### INTERVIEW WITH ANDREJ KRANJC

conducted by Nataša Ravbar

Andrej Kranjc is a world-recognized karstologist and speleologist for his achievements in karst geomorphology, hydrology, cave research, karst terminology and history of karst science. In 2013 he celebrated his 70th anniversary. As his student and colleague I took this opportunity to present some highlights of his life and work.

Despite being retired already since 2010, he is currently a Vice-President of the Slovenian Academy of Sciences and Arts. During our relaxing and amusing conversation in his office over a cup of coffee the present interview arose.

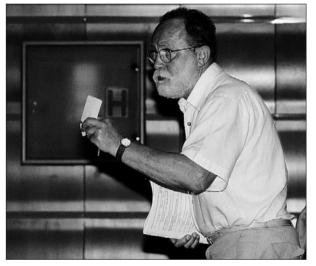
### Andrej, how did you get acquainted with karst and became close to it?

Oh, this was a long time ago. I knew well Stane Pirnat who was living in the neighbourhood and we hang out together. When he was already a caver, he invited me to join him caving in Matjaževa jama under Šmarna gora close to Ljubljana. This was the first non-tourist cave I visited. Later, when I was already in high school, Dušan Novak, a geologist, made publicity of caving and speleological section of Planinsko društvo Železničar (Mountaineering Club Železničar). I decided to join it.

In the frame of this section I often went with Jože Bole and Boštjan Kiauta who were spelebiologists, collecting snails into caves in the surrounding of Domžale and Moravče (N and NE of Ljubljana). I had to carry textile bags and gather soil where Bole was searching for snails. Sometimes I also joined Dušan Novak at a field work carrying samples of rocks.

So, I got involved in caves and caving. With the cavers from the speleological section I learned basics of caving and cave mapping. This then led me to get acquainted with cave biology which in the beginning interested me the most. I even wanted to study biology to specialize myself to cave biota. However, I also like travelling. And just before I enrolled in University I changed my mind and decided for geography, because somehow I thought if I study geography, there will be more chances for travel.

In 1959 I was already a caver. Nada Čadež Novak and later Peter Habič worked on tracer experiments. I joined their teams for manual sampling, because at that time there were no automatic samplers. We were sampling at the Rižana, Lintvern and other springs. Every year I spent about a month in the field, camping near the springs and taking samples when necessary. I liked this very much and a lot of interesting things happened.



Andrej Kranjc chairing a session at the 14th International Karstological School "Classical Karst" in Postojna in 2006 (Karst Research Institute Archives).

Your scientific work is entirely devoted to karst and caves, from the diploma, master and doctoral thesis, to the most recent scientific and popular publications. Your doctoral thesis from 1987, was dedicated to the fluvial transport in karst. Unfortunately, the work was rather overlooked, unacknowledged and mostly not known in that time. Yet the citations, mostly in foreign literature, show that the work received some international response. What, on your opinion, is the highest achievement of your thesis?

This is difficult to say. At that time the research trend was to study fluvial or recent cave sediments. In England there was Peter Bull, who made thorough studies on fluvial transport in karst. On my opinion the highest value of my thesis was that similar studies have not been done in Slovenia. And my research was the first –

that was important. Another aspect was the presentation how the transported material, the pebbles form. I think this was very interesting. I emphasized their origin and role in speleogenesis. For example, in Škocjanske jame at the beginning, where Reka River enters the cave system a lot of flysch pebbles are present and then downwards towards the siphon there is less and less of these pebbles, and they are smaller and smaller.

## Your mentor was prof. Ivan Gams, one of the leading persons of the international karstology. What did you learn from him?

A lot, but to summarize – I started to work under prof. Gams in 1965 for the preparations of the 4th International Speleological Congress that was held in Postojna and Ljubljana. He needed somebody for help. He asked students and I applied. I must say that I was not automatically accepted, but had to pass typing test. I worked four months for organization of this congress.

Then when I studied geography, prof. Gams just started to give lectures at the university. Before that he was employed at the Karst Research Institute in Postojna. I was in the first generation of his students. He introduced me to karst geomorphology and geography of karst. He impressed me with his enthusiastic lectures that were much more interesting in comparison to others. He also organized long and interesting geomorphological excursion going from Slovenia across Alps to France. The trip lasted for two or three weeks. We were a small group of 15 to 20 students and we had lectures practically in the field. At that occasion we learned a lot.

Prof. Gams was my supervisor for master and doctoral thesis. We often met for discussions. When meeting him he also introduced me to his colleagues Valter Bohinec, Svetozar Ilešič and Roman Savnik, all being eminent Slovene geographers. Gradually I was brought to their company and had the opportunity to discuss with them.

The period of your professional work is imbued with the Karst Research Institute (KRI) from Postojna that would without you not have the importance in world karstology as it has today. Did prof. Gams bring you to KRI in 1966 where you stayed employed until your retirement?

No, it was dr. Peter Habič. That was after I finished working for the Speleological Congress, it was decided to publish all the presentations and discussions from the Congress that have been recorded to tape recorder. That is how my part-time employment at the KRI started. This was rather ungrateful work, because the recording was of bad quality, it was impossible to recognize who is talking, the recorded sections were mixed. So, after all, most of the records were not published.

In summer 1966 I guided tours of foreign speleologist or karstologists who came to visit the cradle of karstology. A year later I was full time employed and was tasked to make preparation research for the motorway route between Postojna and Vrhnika. This was one of the first applied projects KRI was working on. My job was to map all the dolines that were in the route and to evaluate how much sediment there is on the bottom of these dolines. Every day I went mapping and occasionally drilling the bottoms of these dolines with a hand auger. A lot of material and data on dolines characteristics was gathered and I am very sorry that none of these was ever published. In quite some dolines that we selected even the whole material has been excavated and a lot of money invested so that we were able to see how the bottoms looked like. A lot of pictures and measurements were taken.

### In 1972 you made specialization in France, under the supervision of dr. Alain Mangin. What experience did you gain there?

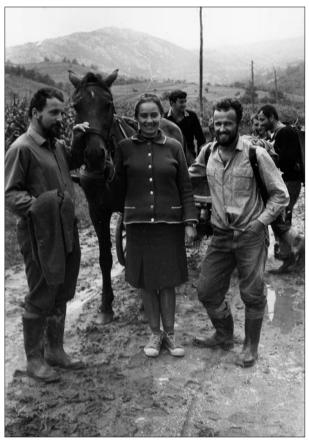
There were in fact two, on my opinion, very precious experiences. On one hand I absorbed a lot of knowledge on regional karst. Bernard Gèze, a very well known French speleologist and karstologist, together with dr. Mangin, organized a thorough trip across French karst for prof. Bleahu from Romania to show him most spectacular phenomenon. Luckily, it was possible for me to join them. The trip took us three weeks altogether and I experienced a lot.

On the other hand, I got the experience to see and feel, how research institutions abroad work. In that time working at a foreign institute was rarity and not a lot of my colleagues had such an opportunity. I must say that the manner of education and specialization in France was much different than in Yugoslavia.

My primary institution abroad was Laboratoire souterraine in Moulis, which was important institute. Dr. Mangin organized that I visited some other centres and professors in France who worked on karst. I visited prof. Nicod with whom I still have very good contacts, I can say we are friends. Dr. Renault who was specialized in sediments took me to Vercors Plateau for two days and we discussed sediments, because this was my specialization, and he explained me some aspects. Many of eminent professors I met gave me their doctoral thesis that I still keep at home.

In connection to your basic research you focused on the karst geomorphology, hydrology and cave climate. More than with the theoretical aspects you dealt with environmental issues, protection and conservation of karst. In later years, you devoted more to karst terminology and history of karstology. You are also known as a good expert in regional karstology. You have visited most of the famous karst places. Is there a region that you haven't been but you would still like to visit?

Oh yes, of course. I like travelling. This means that I would like to go everywhere where it is possible, not just to karst regions. Once, it is probably tens of years ago, I counted caves that I have been to, including very small ones, and I reached a number of 1,000 to 1,200.



Andrej Kranjc, local girl and Boris Sket on the way from Oha-ba-Şura Mare cave in Romania, August, 1968 (Andrej Kranjc archives).

And it is true, I visited karst areas in the whole continents, except in Antarctica, of course. I can say that I visited karst for example in North America, but the continent is so large that I only visited a small part of karst there. In South America I was three times in Brazil and at least two times I visited the same caves. I would still like to visit Magellan Strait and Tierra del Fuego to see the karst in marbles.

Between 1988 and 1995 you were the head of the KRI. Among others in 1993 following your initiative KRI started to organize International Karstological Schools that later grew into the main annual karsto-

logical events in the world. How do you remember this period? Some of our colleagues remember you as a very strict boss.

I wish I would have been stricter boss. I do not think I was strict enough. In general, I do not have nice memories on this period. There were problems with money. Also for Acta Carsologica printing we had high depths. At that time I did not sleep well, because I always had fear and worries, whether we would get projects or not. Because we did not have enough projects I had to fire some of very capable young colleagues.

And then there were also some disagreements among colleagues about the orientation, vision and priorities of the KRI. Some did not see it necessary to focus also on biological studies, even though it turned out that it would be good that we also oriented at least to ecology. I had the vision that a truly good research institution should be expanding not shrinking its capacities and that we should support young researchers, to educate and skill them, to ensure inheritance of our work.

For me it is better not to remember those days. But at least I managed that KRI did not go bankrupt or declined.

Regarding the International Karstological Schools it was actually dr. Zofija Klemen Krek, a Director of the Bureau of Slovenian National Commission for UNESCO, who took the initiative. At that time we were preparing proposal for Kras to be included in the UNESCO world heritage, so I had very frequent contacts with her. She offered financial help and Slovene "UNESCO" is still the sponsor of the School.

Related to your research work and publications including your large international connections, you were invited to join different international organizations, such as World Commission on Protected Areas, The World Conservation Union – Task Force for Caves and Karst, International Association of Hydrogeologists, Karst Commission of International Geographical Union, which chair you were, International Speleological Union, International Quaternary Research Association and others. Why do you think you were trusted such honourable, but responsible functions?

I considered these functions very seriously. I never tried to promote my research and ideas in these circles and forcing my mind. If necessary I told my opinion. Of course, if somebody needed my help, I was willing to do so, for example also to find results of other researchers, not only mine. Still now I am active in different committees and boards.

Between 1993 and 2010 you were the Editor-inchief of the leading karstological journal Acta Carsologica (AC). In 2007 you succeeded that the journal

## was included in the SCI (Thomson) bibliometrical system. How did you see the journal's mission then?

I think that especially in that time the journal developed from internal journal, publishing mostly results of the KRI, to what is now. Previously the authors were mostly researchers from the KRI, articles published almost entirely in Slovene. It was not a yearly publication, but only when there were enough papers. Presently AC cannot be called an international journal, because it is not: the editors, financers and most important driving wheels of the journal are Slovenes and it is published in Slovenia after all. But I think it has an international reputation, it is accepted by the distinguished authors and they like to have papers published in AC, despite the impact factor is not very high. It has the authors from all over the world, it is published in English. Now, you know better than me, that AC Editorial has problems of too many submitted manuscripts. So, I think AC really developed well. Also the appearance changed completely and I like it very much.

International and national recognition of your work is shown through the chairs or memberships of steering committees and boards, through awards like French Chévalier des Palmes Académiques, Award for research in Slovene identity, Golden medal of Slovene Geographical Society, membership of the Slovenian Academy of Sciences and Arts and through invitation to be a member of different scientific and editorial boards of leading journals on karst. Apart from the professional you performed a number of functions, primarily related to research and professional activities of the local, municipal to the republic level. However, many of readers probably do not know that you are also a war veteran.

Yes, I was a soldier in Yugoslav national army. During the Slovene independence war in 1991 I was involved in territorial defence and I was assigned a group for mobilization. One year before I had to report all my absence from Postojna because of this, and I was forbidden to leave Postojna a week before the war started.

During the war Yugoslav army wanted to get all the registers of people who can be mobilized from the communities. In Postojna this register was hidden in the KRI in my office for one week. Our commander and a soldier were also sleeping in my office for two nights, because Yugoslav army was searching it intensively. However, the register was safely hidden. At that time I also had to wear weapon, which did not make me feel very well. I am sorry that I have never seen or heard that KRI is thanked for this as an institution, although this thing was really very important.

Thanks to your vision and initiation, and to your persistence, the Postgraduate study of Karstology,

## unique of its kind was introduced in 2001. Did it take a lot of effort from the idea to the realization?

Its history is very long. At the KRI I made the proposal already at the end of 70ies that it would be good if we can have a study of Karstology in Slovenia. Many times at different political constellations we proposed it to different institutions like ministries, universities, research authorities and so on. I also informed the director of the Research Centre of the Slovenian Academy of Sciences and Arts, a part of which KRI is, dr. Oto Lu-



Andrej Kranjc in Jama v grapi, 1971 (Photo: France Habe, Andrej Kranjc Archives).

thar and it was him who passed the idea to the newly established Faculty of Humanities in Koper. He was very tightly engaged in its organization and the Faculty tried to offer something different than the rest of the Slovene universities. Later, in 2003, the programme was moved to the University of Nova Gorica.

In addition, I would like to emphasize that I just came back from China, from the meeting of the Scientific Committee of the International Research Centre on Karst under auspices of UNESCO at Guilin. A very old idea of mine is that KRI becomes an UNESCO's Karst research centre or that the programme Karstology of the University at Nova Gorica becomes an UNESCO Chair on Karstology. We started the procedure already years ago but I am afraid that we are too slow. As I recognized now in Guilin China and Hungary are in front of us already, which is a pity.



Andrej Kranjc, Janja Kogovšek and Alojz Vadnjal, 1976, in one of the Institute's field trips to Voje valley, Bohinj, Slovenia (Andrej Kranjc Archives).

# You also gave lectures at other faculties and have been a mentor to many researchers at home and abroad. What is the most important that you wanted to pass on to them, on to us?

The most important thing I wanted to teach my students is to be good, responsible and competent karstologist. I always said: You cannot know all the details, but you have to know karst, what it is, how it originates, where it is, who works on karst. And if the doctors of karstology are in circles discussing about karst, it is not important on which topic, either it is tourism in caves, paleomagnetic research or speleobiology, he or she has to know it, understand it and has to be able to be involved in the discussion. Of course nobody is specialist and knows everything, but a student of karstology has to have the general level of knowledge about karst quite high. This is the most important than he or she can become specialized for whatever interests him/her.

## What are your present responsibilities in the role of the Secretary-General of the Academy?

Nothing special. I am a part of the Executive Board. That means that I help the things at the Academy are going on. Academy is not very flexible, not very fast in reacting. In any case I am trying to combine this small occupation with my professional work. Sometimes it is possible to join and sometimes Academy helps me to go to the field or to participate professional meetings. For example this year I took part at the Academy exchange with Czech Academy in Prague and I combined it with the participation in International Speleological Congress at Brno. It was the same two or three years ago. When I made exchange with Russian Academy in Moscow, I visited northern Russia gypsum karst.

#### Besides karst what attracts you as well?

At home, I like wood chopping. In this way I can relax from office work. But my great passion, my hobby are books. My father in law was expert on Slavic languages and he had practically all modern Slovene literature and some foreign literature as well. I upgraded his collection. We now have too many books already. Practically everywhere in our house, where possible there are bookshelves, so books are everywhere. We decided at home that we will not buy books anymore, but just yesterday I saw an interesting book in a bookshop nearby and I will most probably buy it.

Besides this I initiated postcard collection in our family. I now handed over my relatively small collection to my son and I help him replenishing it. Especially when I am going somewhere, I always send him postcards. And I am also collecting stamps, but with karst and cave motives. The other motives I collect are birds. However, I am not a very serious collector.

## If you look at all these 70 years, what would you put in the forefront?

I have very little memory of my early, school ages. I have to say that I never enjoyed school very much. I had such traumatic experience that even ten years after I started to work I was afraid of Mondays. So, working was much more relaxing and I am happy that I could work on what delighted me.

## Andrej, thank you very much for your time and I wish you health and many more years to come.

Thank you. I hope only that my mind will serve me – it does not matter how long.