

Microscopic picture on mylonite. Photo by K. Kinnunen

Geoaesthetics

Art in geology, geology in arts

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The nature offers us many aesthetic sensations. Indeed, the nature is a "great artist". The geological processes are its instruments. The beauty of landscapes is one of its most common aesthetic expressions. How many of us have admired

Microscopic picture on mylonite. Photo: K. Kinnunen
the beauty of landscapes, representative outcrops,

wonderful minerals, and fossils, and geological phenomenon, such as volcanic eruptions, ice-bergs, sedimentation, erosion, etc.?

What are those sensations that we experience? These are a mixture of feelings where the aesthetics, the wonder of the nature and the majesty of geological processes assault our minds and hearts in the form of art.

The relationship of art and geology has been treated by painting, photography, poetry, sculpture, installations, and performance. This relationship is called here as geoaesthetics. It can be defined as



Nocturne lava shower at Stromboli. Photo by A. Heikkilä

"Aesthetics produced by natural geological processes, such as rocks, or by man, when he uses geological elements or concepts to produce art".



Orbicular rock. Photo by J. Väätäinen

Therefore, the geoaesthetics comprises rocks, formations, minerals, landscapes, natural monuments, outcrops, and structures, as well as geological and geophysical maps, the use of rocks or other geological elements in decoration, architecture, and Land/Earth art. The post-modern, avantgarde antiart view (e.g. Dadaism) according that everything can be considered as art, anyone can produce it, even the nature.



A tree and rocks. Photo by the author



Sedimentary structures as a painting. Photo by the author



Understanding these issues as art is a subjective feeling, a matter of taste. However, a person does not need to be a geologist to see beauty in those phenomena. Indeed, usually it is easier to layman perceive the aesthetics in geology than for geologists. Although geologists see their field from the scientific, applied and aesthetic points of view, unfortunately many of us prefer to view geology only as a science or applied benefit for the society.

But when acknowledging the importance of aesthetic, it is easy to see that beyond its aesthetic pleasure, geoaesthetics can be used in geological education, nature tourism, Earth heritage conservation, landscaping, architecture, and arts in general.

Presentation made at The Aesthetics of Stone and Rock: International Conference on Environmental Aesthetics Koli, Finland, 06.-08.06.2007, <http://webit.pkky.fi/stoneconference/>

More pictures at the end of the newsletter.

Jenola's civilized butterflies. Jenola Caves, Australia. painting by Bruno Maximus 2006



Rainbow at the Monument Valley. Photo by T. Manninen

The Workshop on New Practices in Geodiversity for the Sustainable Development of the Regions.

(Sibiu , Romania ,8 -10 October 2007)

Dan Grigorescu, dangrig84@yahoo.com

The Workshop was organized by TAIEX (the Technical Assistance and Information Exchange – an instrument of the Directorate General Enlargement of the European Commission) ,the co-organizers of this event were the European Federation of Geologists , European Geoparks Network and Hateg Country Dinosaurs Geopark.

The workshop was attended by 68 participants from 24 countries,most of them coming from the new EU member states and from countries which have signed agreements with the European Commission for future EU enlargement. The delegates consisted of professional and university Earth scientists, representatives of Ministries of Environment, Tourism, Culture and Regional Development, representatives of regional authorities and organizations involved in regional development, land management, planning and tourism.

Among the participants were members of the ProGEO WG1 ,from Bosnia (Galiba Sijaric), Bulgaria, (Todor Todorov and Radoslav Nakov), Croatia (Ljerka Marjanac), Slovenia (Branka Hlad and Uros Harlec), Turkey (Hulya Inaner) and Romania (Antoneta Seghedi, Alex Andrasanu, Stanila Iamandei, Valentin Paraschiv and Dan Grigorescu) ,but also ProGEO members from other

countries (John Morris, Jonas Satkunas and Rein Raudsep).

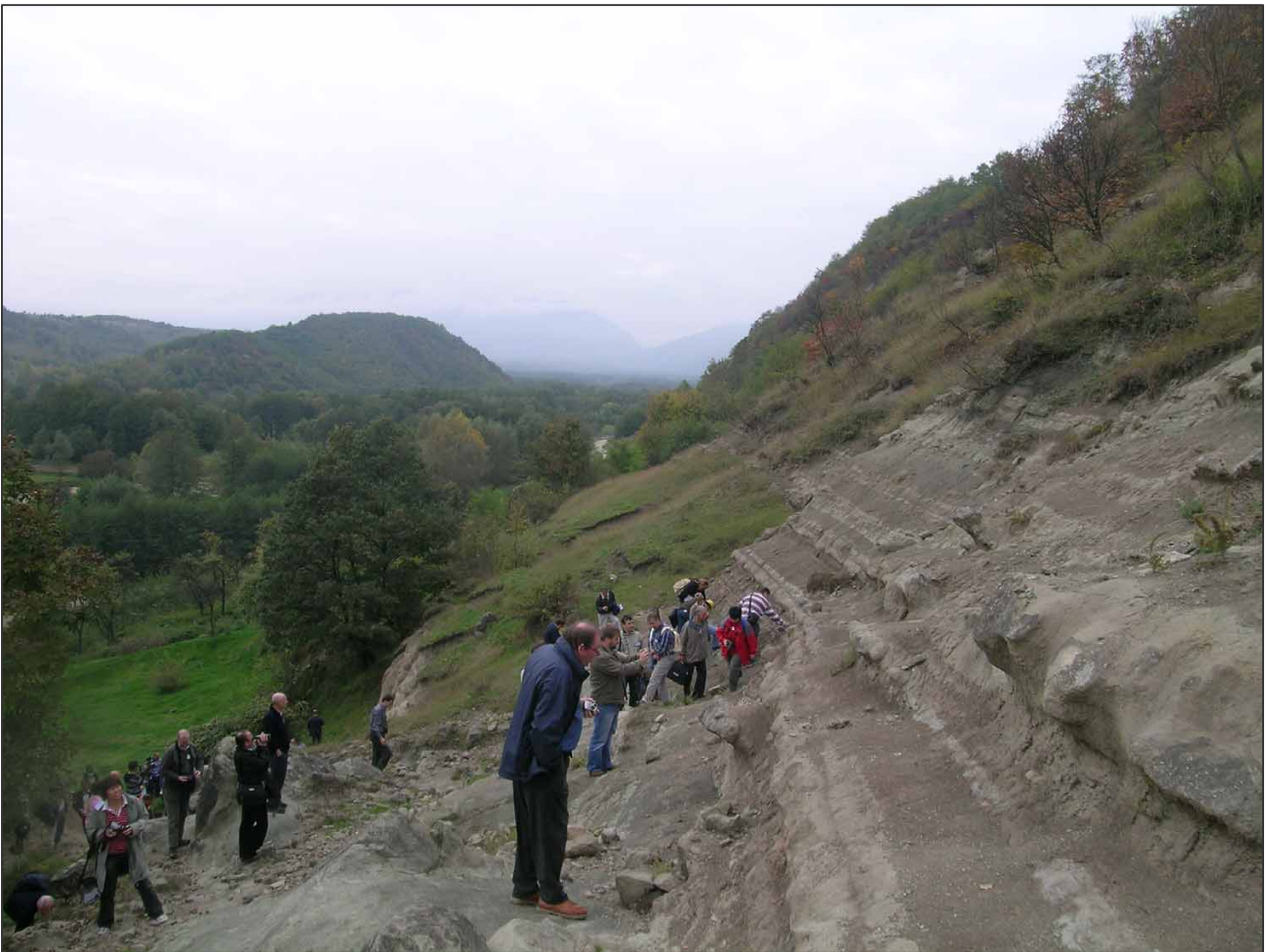
The main aim of the workshop was to present and to discuss practices related to the sustainable development of the regions based on an integrated management of the natural and cultural heritages within a region, an aim that is common to all Geoparks.

The Geopark provided the center of discussions, and several presentations made during the workshop sessions were based on case studies within several Geoparks. The speakers were from Hateg County and the Bergstrasse-Odenwald, VulkanEifel, Lesvos Petrified Forest, and Copper Coast Geoparks. The presentations ranged from the development and implementation of the Geopark management plan, to education, geotourism and involvement of the local communities. A presentation concerning the European Geopark Network and the role it plays in

sustainable regional development was made by Earls Garth, Director Geological Survey Northern Ireland .

Geodiversity, geoconservation and sustainable development were also considered in the Workshop in presentations delivered by Murray Gray from the University of London, John Gordon from the Scottish Natural Heritage and Hanneke van den Ancker, from the Geoheritage, Netherlands - who focussed her presentation on soil and the EU soil directive.

The second day of the workshop was devoted to a visit in the Hateg County Dinosaurs Geopark. The participants were guided to a geological site with remains of the "dwarf dinosaurs of Transylvania"- a symbol for the Geopark, then they visited the Densus church -the oldest church in Romania, dating from the 14th century and the School for Adult Education that was built in the commune General Berthelot, for ensuring professional retraining of the local people, one of the Hateg Geopark's objective. Here the



Examination of one of the geological sections (Sibisel valley section) from the Uppermost Cretaceous continental deposits of the Hateg Basin that provided numerous dinosaur bones



Three ProGEO WG1 members in front of the Santamaria castle from Hateg

participants met with local inhabitants , most of them peasants and together, they had a lunch offered by the administration of the commune.

The meeting with the local community continued in the Hateg town-hall where the participants had the opportunity to visit an exhibition depicting the natural and cultural sites and activities of the Hateg Geopark. Several panels illustrated the university students' work and contributions in different fields related to the Geopark objectives. These included scientific research, the organization of sites and architectural renovation of the old houses which are abundant in the region. The exhibition also included representative geological samples from the Geopark among which nests with dinosaur eggs were highly appreciated. The visit in Hateg ended with a meeting with members of local communities including teachers, professors, farmers, rangers in the

Geopark, directors of enterprises, representatives of NGOs and mayors. It was a good opportunity for the participants in the workshop to ask questions related to the methods of achieving the cooperation required in the development of the Geopark management plan.

At the end of the visit the participants expressed their feelings that "Hateg Country Dinosaurs Geopark" is an area where people live closer to Geology, and where visitors can breath the air of the "lost worlds" (quotation from one participant). Many attendees from Eastern European countries requested that the representatives of the EGN present in the workshop should facilitate the organization of regular consultations for those interesting in the creation of new Geoparks.

A message from the treasurer

Dear all,

Internet technology is moving forward and I am investigating the possibilities to do credit card payments over the internet! It is not complicated to do, but there are a few administrative things for me to straighten out.

This has been asked for by many members, and the reason that ProGEO has not done this earlier is simply because (which you all know by now) earlier solutions have been too expensive, too insecure and technically too complex. So, what has happened? There are today a few payment services that offer other kind of solutions. Maybe this will suit ProGEO.

SO – what is the next step for you? First of all, I want to thank those of you who have already paid the membership fee for 2008. If there is anyone else who finds it convenient to pay the usual way through bank transfer, please do that now. For the rest of you, I now ask you to please wait and not pay your membership fee at once. As soon as I have checked whether it will be possible for ProGEO to use an online payment service or not, I will send an e-mail to all members about how to pay. This concerns all individual members. Please note: I will still send out payment invoices to all Institutional members soon, who will be asked to pay the usual way.

Please know that – as always – the National representative in each country has the responsibility to keep national memberlists updated, and must also keep track on who has paid and who has not. This is then reported to me. Your individual responsibility is always to communicate with your National Representative. Whether or not you will pay individually or collect the fees and make a group payment, is entirely up to you. As you all know I am the end station, I must have correct information when it arrives, to be able to keep the financial books in order.

I sincerely hope that a credit card payment option will work out. Wait for my call.

Warmest regards,
Sven Lundqvist
ProGEO Treasurer, Webmaster

5th International ProGEO Symposium on Conservation of the Geological Heritage 1st-5th October 2008 Rab Is- land, Croatia

www.progeo-croatia.hr

The Organizing Committee welcomes all professionals and students whose work/research is dedicated or related to Nature conservation, geotourism, life-learning programs, education, management, sustainable development, planning and decision-making to participate in the 5th International Symposium on Conservation of the Geological Heritage. The Symposium will take place in the city of Rab, on the Rab Island in northeastern Adriatic Sea, Croatia, October 1st-5th, 2008.

The main aims of the conference are:

- To celebrate the International Year of Planet Earth by Symposium outreach activities
- To discuss threats and site loss, and constraints imposed by town and country (spatial) planning
- To promote activities of ProGEO working groups on European geosites
- To encourage national geoparks projects in the framework of sustainable development *
To discuss legal frameworks of national geoparks and their practical management
- To enhance geotourism and its potentials for regional developments
- To improve quality of communication between geoconservationists and the public

The conference will consist of 5 workshops covering:

- European geoheritage frameworks and geosites
- National geoparks for sustainable development: evaluation, legislation and management
- Geoheritage to public: outreach activities - who, where, what, how?!
- Geoheritage and protection in practice: recognition, conservation, threats and practical management - good examples and possibilities
- Geotourism: new potentials for regional development

NB Deadline for submission of abstracts: April 15th !



It will be arranged several field trips:

- Vela Draga protected geomorphological monument. Labin Coal mining museum.
- Recent travertine formations, spectacular waterfalls (Plitvice National Park). Caverns and the site of Pleistocene fauna (Cerovačke pećine). Fossil flora of Upper Carboniferous age (Ričice site). Glacial and periglacial deposits - evidence of Middle Pleistocene glaciation of Dinarides (Paklenica National Park), spectacular outcrops!
- Middle-Upper Permian cemented reef (Baške Oštarije site). Organic-matter rich fossiliferous limestones of Middle-Upper Permian age (Velnačka glavica protected geological monument). Alluvial deposits of Eocene age (Promina Fm.), spectacular outcrops in Krka River canyon. Travertine formations and waterfalls of the Krka River (Krka National Park). Glacial and periglacial deposits - evidence of Middle Pleistocene glaciation of Dinarides (Paklenica National Park).
- Shallow marine platy limestones of Eocene age, very rich in ichnofossils (Benkovac site).
- Geotrails on the Island of Rab.
- Geology of the Lopar Peninsula, sequence stratigraphy of Lopar Sandstones. Modern coastal processes, modern stromatolites.

The island of Rab hosts a national Geopark and celebrates 120 years of tourism in 2008. The population of ca. 9000 inhabitants are proud of their cultural and natural heritage, and the island serves as a good example of sustainable development.

IGC 2008, Oslo

<http://www.33igc.org/coco/>

Relevant symposium: Geoheritage and Society

Consisting of:

IES-01 General contributions to geoheritage and society *Antony J. Reedman, Chris Woodley Stuart, Jiang Janjun, Pasquale Li Puma, Afia Akhtar (EGN, AGID, GGN):* "Geoheritage", literally meaning that which is, or may be, inherited from the earth, is a particularly wide-ranging subject. The ways in which a nation's populace interacts with its geoheritage determines much of its national character. Symposia IES-2, IES-03 and IES-04 (see below) deal with such practical topics as geotourism, conservation, the establishment of geoparks and their management and the relationship between geoheritage and education, but discussion of the many other topics related either nationally or internationally to the broad concept of "geoheritage and society" will be addressed in this symposium. Contributions are welcome.

IES-02 Earth heritage: Science, education and capacity building *Peter Bobrowsky, Robert Missotten, Zhao Xun (IUGS, UNESCO, GGN):* The appreciation we share with other geoscientists and the public at large for beautiful landscapes, unique geological features and active geological processes provides a basic tenet for the concept of GeoHeritage. Underlying the need for preservation, conservation, public outreach

and geotourism, rests a disciplinary obligation to better communicate the science of geology to the wider global community. The purpose of this session centres on identifying what elements of existing geological heritage or outreach initiatives are amenable to detailed scientific analysis, what social benefits arise from the study of such initiatives and how do such public outreach initiatives transform geological observations into information readily assimilated by the general public. Do these initiatives provide an inroad for education in developing countries, why raise awareness in new initiatives such as geoparks instead of traditional means of teaching and education and so on. This session provides scientists interested in geological heritage research, outreach and education an excellent opportunity to share in case study successes and failures, help focus the future direction of such initiative and network with others who share common interests in these related topics.

IES-03 Geosites and landscape - conservation and management strategies *Jose Brilha, Emmanuel Reynard (ProGEO, IAG):* Geoconservation has a history of more than 100 years. Strategies and practices vary. To improve its position it is important to develop the field in a wide perspective, linking local interests with national and international efforts, geology with landscape and conservation with use.

The session deals with pragmatic issues regarding the establishment of conservation and management strategies concerning geoheritage.

IES-04 Geoparks and geotourism *Nickolaos Zouros, Patrick McKeever (EGN):* Today, when we think of geological heritage many, naturally, think of places such as Iceland, the Pacific Ring of Fire, the Grand Canyon or the Giant's Causeway. However, right across our planet there are rocks, landscapes and places that provide evidence of particular moments in the common geological history of our planet. In some of these places local communities have established initiatives not only to help protect and conserve these special places but also to educate the wider community about their importance and, where appropriate, to develop some of these places into sustainable tourism attractions. These "geoparks," under the auspices of UNESCO, have rapidly gained the attention of the public and are now a key element in bringing the importance of Earth Science to a wider audience. This session examines the role geoparks have played to date in promoting Earth Science and in using our geological heritage to bring sustainable economic development to local communities. It will also examine the future development of the geopark initiative and critically look at the lessons learned to date.



Grand Canyon. Photo by T. Manninen



Fold in metavolcanic rocks. Photo by the author Toni Eerola



Geologists observing a geologic map. Photo by the author Toni Eerola



A performance at a migmatite wall. Photo by D. Aguiar

Deadline for the next issue of ProGEO NEWS: 10.06.2008

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