

Landscape Development in Mountain Regions

Proceedings of the
ForumAlpinum 2007

18. – 21. April, Engelberg / Switzerland

www.forumalpinum.org




sc | nat 

Swiss Academy of Sciences
Akademie der Naturwissenschaften
Accademia di scienze naturali
Académie des sciences naturelles

Schweizerische Akademie der Geistes- und Sozialwissenschaften
Académie suisse des sciences humaines et sociales
Accademia svizzera di scienze morali e sociali
Accademia svizra da ciencias moralas e socialas
Swiss Academy of Humanities and Social Sciences



 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Umwelt BAFU
Office fédéral de l'environnement OFEV
Ufficio federale dell'ambiente UFAM
Uffizi federal d'ambient UFAM



Imprint

Distributor

Austrian Academy of Sciences Press, Vienna

Editors

Prof. Heinz Veit, Dr. Thomas Scheurer, Dr. Günter Köck
International Scientific Committee on Research in the Alps ISCAR, www.iscar-alpineresearch.org

ISBN Online: 978-3-7001-3940-9

doi: 10.1553/forumalpinum

Local scientific committee

Prof. Heinz Veit (ICAS / ISCAR / University of Berne), chair, Susanne Grieder (ISCAR / Swiss Alpine Museum), Dr. Christian Gysi (Schweizer Alpen-Club SAC), Dr. Stefan Husi (National Research Programme NRP 48), Sylvia Martinez (Swiss Biodiversity Forum), Prof. Jon Mathieu (ICAS / University of Lucerne), Prof. em. Bruno Messerli (University of Berne), Christian Preiswerk (Swiss Academy of Sciences SCNAT), Dr. Raimund Rodewald (Stiftung Landschaftsschutz Schweiz), Dr. Engelbert Ruoss (ICAS / ISCAR / UNESCO Biosphere Entlebuch UBE), Dr. Thomas Scheurer (ICAS / ISCAR), Andreas Stalder (Federal Office for the Environment FOEN), Urs Steiger (Swiss National Research Programme NRP 48), Marlis Zbinden (Swiss Academy of Humanities and Social Sciences SHS)

Partners:

Swiss Academy of Sciences SCNAT, Swiss Academy of Humanities and Social Sciences SHS, Swiss National Research Programme NRP 48, Federal Office for the Environment FOEN

International scientific committee

International Scientific Committee on Research in the Alps ISCAR:

Prof. Heinz Veit (University of Berne, chair 2005-2006), Dr. Loredana Alfaré (IMONT, Rome), Prof. Axel Borsdorf (University of Innsbruck), Prof. Philippe Bourdeau (University Joseph Fourier, Grenoble), Dr. Anton Brancelj (Slovenian National Institute of Biology, Ljubljana), Dr. Jean-Jacques Brun (CEMAGREF, Grenoble, chair 2007-2008), Susanne Grieder (Swiss Alpine Museum, Berne), Prof. Horst Hagedorn (University of Würzburg), Prof. Dietrich Herm (University of Munich), Dr. Günter Köck (Austrian Academy of Sciences, Vienna, guest), Ivan Kreft (University of Ljubljana;), Dr. Massimo Pecci (IMONT), Dr. Christian Preiswerk (Swiss Academy of Sciences SCNAT, guest), Prof. Roland Psenner (University of Innsbruck), Dr. Engelbert Ruoss (UNESCO Biosphere Entlebuch UBE), Dr. Thomas Scheurer (ISCAR office, Berne), Marlis Zbinden (Swiss Academy of Humanities and Social Sciences SHS, guest)

Editorial staff and production

Dr. Günter Köck (Austrian Academy of Sciences, Vienna)
Dr. Thomas Scheurer (ISCAR office, Berne)
DI (FH) Vittorio Muth (Austrian Academy of Sciences, Vienna)
Mag. Herwig Stöger (Austrian Academy of Sciences, Vienna)
Vera Kaufmann (ISCAR office, Berne)

Layout

Vera Kaufmann (ISCAR office, Berne)

Translation & Proof-Reading

Margret Powell-Joss, Berne

Veit H., Scheurer T., Köck G. (Ed's.) 2007: Landscape Development in Mountain Regions. Proceedings of the ForumAlpinum 2007, 18. – 21. April, Engelberg / Switzerland – International Scientific Committee on Research in the Alps ISCAR. – Vienna, Austrian Academy of Sciences Press. Digital Edition.

ISBN Online: 978-3-7001-3940-9; doi: 10.1553/forumalpinum

used as „material“ and a medium for appropriation and attachment processes by populations, both at a national and local scale. Landscape is a kind of „cement“ binding local communities, as well as a means of projecting a positive image of this society towards the outside world.

Three examples provoked discussion:

- The case of Mont Aiguille: an emblematic landscape showing a very unique and legendary mountain, which has been very well known since the 15th century. It can be found on many brochures, packaging, postcards, etc. It certainly functions as an emblem and a source of attachment for the people of the nearest area (Trièves), for whom the peak is a feature of everyday environment. However, this is not true for all the inhabitants of the Vercors massif. Mont Aiguille is more a showcase, an „advertising landscape“ for the Vercors, the Dauphiné, and even the North of the Alps. This example shows that identity-building capacity depends on scale.
- The case of Valchevrières (Vercors): this small village was destroyed by German troops in 1944 as a reprisal; since then, it has become a „memorial“ to the Resistance: the ruins continue to exist, the meadow is mowed, the woodland and scrub are cleared, etc. Various notice boards all around the site tell of its history. Here the landscape is part of the testimony; its sacredness may induce meditation. But surveys show that the location is more connected to the memory of World War II and national identity. The local population does not express a real attachment; they might prefer to forget. This example allows us to focus on relationships between identity and memory.
- Is a golf club a modern landscape? This landscape is extremely well appreciated by the local population because it was created on an abandoned area. Now the forest is cleaned, the grass is green and perfectly cut, some statuesque trees have been preserved in the golf course. This is an example of a totally artificial mountain landscape, an example demonstrating that identification and attachment not only refer to heritage and tradition but also to recent practices and sceneries.

The workshop also addressed issues of forest landscapes and peri-urban landscapes in mountains.

All these examples try to converge on the main idea, i.e. the fact that the construction of collective identity is a permanent process; that expressions of identity change as populations and territories change; that identification is based on memory or lack thereof, and on transformation and adjustment. It is generally more relevant to study processes and „materials“ used by the population to build and express different forms of identity, rather than to try and fix a „local identity“ as a well-defined object.

1.3.4. Toponymy and Geoheritage in the Alps – cultural approaches in geoheritage research

Workshop 1/4

Moderators:

Isolde Hausner (Austrian Academy of Sciences, Vienna, Austria)

Emmanuel Reynard (Institut de Géographie IGeL, Université de Lausanne, Switzerland)

Geological and geomorphological processes and dynamics drastically influence alpine landscapes, and shape the main valleys in the Alps. Geoconservation and geoheritage research, however, is poorly developed in this region. Landscape studies are mostly concerned with aesthetic and biological aspects (landscape as habitat) and do not really examine the geological and geomorphological characters of alpine landscapes.

This workshop aimed at considering the topography of alpine landscapes from two perspectives, focusing on the importance of geology and geomorphology (geoheritage) for a complete analysis of the alpine landscapes, and on the contribution of cultural studies and linguistics (toponymy) to the analysis of alpine topography and geomorphology.

The introductory paper by Emmanuel Reynard (University of Lausanne) provided an overview of geoheritage research (assessment, mapping, geoconservation, geoparks, geotourism) currently being developed in Alpine countries. Isolde Hausner (Austrian Academy of Sciences) illustrated how cultural studies can contribute to geoheritage research by providing information on the relationship between a given society and its natural environment. The discussion following these papers had a wider scope.

Geoheritage conservation in the Alps

Several biotical alpine elements in the Alps (i.e., *ibex* or *edelweiss*) have been protected for several decades. Although the geological structure (i.e., folds) and geomorphological features (i.e., glaciers, alluvial valleys or karstic areas) form the skeleton of alpine landscapes, their geoheritage is poorly known and protected in the various alpine countries. Especially in the ski areas at high altitudes, several landforms and „mineral landscapes“ have been damaged, and even destroyed, by ski tracks and artificial snow-making infrastructures. One explanation of the weak protection of the abiotic heritage is the poor knowledge of Earth sciences among stakeholders and the general public. Another reason is an inaccurate perception of the value of geoheritage: the common view is that geology and landforms are quite stable and solid; the dynamic nature of geological and geomorphological features is not well perceived. Therefore, geoheritage

fragility is poorly taken into account during environmental impact assessment procedures.

Geoheritage of interest not only to geoscientists. Some sites integrate other interests in the ecological, cultural, and even economic domains. In heritage actions and studies, the abiotic heritage should therefore be integrated with ecological and cultural aspects of landscape in order to obtain a global view. One way of creating links between geosciences and cultural studies is the study of toponymy.

Mountain and alpine pasture toponyms in East Tyrol

The second paper presented the main results of the project *ALPKULTUR – cultural-historical documentation of toponyms in the alpine space: Mountain and alpine pasture toponyms in East Tyrol*. The project focused on toponyms and their cultural-historical value. In the workshop affiliations to geoheritage were pointed out. The following highlights relating to examples from the corpus were discussed.

References to geomorphological and topographical features mainly occur in the names of mountains: One motive of naming is a reference to the rock or its composition, as for instance *Kristallkopf*, *Kristallspitzl* or *Kristallwand*. These names are very rare and every single case requires verification that the name is actually geologically motivated (rather than being a metaphor for ice or similar phenomena). A more common form of naming is the reference to salt in names like *Salzkopf*, *Salzkogel*, *Salz-*

klamm. The mineral was important for livestock farming. Names like *Schlatenkees* (the name derives from slavic **slatina* „sour water, carbonized water“, and is applied to a location above the so called *Salzboden*) show that people have been aware of the value of these places for a very long time. A reference to ore is contained in the name *Rudnik*, derived from slavic **rudnikъ* which means „ore mountain“.

A frequent naming motive that hints at special kinds of stone is colour (*fig 3*). *Red*, for example, in Osttirol is commonly used for rocks whose colour is derived from inclusions of iron discharged by weathering and oxidation. As the name *Cimaross*, derived from Romanic **cima rossa* „red peak“, shows, this naming motive also is very old. The names *Blauspitze*, *Blaues Hüatle* and *Blaue Knöpfe*, however, are situated in a zone of green schist, where the typical blue scree below the summits motivate the name.

Rural metaphors are commonly used to describe mountain shapes. In certain cases they also depend on the stone. The dialect word *Schober*, for example, designates a cone-shaped haystack. Mountains bearing these metaphorical names (e.g. *Hochschober*, *Kleinschober*, *Schoberköpfl*) typically are situated in areas with primitive rocks rather than limestone.

Some names also refer to the weathering phenomena in the rock and its results (moraines, scree). The *Falmorit*, for example, derives from Romanic *vall* „valley“ + Proto-Romanic **marra* „debris“ + the Romanic diminutive suffix *-ittu*. The meaning of *Falmorit* would therefore be „valley strewn with small-sized debris“ (i.e. scree).

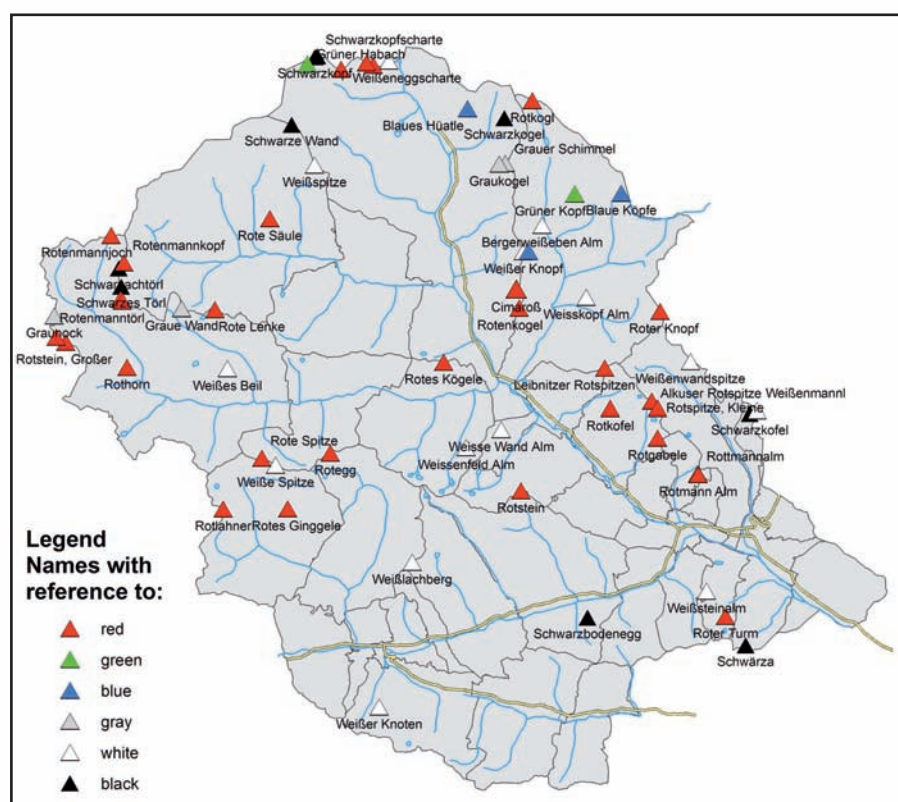


Fig. 3: East-Tyrolean names with reference to a certain colour

Conclusions and perspectives

In evidence there is a close relationship between the geomorphological realities of a certain area and its toponyms. Interdisciplinary research, especially with geology, is the only way to obtain further results in this interesting field of onomastics. A further result of the workshop was that the onomastic research could be extended to the relatively new topic of soil conditions. This would affect toponyms referring to weathering phenomena etc., as well as to vegetation, and might provide a missing link between geomorphology and biology.

An ideal approach to elaborate this interdisciplinary method could be a joint project of these two disciplines in a certain area, for example a national park.