Negotiating conservation: Meaningful spaces in a world heritage debate

Liechti, K ; Müller, U

35 Negotiating Conservation: The Construction of Meaningful Spaces in a World Heritage Debate

Karina Liechti[1] and Urs Müller[2]

Abstract

According to their personal experience, social background and resultant degree of affectedness, people have certain ideas about the meaning of a World Heritage Site (WHS): What can be expected from it? What relation can and should one have to it? Dealing with potentially different meaningful spaces is decisive when it comes to negotiating pathways to the sustainable development of a WHS region. The multiple realities that exist in a pluralistic world must be taken seriously and addressed adequately. The present article describes how the Jungfrau-Aletsch-Bietschhorn WHS was socially constructed by exploring visual and verbal representations of the WHS during the local decision-making process preceding inscription (1998–2001). The results demonstrate that in visual representations (images) the WHS was to a large extent idealised as an unspoiled natural environment. Such a picture-book-like image has no direct link to the population's daily needs or their questions and anxieties about the consequences of a WHS label. By contrast, verbal representations (articles, letters to the editor, and comments) were dominated by issues concerning the economic development of the region, fears of disappropriation, and different views of nature. While visual and verbal representations differ significantly, their combination may have contributed to the final decision by a majority of the people concerned to support the application for inscription of the Jungfrau-Aletsch-Bietschhorn region in the World Heritage List of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

Keywords: World Heritage Site; decision-making processes; meaningful spaces; sustainable regional development; Swiss Alps.

35.1   Introduction

World Heritage Sites, according to the World Heritage Convention of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) (UNESCO 1972), are considered as sites of outstanding universal value from the points of view of science, aesthetics, and conservation. In the case of the Jungfrau-Aletsch-Bietschhorn World Heritage Site[3] in the Swiss Alps, this outstanding universal value is related to its classic glacial features, its geological records, its alpine and sub-alpine habitats with great diversity of wildlife and excellent examples of plant succession, and its impressive vista that has played an important role in European tourism, literature, and art (UNESCO World Heritage Centre 2003). These values are said to be of the highest importance to the international community as a whole (UNESCO 2005, Art. 49; see also Art. 77) and must be preserved for coming generations.[4] But who is this international community? Who defines outstanding universal value? And, most importantly, is this value also reflected at the local scale?

In the present article, we demonstrate that in the process of negotiating about a World Heritage Site (WHS), people construct their own individual 'realities', ascribing meanings to the issues under consideration, and thus, in a spatial sense, they construct their own individual meaningful spaces. According to their personal experience, social background and the result-ant degree of affectedness, people have certain ideas about the meaning of a WHS, for example: What can be expected from it? What relation can and should one have to it? Thus, to put it simply, the Jungfrau-Aletsch-Biet-schhorn WHS does not represent the same values for a local livestock herder as it does for a glaciologist or a winter sports tourist. By exploring how the region was represented in the local press during the decision-making process (visual and verbal representations), we identified what meanings the persons concerned ascribed to the Jungfrau-Aletsch-Bietschhorn WHS, how the WHS was socially constructed, and thus how it became a mean-ingful space to the actors involved. We point out that the existence (and handling) of these different meaningful spaces is decisive when it comes to negotiating pathways to the sustainable development of a WHS region. The multiple realities that exist in a pluralistic world must be taken seriously and addressed adequately.

35.2   Theoretical background

The research presented here takes a social-constructivist perspective (Berger and Luckmann 1966), advancing the view that meaning is not inherent to objects but ascribed (Werlen 2000, p 307). The primary emphasis of social constructivism is on looking into the question of how we interpret and represent our environment – implying a refusal to take the environment as a given that can only be depicted in one specific way – and on seeking to understand how environmental claims are created, legitimated, and contested (Hannigan 1995, p 3; Rydin 2003, p 16). A constructivist perspective does not deny the existence of the material world.

> *However, it is not the material world which conveys meaning: it is the language system or whatever system we are using to represent our concepts. It is social actors who use the conceptual systems of their culture and linguistic and other representational systems to construct meaning, to make the world meaningful and to communicate about the world meaningfully to others.* (Hall 1997, p 25)

Incorporated meanings structure the way actors interact with their environment. Only through the attribution of meanings do 'things' really become things. In the context of the present article, this means that the World Heritage Site cannot be experienced directly, but only through the lenses of internalised meanings. Subject to our personal and social background and hence our degree of affectedness, and in our interactions with other people and the environment, we make the WHS a meaningful space. Or in the words of Jäger (2001, p 42): "[…] all meaningful reality is existent for us because we make it meaningful or because it has been allocated some meaning by our ancestors or neighbours and is still important to us." Meaningful spaces can be merely individual constructions, but usually they are conventionalised and shared collectively among the members of certain social groups.

Meanings are shaped and reshaped in a complex process of internalisation, storing and recollection of experiences. As humans are not in a position to witness the endless variety of matters of concern with their own eyes, the media play a crucial role in the construction of meaning. Even though Luhmann's statement that "whatever we know about our society, or indeed about the world in which we live, we know through the mass media" (Luhmann 2000, p 1) is exaggerated in regional contexts, the media not only make different perspectives and meanings visible, but also contribute significantly

to creating 'realities'. The way meaningful spaces became visible and were constructed by the media in the case of the Jungfrau-Aletsch-Bietschhorn WHS is further elaborated below.

35.3   The Swiss Alps – meaningful spaces in historical perspective and current debate

The Swiss Alps are a famous example of changing 'realities': Whereas in the 18th century the Alps were seen as gruesome and ugly, a place to avoid, a century later Thomas Cook was successfully organising cheap trips to the Alps for British tourists. The horrible Alps had changed to an attractive and inviting landscape, a sublime place which was a 'must see'. The people inhabiting the Alps were romanticised as happy mountaineers, leading a modest life in harmony with their environment. Representing an antipode to inhospitable cities, the Alps were regarded as the embodiment of an idyllic rural life. This view of the Alps as a pristine and mostly unspoiled natural space neglected age-long efforts to cultivate the environment. In the 20th century, this idealised and romanticised view, spread through tourism brochures, posters and postcards, became a commonplace among the broad public (Stremlow 1998).

The state of the art of research on (different) views of the Swiss Alpine space was recently surveyed by Backhaus et al (2007). As a result, these authors derived a landscape model consisting of four poles, where 'nature' and 'culture' mark the polarities of one axis, while 'individual' and 'society' mark the poles of the intersecting axis. They locate six dimensions of landscape within the 4-pole model: corporeal/sensory, aesthetic, identificatory, political, economic, and ecological (Backhaus et al 2008). The dimensions can be seen as foci that people (or academic disciplines) adopt when dealing with landscape. For instance, research focusing on the ecological dimension of a landscape is concerned with natural-scientific issues such as biodiversity. On the other hand, research located in the aesthetic dimension emphasises the value attributed to beauty or to personal pleasure. Both views offer meanings that complement each other and should thus be correlated in a democratic dialogue. An effort to combine the aesthetic with the economic dimension is exemplified in the work of Baumgart (2005): By applying discrete-choice experiments, she aimed to translate the 'meanings' of landscape transformations, or rather the value of the aesthetic dimension of landscapes, into monetary terms. She showed that a development project is more likely to be supported if it fits the traditional patterns of Alpine landscapes.

The 'outstanding universal values' of the Jungfrau-Aletsch-Bietschhorn WHS – when they are related to the landscape model above – are explicitly linked to the ecological, aesthetic and identificatory dimensions (see introduction). In the concrete local context, however, as is shown below, other dimensions contributed to the construction of meaningful spaces as well.

35.4   Methods

The present analysis focuses on the four years prior to the declaration of the Jungfrau-Aletsch-Bietschhorn region as a WHS in 2001, the key time frame during which negotiations on World Heritage candidature took place. It is based on press coverage of the Jungfrau-Aletsch-Bietschhorn WHS in the *Walliser Bote*, the most important daily newspaper in the Oberwallis (the German-speaking part of the Canton of Valais), which has a print run of about 27,000 and reaches 85% of the region's households (WEMF AG 2004). Two types of data were analysed: visual representations (72 press photos of the WHS) and verbal representations (122 press articles on the WHS).

Spatial appropriation categories were applied to the visual representation data. These categories were developed in a procedure that moved back and forth between theoretical considerations, empirical use of the provisional categories, and the image material (for a detailed description, see Müller and Backhaus 2007). For the categorisation of images, the main distinction was made between pictures that depict 'unspoiled natural environment' and those showing 'traces of cultural appropriation' (i.e. artefacts or activities). Pictures in the second category were further differentiated in several subcategories. This analysis resulted in an overview of the visually communicated type of spatial appropriation that resembles an 'area statistic' for the specific region – not, however, of its 'real' space, but of its pictorial representation in the *Walliser Bote*.

The verbal representations were analysed using content analysis methodology in general (according to Mayring 2004) and 'summarising content analysis' in particular. This procedure makes it possible to reduce the material in such a way that the essential contents are preserved, but the text is shortened to a manageable length (Mayring 2004, p 268). The result of the analysis is an overview of the issues most prominently discussed in the *Walliser Bote*.

35.5   Results and discussion

35.5.1   Visual representation of the Jungfrau-Aletsch-Bietschhorn WHS

The results regarding the visual representations show that during the period of examination the *Walliser Bote* presented the WHS to a large extent as an unspoiled natural environment. 21.6% of the visual image surface area shows no cultural activities or artefacts at all (Figure 1, "natural environment"). Regarding the 78.4% that falls under the category of "cultural space", 14.3% of the visual image surface area portrays the WHS as a "harmonic space", i.e. as an idyllic, museum-like space, with no evidence of concrete land use. The category of "experiential space in general" is the largest category (24.8%). Pictures in this category depict the WHS predominantly
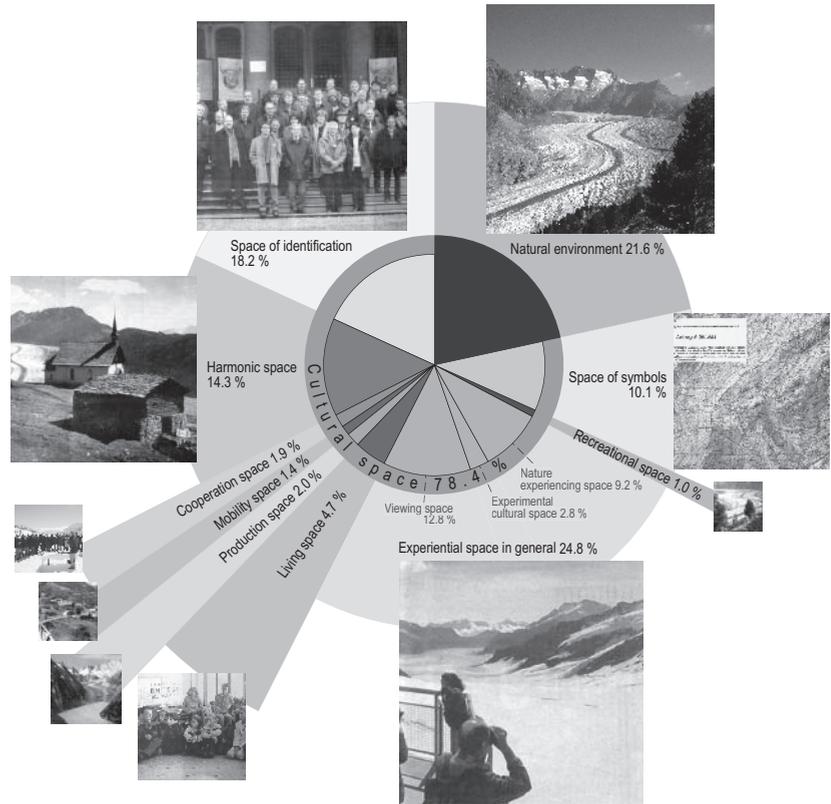

Fig. 1
The image of the Jungfrau-Aletsch-Bietschhorn World Heritage Site as presented in the *Walliser Bote* between 21 February 1998 and 13 December 2001. (Graph by Urs Müller, photos courtesy of *Walliser Bote*)

as a space for experiencing nature ("nature experiencing space") and enjoying grandiose views ("viewing space"); fun-sport activities are not shown. The high percentage of the category "space of identification" is due largely to pictures of opinion leaders supporting the WHS candidature. Finally, the category "space of symbols" embraces graphic illustrations such as maps of the WHS perimeter. Images focusing directly on economic or residential appropriations ("living space"/"production space") are insignificant.

If we analyse the 78.4% of the image surface area showing "cultural space" more closely, the impression of the WHS being portrayed as a natural landscape almost devoid of people becomes more striking. More than half of the image surface area for "cultural space" is dedicated to pictures showing cultural appropriation with a natural background (Müller 2007, p 247). Furthermore, the most famous landscape component of the WHS, the Great Aletsch Glacier, dominates visual communication. More than half of the pictures (37 of 72) present the iconic view of the glacier, highly staged for aesthetic appeal and reminiscent of a promotion calendar.

In summary, the visual portrait of the WHS drawn by the *Walliser Bote*, the most important regional source of information, had no direct link to the population's daily needs. Questions and anxieties about the consequences of a WHS label and the commitment to sustainable development prevalent among the population concerned were not taken into account. Instead, the potential WHS was depicted in a way similar to how it would be shown in a touristy promotion brochure, addressing the assumed values of target groups outside the region. This kind of visual communication met with criticism from some of the regional inhabitants. People fearing heteronomy complained that instead of providing information, the media and promoters of the WHS tried to 'persuade' the population by appealing to their emotions. Rather than being convinced by a picture-book-like presentation, people wanted to know the benefits and the costs of a WHS label.

35.5.2   Verbal representation of the Jungfrau-Aletsch-Bietschhorn WHS

The verbal representations show some similarity to the visual representations in terms of associating the WHS with a place of outstanding beauty. The natural features of the region are valued positively above all because of their aesthetic appeal. "This unique landscape is formed by wind, cold, sun and the powerful flow of the glacier. Fauna and flora cover this landscape in

every season so that it bristles with beauty" (*Walliser Bote*, letter to the editor, 9 March 2000; see Walliser Bote 2000b; this and the following citations from the *Walliser Bote* were translated into English by Karina Liechti). In this realm, the media debate concurs with the international view and the universal values crucial for inscription in the World Heritage List. Other natural features, such as the value of biodiversity, plant succession, or glacier morphology, although represented in the pictures, were rarely elaborated in more detail in the articles.

Apart from the above-mentioned similarities to the visual representations with regard to aesthetics, the verbal representations show a different and more differentiated pattern that reflects debates on how to deal with the picture-book-like WHS. In contrast to visual representation, verbal discussion was dominated by issues concerning the region's economic development. Discussion thus focused on how to deal with the WHS's 'outstanding beauty', thereby anchoring the aesthetic images. Two conflicting lines of argumentation were identified. One associated the WHS with economic loss due to its potential to impede infrastructural expansion. Applying an economic interpretation of sustainable development was justified in the following terms: "It is our uppermost duty to keep options for [infrastructural] extension open in order to provide a secure livelihood for future generations" (*Walliser Bote*, general article, 2 April 1998; see Walliser Bote 1998b). The other line of argumentation described the WHS as having the potential to enhance economic and mainly touristic development. The WHS was presented as a means to bring more tourists to the region: "Inscription of the region in the World Heritage List would spur a big international marketing campaign that we could never pay for by ourselves" (*Walliser Bote*, general article, 26 March 1998; see Walliser Bote 1998a). The disputes in this discussion were related to a major debate regarding the level and the status of protection required for the WHS. While some people – mainly with backgrounds in conservation – emphasised the need for enhanced nature protection and saw the WHS as a means of advancing this purpose, others – mainly opponents of the WHS – associated the WHS with attempts by outsiders to deprive local inhabitants of their right to determine the development of their region on their own: "Never should we allow foreign organisations, people from Paris, Bern […] to decide what we have to do and how we do things in our mountains" (*Walliser Bote*, letter to the editor, 7 March 2000; see Walliser Bote 2000a).

A general look at the verbal representations reveals that the understanding of sustainable regional development was the most controversial aspect of the debate. Even though both the proponents and the opponents of the WHS focused on sustainability as the main objective – in terms of the care of future generations – the means of achieving this objective were highly contested (for further information, see Liechti et al, accepted).

35.5.3   Combining the visual and the verbal

While visual and verbal representations differ significantly to a large extent, their combination may have contributed to the final decision of the majority of people concerned to support the application for inscription of the Jungfrau-Aletsch-Bietschhorn region in the World Heritage List. The prominence of economic arguments and narratives about intergenerational responsibility in the verbal representations, and their combination with the aesthetic appeal of the natural environment in the visual representations, may have built a common meaningful space for one part of the population. However, other parts of the population attributed completely different meanings to the WHS; this was shown, for instance, in the discussion of protection and spatial deprivation (see above). Thus distinct meaningful spaces were created. The related contested views, prominent in the run-up to the candidature, remained an issue in negotiations after the inscription of the region in the World Heritage List in 2001. This became most prominently visible in the course of a participatory process (Figure 2) that involved the local population as well as various organisations (for more information, see Wiesmann et al 2005).

35.6   Conclusions and open questions

35.6.1   Practical considerations

As mentioned above, World Heritage Sites are considered sites of outstanding universal value from the points of view of science, aesthetics, and conservation. From the constructivist perspective taken here, WHSs are social constructions that reflect the values and power relations prevailing at the time of their implementation. Thus, the declaration raises the question of who defines what as worthy of protection, and for which reasons. WHSs have been created against the will of the people directly concerned – particularly in countries of the so-called developing world. Such heteronomy

Fig. 2
Negotiating the
World Heritage
Site. (Photo courte-
sy of *Jungfrau
Zeitung*, 2005)

is not possible in the Swiss context (Wiesmann and Liechti 2004). Here, a WHS must evolve in a participatory bottom-up process, or a potential candidature must be backed by proof of strong support among the people concerned. Hence, promoters of a WHS candidature are confronted with the question of how (at least the majority of) local people can be motivated to take part in World Heritage or sustainability initiatives. Referring only to the aforementioned 'universal values' of a scientific, aesthetic or conservationist nature is unlikely to bring success. Such values are too abstract and too meaningless for local people, as they do not have enough in common with local people's lives. Even worse: Presenting the WHS as an aesthetically staged, picture-book-like natural space could even provoke opposition, as it suggests conservation of 'outstanding values' as the only aim of a WHS – disregarding existing (sustainable) uses of the region. However, since the Budapest Declaration of 2002, WHSs have had to strike a balance between conservation and development, "so that World Heritage properties can be protected through appropriate activities contributing to the social and economic development and the quality of life of our community" (UNESCO

2002). Achievement of sustainable development is closely associated with the participation of all actors. One-dimensional communication that aims only to affect people emotionally (for instance, with both shocking and idealised 'picturesque' images) can lead to polarisation within a population and hence to obstruction of the participatory process. Comprehending different constructions of 'reality' and different meaningful spaces, and taking them seriously, is thus an important precondition for sustainable development (Liechti 2008).

35.6.2   Theoretical considerations

From the applied social-constructivist perspective, spatial classifications such as the labelling of a region as a WHS are not rooted in the nature of things but rather in people's socio-culturally determined interests. Thus, to put it bluntly, people's conceptions of the world tell us more about the needs, values and beliefs of those striving to make some sense of reality than about 'reality' itself (Graeser 2000, p 298). Nevertheless, in addition to a methodological problem (see below), we also want to raise a theoretical shortcoming of the purely social-constructivist perspective.

While it is certainly beyond dispute that statements about 'reality' are historically and socio-culturally constituted and thus contingent, the other side of the coin is not taken seriously enough. While, for instance, the values a region has to offer that could qualify it as a WHS are a social construction, whether a region corresponds to such values or not is obviously no pure construction. A region without glaciers cannot strive for the label of 'containing Europe's largest glacier' as the Jungfrau-Aletsch-Bietschhorn WHS did. But how can the bio-physical basis be incorporated into theories of social construction without plunging into naive realism (Escobar 1999, p 3)? How, for instance, can we deal with 'nature' from a constructivist perspective without offering support to the dangerous position that 'environmental problems' may be mere fictions (Eden 2001, p 82)? While actor-network theory (ANT) is probably the most promising approach to overcome the nature/culture (object/subject) dichotomy, in recognising the bio-physical background of constructions, ANT does not go beyond Gibson's (1986) ecological approach to perception (Latour 2005, p 72) – leaving as many open questions as Gibson did (Müller 2007, pp 19ff.). Thus, the theoretical edifice is in need of further development.

35.6.3   Methodological considerations

Even if 'reality' cannot be constructed completely arbitrarily, there still remain many ways of conceiving it. The media in particular, which claim to record 'reality', create it instead (Bourdieu 2001). Analyses of the reproduction and dissemination of representations of 'reality' thus remain an important challenge for scientific research. Further studies should take into account that dominant representations are an outcome of social power relations. The "power of constructing reality" (Bourdieu 1991, p 166) is a matter of symbolic power, i.e. the symbolic capital successfully realised by actors in specific (here, journalistic) fields. If we want to understand why a certain person or perspective is published rather than another, we have to find ways to examine an actor's position in social space and investigate his/her available social, economic and cultural capital. Furthermore, with respect to internalisation of media discourses by audiences, the relationship between media reports and people's beliefs is still elusive. While media analyses shed light on the views spread by public discourse, they cannot grasp what people actually think about an issue or, in our example, their actual motivation for participating in sustainability initiatives. Thus, in order to gain a comprehensive understanding of decision-making processes, investigations of media producers and media consumers should be added to the media analyses presented here.

Endnotes

[1] Karina Liechti is a former staff member of the Swiss National Centre of Competence in Research (NCCR) North-South; she worked as Regional Coordinator of research activities in the Swiss Alps, then as a researcher in the Swiss Alps and in Kyrgyzstan. Her area of interest is sustainable regional development with a specific focus on protected area negotiations and pastoral land-use systems. She is currently working as a short-term expert for GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) in Mongolia.
E-mail: karina.liechti@gmx.ch

[2] Urs Müller completed his PhD on "The Power of Images in Sustainable Development", at the Department of Geography, University of Zurich, Switzerland. He is working as a post-doctoral researcher for the University Research Priority Programme (URPP) Asia and Europe, at the University of Zurich, focusing on sustainable development in Nepal and Switzerland.
E-mail: urs.mueller@geo.uzh.ch

[3] In 2008 the site was renamed Swiss Alps Jungfrau-Aletsch UNESCO World Heritage Site. Given that this article deals with the period from 1998 to 2001, we use the name that was relevant during that time.

[4] According to UNESCO's 2005 guidelines for the implementation of the World Heritage Convention, "[o]utstanding universal value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole" (UNESCO 2005, Art. 49; see also Art. 77).

References

Publications elaborated within the framework of NCCR North-South research are indicated by an asterisk (*).

Backhaus N, Reichler C, Stremlow M. 2007. *Alpenlandschaften: von der Vorstellung zur Handlung.* Zurich, Switzerland: vdf.

Backhaus N, Reichler C, Stremlow M. 2008. Conceptualizing landscape: An evidence-based model with political implications. *Mountain Research and Development* 28(2):132–139.

* Baumgart K. 2005. *Bewertung landschaftsrelevanter Projekte im Schweizer Alpenraum: Die Methode der Discrete Choice-Experimente.* Bern, Switzerland: Geographica Bernensia.

Berger PL, Luckmann T. 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge.* New York, NY: Doubleday.

Bourdieu P. 1991. *Language and Symbolic Power.* Cambridge, UK: Polity Press.

Bourdieu P. 2001. Television. *European Review* 9(3):245–256.

Eden S. 2001. Environmental issues: Nature versus the environment? *Progress in Human Geography* 25(1):79–85.

Escobar A. 1999. After nature: Steps to an antiessentialist political ecology. *Current Anthropology* 40(1):1–30.

Gibson JJ. 1986. *The Ecological Approach to Visual Perception.* New edition [1979[1]]. Hillsdale, NJ and London, UK: Lawrence Erlbaum Associates.

Graeser A. 2000. *Bedeutung, Wert, Wirklichkeit: Positionen und Probleme.* Bern, Switzerland: Peter Lang.

Hall S, editor. 1997. *Cultural Representations and Signifying Practices.* London, UK: Sage.

Hannigan J. 1995. *Environmental Sociology: A Social Constructionist Perspective.* London, UK: Routledge.

Jäger S. 2001. Discourse and knowledge: Theoretical and methodological aspects of a critical discourse and dispositive analysis. *In:* Wodak R, Meyer M, editors. *Methods of Critical Discourse Analysis.* London, UK: Sage, pp 32–62.

Latour B. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory.* New York, NY: Oxford University Press.

* Liechti K. 2008. *Negotiating Sustainable Regional Development: The Relevance of Meaningful Spaces in Times of Change* [PhD dissertation]. Bern, Switzerland: University of Bern.

* Liechti K, Wallner A, Wiesmann U. Accepted. Linking a World Heritage Site to sustainable regional development: Contested natures in a local negotiation process. *Society and Natural Resources.*

Luhmann N. 2000. *The Reality of the Mass Media.* Cambridge, UK: Polity Press.

Mayring P. 2004. Qualitative content analysis. *In:* Flick U, von Kardorff E, Steinke I, editors. *A Companion to Qualitative Research.* London, UK, Thousand Oaks, CA, New Delhi, India: Sage.

* Müller U. 2007. *Die Kraft der Bilder in der nachhaltigen Entwicklung. Die Fallbeispiele UNESCO Biosphäre Entlebuch und UNESCO Weltnaturerbe Jungfrau-Aletsch-Bietschhorn.* Zurich, Switzerland: vdf.

Müller U, Backhaus N. 2007. The Entlebuchers: People from the back of beyond? *Social Geography* 2:11–28.

Rydin Y. 2003. *Conflict, Consensus and Rationality in Environmental Planning: An Institutional Discourse Approach.* New York, NY: Oxford University Press.

Stremlow M. 1998. Die Alpen aus der Untersicht – von der Verheissung der nahen Fremde zur Sportarena. Kontinuität und Wandel von Alpenbildern seit 1700. Bern, Switzerland: Haupt.

UNESCO [United Nations Educational, Scientific and Cultural Organisation]. 1972. *Convention Concerning the Protection of the World Cultural and Natural Heritage.* Paris, France: UNESCO. Also available at: http://whc.unesco.org/en/conventiontext/; accessed on 27 July 2009.

UNESCO [United Nations Educational, Scientific and Cultural Organisation]. 2002. *26COM 9 – Budapest Declaration on World Heritage.* Paris, France: UNESCO. Also available at: http://whc.unesco.org/en/budapestdeclaration/; accessed on 19 August 2009.

UNESCO [United Nations Educational, Scientific and Cultural Organisation]. 2005. *Operational Guidelines for the Implementation of the World Heritage Convention 2005.* Paris, France: UNESCO. Also available at: http://whc.unesco.org/archive/opguide05-en.pdf; accessed on 15 July 2009.

UNESCO World Heritage Centre. 2003. Jungfrau-Aletsch-Bietschhorn. *UNESCO World Heritage.* http://whc.unesco.org/en/list/1037; accessed on 15 July 2009.

Walliser Bote. 1998a. Skepsis hüben wie drüben [general article]. *Walliser Bote*, 26 March 1998, p 11.

Walliser Bote. 1998b. Erschliessung des Aletschgebietes? [General article.] *Walliser Bote*, 2 April 1998, p 23.

Walliser Bote. 2000a. Unesco – muss das sein? [Letter to the editor.] *Walliser Bote*, 7 March 2000, p 19.

Walliser Bote. 2000b. Unesco World Heritage List – Jungfrau/Aletsch [letter to the editor]. *Walliser Bote*, 9 March 2000, p 25.

WEMF AG. 2004. *MACH Basic 2003*. Zurich, Switzerland: WEMF AG.

Werlen B. 2000. *Sozialgeographie.* Bern, Switzerland: Haupt.

* Wiesmann U, Liechti K. 2004. The contributions of World Natural Heritage Sites to sustainable regional development – Two case studies from the North and the South. *Revue de géographie alpine – Journal of Alpine Research* 92(3):84–94.

* Wiesmann U, Liechti K, Rist S. 2005. Between conservation and development: Concretizing the first World Natural Heritage Site in the Alps through participatory processes. *Mountain Research and Development* 25(2):128–138.