number and size of PA can be seen as a positive development since it acknowledges the importance of protecting the environment as part of sustainable development from a less anthropocentric and more bio-centric point of view (WCED 1987). This development has, however, led to criticism (Locke & Dearden 2005), with claims that “almost half (47.9%) of these new PAs may not be real PAs at all” (op. cit.: 7) but rather areas that aim for utilization and, therefore, resource management purpose rather than real protection and natural conservation. Environmental protection is important and of worldwide significance, and in order to reach a sound sustainability when it comes to the human use of natural resources, both a local and global perspective are important (Saarinen 2006).

For a long time, environmental protection was solely seen as a form of ‘fortress conservation’ (Brown 2002), and as Phillips (2003) claims that when it came to conservation the general public was not regarded as an important factor in the

management of PA. Between the 1970s and 1990s several international conferences mentioned the importance of input of the general public in the decision making processes, but it was not until the beginning of the 21<sup>st</sup> century when the IUCN started to incorporate the public as an integrative part of their PA management guidelines that this emphasis really became recognized (Phillips 2003; IUCN 2003b).

The inclusion of public participation in the decision making process of PA is important but it also increases the possibility for conflicts. Conflicts can, for instance, emerge due to the bi-polar need for environmental protection on one side and economic dependency of local communities on resources within PA on the other (see Xu et al. 2009), and/or due to the variety of different stakeholders affected by the decisions made (IUCN 2002, 2003b; Hiwasaki 2005; Berkes 2007; Tam 2006; Schaller 2010). There exists an extensive literature on how to tackle such conflicts, also indicating that conflicts are an integral part in the management of PA, and which approach is the most suitable (see Kyllönen et al. 2006; Cole & McCool 1997; Walker & Daniels 1997). Besides extensive literature on examples of conflict management and research on the different approaches to conflict management, it remains to be seen if these methods can be applied universally; every community has different cultural characteristics and thus a different conflict management tools might be needed (Mitchell-Banks 1997; Axelrod 1997; LeBaron 2003). The question “how universally applicable are the commonly conflict management methods” is important as many of tools have been developed in the Western world.

The interested parties who are involved in the decision-making process of modern PA can be individuals, groups, organizations and societies. Ultimately, however, these parties are represented by individuals who have their perceptions, values, and beliefs. The aim of this research is to examine the perception of such individuals in two very different cultures – the Icelandic one and the Japanese one – in order to find out if there is an underlying universal perception among such representing individuals in both of these cultures. This research focuses in on two national parks – one in Iceland and one in Japan – to find out what is similar and what is different when it comes to the perception of PA conflict management of individual who represent interested parties in PA.

## 2 Study areas

To explore what is alike and what is different when it comes to the perception of what matters in the conflict management, communication and consensus building in regards to PA, the Vatnajökull National Park and the Daisetsuzan National Park were selected as case studies. The two selected NPs share not only key geological features – mountain regions, forests, similar climate, top soil, etc. – but both also evince a strong bond of the local people who live in the area and the land (Hell-dén & Ólafsdóttir 1999)

## 2.1 Iceland

Iceland (approximately 103,000 km<sup>2</sup>) is an island, lying just south of the Article Circle in the North Atlantic. Iceland, settled by Vikings from western Scandinavia around 871 (Ogilvie & Pálsson 2003) is one of the countries in Europe with the lowest population density (approx. 3 inhabitants/km<sup>2</sup>) (STATICE 2009). Located directly on the Mid-Atlantic ridge where the Eurasian and American shells are drifting away, Iceland is known for its volcanic activity like the recent volcanic eruption of Eyjafallajökull in the beginning of 2010, or Grímsvötn in May 2011. Iceland is one of the most volcanically active countries in the world and thus rich in its diverse geological features. Volcanoes, avalanches, big black deserts, and long dark winters is well known for the Icelanders, and yet Iceland is blessed with many natural features such as extensive fishing grounds and low and high-temperature geothermal fields, widely utilized for energy production (Thórhallsdóttir 2007).

For centuries, Icelanders saw their environment as evil and deadly (Árnason 2005). Nowadays the admiration for nature is very evident among tourists visiting Iceland (Ólafsdóttir & Runnström 2009) and also modern Icelanders increasingly share the admiration for nature (see Benediktsson 2007). The harsh natural environmental has also had an influence on Icelandic society and made Icelanders more used to uncertainty than most western societies (Eyjolfsdóttir & Smith 1996). The exposure of society over time to the harsh environment can be seen as the driving force behind Icelanders high level of activity and short-termism (*ibid*) and as Swatos (1984) suggest Icelanders are “despite all their cultural achievements [...] children of nature” (Swatos 1984: 39).

The Vatnajökull National Park (Vatnajökull NP or VNP) is located mainly in the central highlands of Iceland, towards the east (see Figure 1) and covered in 2008 about 12,000 km<sup>2</sup> or 12% of the landmass of the country (MFE 2008). The main feature of the Vatnajökull NP is the Vatnajökull glacier, which covers approximately



Figure 1: Location of the Vatnajökull National Park (dark gray: Vatnajökull NP, including Vatnajökull glacier).

8,000 km<sup>2</sup>. The park also has mountainous landscapes, many volcanoes, waterfalls and indigenous forests, to name some of its features. The land of the Vatnajökull NP is mainly state owned, but privately owned land is also found in the park. When this is written, only a fraction of the land within the national park is privately owned, and negotiations with landowners continue (Schaller 2010). The management structure of the Vatnajökull NP is described by the Act on Vatnajökull National Park (Alþingi 2007; MFE 2007), and consists of members of different interest groups. Their involvement in decision-making processes is in line with the “new paradigm” of public participation in nature conservation worldwide, as described by Phillips (2003).

## 2.2 Japan

Japan (approximately 378,000 km<sup>2</sup>) is a collection of various islands of volcanic origin on the Pacific coast of Asia. The four main volcanic islands of Japan are Hokkaido, Honshu, Shikoku, and Kyushu. Its interior mainland is mostly mountainous and covered with forests. The Japanese population (about 337 inhabitants/km<sup>2</sup>) is living mainly on the low flat lands around the islands' coast. Japan is located on the Pacific Ring of Fire which results in still ongoing volcanic activity, as the eruption of Shinmoedake in the south of Kyushu, in January 2011 indicates. Geological formations, continuous earthquakes, and the abundance of hot springs (Japanese: *onsen*) are also an indication of volcanic activity.

Japanese express a strong emotional bond with their natural environment (Japanese: *shizen*) (Thomas 2001). The concepts of nature which shape the view of nature today emerged in the end of the 19<sup>th</sup> century (*ibid*). These concepts represent the strong spiritual relationship between humans and their natural environment and are rooted in Buddhism and Shintoism (*ibid*), but can be also dated further back to ancient Japanese and indigenous religion (e.g. the Ainu in Hokkaido) where not only animals were worshiped but also sceneries like forests, caves, hot springs, and waterfalls (Oyadomari 1989; IUCN 2001). Japan is also a nation with a rich tradition in fishing and rice harvesting, which over time and due to its spatial distribution around the coastline might have let to a strong notion of *Uchi-Soto* or ‘inner-group’ (Japanese: *uchi*) and ‘outer-group’ (Japanese: *soto*) vis-à-vis interaction among individuals not native or local (Takata 2003: 543). Though modern Japanese culture expresses still strong linkages with nature, Western influences are starting to be more dominant, especially since the second half of the 20<sup>th</sup> century (Thomas 2001). The development of national parks in Japan has followed examples from the Western world and incorporated the western influenced concept of nature, still “concepts of nature and nature protection in East Asia are still linked to ancient religious philosophies and religious practices” (IUCN 2001: 12).

The history of national parks in Japan started in the beginning 20<sup>th</sup> century, with the Daisetsuzan NP as one of the first national parks, established in 1934 (MOE 2008a: 48; Ito 1996; Shiratori & Ito 2001; Aikoh 2008). Besides from being one of the first national parks established in Japan, the Daisetsuzan NP is with its 2,267 km<sup>2</sup> (Tawara 2004) also one of the largest national parks. The Daisetsuzan NP is a moun-

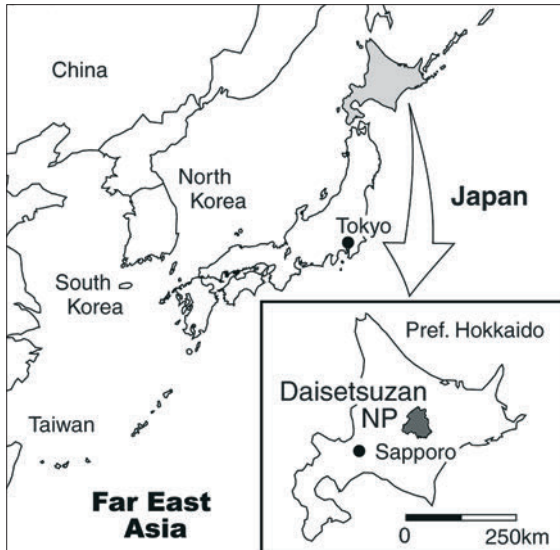


Figure 2: Daisetsuzan National Park in Japan (dark gray: Daisetsuzan NP, light gray: Hokkaido Prefecture).

tainous national park located in the centre of Hokkaido (see Figure 2). When this is written, about 5.5% of Japan's total area is covered by 29 national parks (MOE 2008b, 2009). The national park system management (Japanese: *chiiki-sei*) follows IUCN concepts (IUCN 2001; Phillips 2003), and uses a management system of zoning and multiple-use park, whilst land is not necessarily set aside for conservation (Hiwasaki 2005, 2006). The management of national parks in Japan is shaped by the fact that many stakeholders have to be incorporated into the management system, due to their ownership of the land within the park boundaries. The Daisetsuzan NP is no exception to this fact (Hiwasaki 2005; Schaller 2010).

### 3 Material and methods

The research looks at individuals who do represent groups of parties who have a variety of interests in the decision-making processes regarding the future management of the national parks. A survey was used to evaluate the opinion of these individuals concerning the themes of conflict, communication, and consensus, in regards to the national park management of Vatnajökull NP and Daisetsuzan NP. The explorative survey, presented in this article, has been piloted prior to ensure the quality of statements and to increase the response rate as well as quality of results (White et al. 2005). The statements try to incorporate the four realms of the self: intrapersonal, interpersonal, supra-personal, and transpersonal (Jónasson 2005) in order to access the human perspective of the individual perception of the 3Cs within PA conflict management. To ask about the sense of self with respect to the intrapersonal, interpersonal, supra-personal and transpersonal dimensions of respondents'

is an attempt to explore the constant interaction between the inner subjective world and the outer external reality (op. cit.) and can be summarised as follows: The *intrapersonal dimension* is “the dimension located between the self and the objective psyche” (op. cit.: 84–140). This is what we see when we turn inward towards the inner landscape or the subjective inscape of the human psyche. The *interpersonal dimension* is the aspect of our experience that involves a dynamic intermediate space located in between the participants’ sense of self and other human beings (op. cit.: 19) and hence represents the interaction and cooperation with others. In the *supra-personal* realm, “between the self and the non-human environment” (op. cit.: chapter 4), our relationship with the landscape or nature is apparent, particularly the way participants both identify ourselves with it and differentiate ourselves from it. Finally, the *transpersonal* gets experienced in the space in between the participants’ sense of self and all objects that he or she might find of sacred value (op. cit.: chapter 5) be they holy spaces, transformative symbols and so forth.

The questionnaire was designed as a closed-format questionnaire with 37 statements (the layout can be found in Schaller (2010)). Each statement provided the participant with the option of selecting an answer on a five-point scale Likert scale or rating scale (White et al. 2005). The ranking scale of disagreement-agreement varied from “strongly disagree” and “disagree” to “agree” and “strongly agree”, with the option of “no opinion” as a fifth level. The questionnaire was broken into three segments. The first segment dealt with demographic questions. The second segment provided definitions of basic concepts or terms used (e.g. Vatnajökull NP, stakeholder, local community, etc.). The third segment was divided into three main parts to address the three components of the 3Cs: conflict, communication, and consensus. In each of these three parts, the statements were designed to make use of the four realms approach developed by Jónasson’s (2005) as a way of assessing the different dimensions of how the human self relates with its surroundings. The survey in Iceland was done in English, whereas the survey in Japan was done into Japanese.

The participants were individual who represent two main groups of stakeholders: (1) parties involved in the management of the national parks (e.g. representatives of governmental organizations, NGOs, landowners), and (2) individuals and organizations that do have a stake in the decision-making process of the national parks. The stakeholder analysis for the target groups identified environmental, economic, social, and governmental and administrative bodies based on the concept of sustainability (UN 2002).

In Iceland, the questionnaire was sent out electronically via email to the stakeholders on the 7<sup>th</sup> of October, 2009. The individual asked to participate, sent their responses either electronically via email or in printed form. The questionnaire was open for participation until the 1<sup>st</sup> of November, 2009. In Japan, the questionnaire was sent out in printed form to the selected stakeholders on the 24<sup>th</sup> of November, 2009. The participants returned the questionnaire in printed form. The questionnaire was open for participation until the 12<sup>th</sup> of December, 2009. The analysis for this questionnaire used Microsoft® Office Excel 2003 for Windows Vista™ Ultimate.

## 4 Limitations

This survey and its results has some limitations. First, the list of stakeholders in Iceland was not very extensive due to the limited size of the country and the fact that many environmental organizations are represented by an umbrella organization. Nevertheless the survey included many key-stakeholders. In addition to this the number of participants in Iceland was considerable lower than in Japan. Second, the survey in Iceland was conducted in English, which should not have been a problem as most Icelanders are fluent in their English. In Japan the questionnaire was translated into Japanese. In Japan, the selection of the stakeholders of the target group was dependent on the suggestion by Dr. Aikoh at Hokkaido University, due to the researchers' difficulties of conducting a stakeholder analysis without sufficient knowledge of Japanese and the overall Japanese context.

## 5 Results

A total of 51 individuals (representing 49 organizations) were asked to participate in Iceland, and 101 individuals (of 100 organizations) in Japan. In Iceland, 19 individuals participated, and in Japan 53 individuals in the survey. The response rate was therefore 37% in Iceland and 52% in Japan. The majority of participants were male, older than 36, and held a university degree. More detailed information can be accessed at Schaller (2010). The participants were asked to state their occupational sector. Since the survey in Iceland and Japan used a slightly different segmentation, the answers were grouped into: economic, environment, social, administrative, and other. The majority of the participants followed the given segments, only very few individuals did not identify themselves (see Table 1).

When comparing the answers given by the participants in Japan, with the answers from Iceland, a pattern of answers emerges (see Table 2). Table 2 breaks down the questionnaire according to the given structure in the third segment of the survey, and presents data in a simple version providing only the count of the most answers of the participants. The data has been normalized (combining "strong disagree" and "disagree" together, as well as "strong agree" and "agree" to only a single count).

*Table 1: Occupation and sector of participants of survey in Iceland and Japan (total and percentage).*

	Iceland	Japan	Total
Economic	9 (47%)	16 (30%)	25 (35%)
Environmental	1 (5%)	10 (19%)	11 (15%)
Social	1 (5%)	4 (8%)	5 (7%)
Administrative	4 (21%)	20 (38%)	24 (33%)
other	3 (16%)		3 (4%)
empty	1 (5%)	3 (6%)	4 (6%)
Sum:	19	53	72

Table 2: List of answers to the questionnaire – comparison between Icelandic and Japanese answers to the statements of the survey (ICE: maximum answer from Iceland, JPN: maximum from Japan, B: maximum from both, and ICE/JPN: both have the maximum count besides one additional).

		Interpersonal				Intrapersonal			Supra-personal			Transpersonal		
Statement		3-1	3-2	3-3	3-4	3-5	3-6	3-7	3-8	3-9	3-10	3-11	3-12	3-13
CONF	disagree	B		B				B	ICE	B				
	no-opinion					ICE								
	agree		B		B	ICE/JPN	B		JPN		B	B	B	B
Statement		3-14	3-15	3-16	3-17	3-18	3-19	3-20	3-21	3-22	3-23	3-24	3-25	
COM	disagree		JPN		ICE/JPN									
	no-opinion													
	agree		B	ICE/JPN	B	ICE	B	B	B	B	B	B	B	
Statement		3-26	3-27	3-28	3-29	3-30	3-31	3-32	3-33	3-34	3-35	3-36	3-37	
CONS	disagree		JPN						B					
	no-opinion		ICE		ICE									
	agree		B		B	JPN	B	B		B	B	B	B	

The table presents the data in a matrix of the three main parts (conflict (CONF), communication (COM), and consensus (CONS)), and the four realms (interpersonal, intrapersonal, supra-personal, and transpersonal). The gray markers show (1) where most of the participants gave their answer to which statement, and (2) where there is an overlap between the answers from Iceland and Japan.

It can be seen that in most of the cases (31 out of 17 statements) participants from both countries answered the questionnaire with a similar expression of agreement or disagreement. Only at six statements, the answers differed.

## 6 Discussion

Interestingly, the majority (84%) of the answers in both countries are similar (indicated by the green markers and “B” in Table 2). This can come as a surprise, since one could have assumed a stronger difference in the answers due to different cultures. There are, however, also significant differences. Participants in Japan tend to put stronger emphasis on their agreement or disagreement with the statements given, whereas the participants from Iceland tend to use the “no-opinion” option. The results also state that the answers of participants in both countries differ in 6 cases, and in half of which, the answers differ significantly. Participants from Japan express a stronger agreement with statements 3-5, 3-27, and 3-29. These statements target the perception of the individual towards the community, which in return would suggest that participants from Japan have a stronger connection to their local community. Especially statement 3-8 is of interest, since this statement probes



the perception of the individual and its connection with the natural environment. The answers of the participants in Iceland and Japan are diametric, which would suggest that there is a less emphasis on the anthropocentric valuation of nature in Japan than in Iceland. Nevertheless, it is important to analyze that the answers from Iceland were influenced by the selection and participation of stakeholders. Examining statements 3-15 and 3-17, it can be observed that communication is a difficult issue for both participants in both countries. On the one hand, the Japanese participants express almost equally that they agree and disagree with the statement that it is easy for them to communicate their vision of the future management of the national park with others (statement 3-15); on the other hand, they believe that stakeholders do not openly communicate their interests to one another (statement 3-17). In this context, the participants from Iceland neither only agree nor disagree with these two statements. Data could still indicate that Icelanders are as well rather closed in communications, rather than vocal (the extensive results and analysis can be found in Schaller (2010)).

Of the statements used in this questionnaire to examine what a PA it came with no surprise that the majority of the participants agreed with statements which aim for the positive affects of nature on the individual. For example, 80% of respondents overall agreed with the statement: "I sense inner harmony or consensus when I enjoy having untouched wilderness and nature around me" (3-28).

## 7 Conclusion

It is now seen by international conservation agencies as good practice to include the public in the management of PAs (IUCN 2003b; Phillips 2003). Often, however, conflict management does not treat the deeper layers (e.g. inner motives, cultural influences, sacred beliefs) of an individual's intention that can have a determining influence on the interests in question. The underlying research of this paper explored the human influence in an attempt to reach a little the deeper layers within the self and its relationship with the non-human environment, and the need to consider them when dealing with conflict, communication and consensus in regards to national park management. The aim was to analyze if a similar natural environment shaped a similar perception of individuals toward the 3Cs, which would suggest that there might be unifying principles applying to different cultures towards conflict management and hence a justification of using universally applicable managerial methods.

The results in the presented explorative survey suggest that individuals who represent interested parties of PAs in Iceland and Japan share very similar perceptions of issues related to conflict, communication, and consensus in regards to PA. This can suggest that besides different cultural backgrounds, when it comes to issues closely related to conservation and the natural environment even the most subjective perceptions are in fact not so different. In a world of environmental degradation on a global level there is a strong emphasis on the idea that the solutions towards threats have to take into consideration local perspectives. The overall results of this research

could, however, indicate that there is a unifying principle of valuation among individuals who represents interested parties in NP with regards to nature conservation. This is an insight that might influence the future managing of the Alpine future and the future management of PA in general.

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