FROM THE NOTEBOOKS OF JOVAN CVIJIĆ
– Selected Pages and Interpretations –

ИЗ БЕЛЕЖНИЦА ЈОВАНА ЦВИЈИЋА
– прикази и тумачења –

PUBLISHERS / ИЗДАВАЧИ
Serbian Academy of Sciences and Arts /
Српска академија наука и уметности
Geographical Institute "Jovan Cvijić" SASA /
Географски институт „Јован Цвијић" САНУ

ACTING PUBLISHERS / ЗА ИЗДАВАЧЕ
Academician Vladimir S. Kostić / Академик Владимир С. Костић
Dr Milan Radovanović / Др Милан Радовановић

EDITORS / УРЕДНИЦИ
Dr Ana Milanović Pešić (Editor-in-Chief) / Др Ана Милановић Пешић (главни уредник)
Dr Jelena Ćalić / Др Јелена Ћалић
Dr Marko D. Petrović / Др Марко Д. Петровић
Dr Aleksandra Terzić / Др Александра Терзић
Dr Zlata Vuksanović-Macura / Др Злата Вуксановић-Мацура

TECHNICAL EDITORS / ТЕХНИЧКИ УРЕДНИЦИ
Jasna Micić / Јасна Мицић
Stefan Denda / Стефан Денда

REVIEWERS / РЕЦЕНЗЕНТИ
Prof. dr Ljiljana Gavrilović / Проф. др Љиљана Гавриловић
Dr Radomir Popović / Др Радомир Поповић

TRANSLATION / ПРЕВОД
Dejan Vukelić / Дејан Вукелић

DESIGN AND PREPRESS / ДИЗАЈН И ПРИПРЕМА ЗА ШТАМПУ
Aleksandar Kostić / Александар Костић

COVER PAGE DESIGN / ДИЗАЈН КОРИЦА
Dragana Lacmanović / Драгана Лацмановић

PRINTED BY / ШТАМПА
Službeni glasnik, Belgrade

CIRCULATION / ТИРАЖ
300 copies / 300 примерака

ISBN 978-86-7025-792-4 (SASA)
ISBN 978-86-80029-75-7 (GIJC)
Special issues, No 94

SERBIAN ACADEMY OF SCIENCES AND ARTS
GEOGRAPHICAL INSTITUTE "JOVAN CVIJIĆ" SASA

FROM THE NOTEBOOKS OF JOVAN CVIJIĆ
– Selected Pages and Interpretations –

Belgrade, 2019

On this occasion, we want to express our gratitude and recognition to the efforts of institutions and individuals whose help and engagement contributed to the creation of this publication.

It is with great pleasure that we thank the employees of the Belgrade City Museum, for kindly loaning the notebooks of Jovan Cvijić and other museum material for this publication. We owe our gratitude in particular to Tatjana Koričanac for her article about the legacy of Jovan Cvijić.

For providing support in preparing the publication, we thank Academician Aleksandar Kostić.

For the translation of texts originally written in German and professional-consulting services, we thank Dr Danica Nedeljković, Assistant Professor at the Faculty of Philology and Arts of the University of Kragujevac.

For the translation of texts originally written in French and professional-consulting services, we thank Dr Gaëlle Hallair, CNRS UMR Géographie-Cités, Paris, France.

We thank Dr Goran Vasin, Associate Professor at the Faculty of Philosophy, University of Novi Sad, for professional assistance in interpreting historical data.

We especially thank the reviewers, Dr Ljiljana Gavrilović, a retired Full Professor at the Faculty of Geography of the University of Belgrade, and Radomir Popović, Senior Research Associate at the Historical Institute of Belgrade, for their advice and suggestions that contributed to the quality of the publication.

* * * * *

A note on geographical names (toponymy):

Within this publication, the original geographical names are used in the form they appear on the official geographical (topographical) maps or official legislation. In cases of complex names containing three or more words, the complete geographical name is written when it first appears in each particular text, while a more concise version is used afterwards.

CONTENTS

NOTES IN SERBIAN
(1889–1893)

FOREWORD

The publication that is before the reader, entitled *From the Notebooks of Jovan Cvijić – Selected Pages and Interpretations*, is the result of cooperation between the Belgrade City Museum and the Geographical Institute "Jovan Cvijić" SASA. It has been prepared with a deep awareness of the importance of Jovan Cvijić's scientific research work and with the idea to present to the academic and general audiences less familiar details related to the research of Jovan Cvijić, data collecting and the preparation of visual materials, through a carefully organised and thoughtfully and professionally written book.

The primary task required a meticulous and thorough work on the analysis of extensive historical and archival material, fact-finding and data selection. Valuable data were then arranged so as to best reflect the field research of the great Serbian scientist. The texts accompanying the corresponding original pages from Cvijić's notebooks are written in a concise and structurally equable manner, in order to present selected details about his scientific work and indicate his views and opinions. Furthermore, each text also bears the personal signature of the author, expressed through the interpretation of the selected manuscripts.

At the beginning of the publication, the Museum of Jovan Cvijić is presented, along with the Legacy containing 42 of his notebooks registered in the inventory. The historical and geographical context of the notebooks is subsequently analysed in a separate text, followed by an overview of the dominant issues therein elaborated.

The latter part of the publication contains a number of shorter texts from different areas of Cvijić's scientific work, from the exploration of karst, glaciation, fluvial relief to anthropogeography and ethnographical studies. The texts often contain transcribed segments, with the intention of literally translating Cvijić's words, as well as providing a direct testimony of his scientific work and private and social life. In terms of their contents, the texts are intended for the professional audience, but in general they are also understandable to the average educated reader.

Finally, references appearing in individual texts are merged into the common list of references given in the last part of the publication.

The book *From the Notebooks of Jovan Cvijić – Selected Pages and Interpretations* encompasses the work of four editors, twenty-three authors and three associates – expert consultants. A feature of the publication is that it contains the original pages of Jovan Cvijić's fieldnotes and sketches that have never been published in their original form before. This is a publication with the most comprehensive presentation of this archival material so far. Previously, the first public release of certain pages from Cvijić's original notebooks was made possible through the publication *The Belgrade Atlas of Jovan Cvijić* (the catalogue accompanying an exhibition of the same name, held at the Gallery of SASA), published by the Belgrade City Museum and the Serbian Academy of Sciences and Arts (2015), whilst a total of seven pages from the notebooks were analysed in the monograph *Jovan Cvijić – Life, Work, Times*, published by the SASA and Geographical Institute "Jovan Cvijić" SASA (2015).

In 2015, 150 years elapsed since the birth of Jovan Cvijić, and last year marked the 70th anniversary of the founding of the Geographical Institute named after him. This book, originally published in Serbian in 2017 was a modest contribution of the authors and editors to these jubilees.

Taking into account the significance of Cvijic's work at the international level, we considered it very important to publish this book in English in order to make it available to the wider international scientific audience.

Ana Milanović Pešić

LEGACY OF JOVAN CVIJIĆ

The Memorial Museum of Jovan Cvijić, one of the museums operating within the Belgrade City Museum, is located in a family house built by Cvijić at the beginning of the 20th century on the site of the former garden of the Orthodox Metropolitanate of Belgrade (now at 5 Jelene Ćetković Street). In the house with basement, high parterre and garden lived and worked the well-known Serbian and Yugoslav scientist Jovan Cvijić (1865–1927), academician, researcher and author of a large number of papers in the field of geography and geology. The house has been declared a cultural monument of great importance since 1963, and the first permanent museum exhibition was opened within its premises in 1968.

Cvijić's home, constructed of harmonious proportions and well incorporated into a unique urban environment, along with surrounding buildings of a small square at Kopitareva Gradina, stands as a typical example of Belgrade's architecture at the start of the 20th century. It was built in the spirit of eclecticism with elements of Neo-Renaissance. The house's interior, especially the entrance hall, parlour, study and library, have retained their original wall decorations and objects of applied art made after the designs of Dragutin Inkiostri Medenjak, representing rare preserved examples of tendencies promoting the renewal of the Serbian national style in art.

Thanks to Jovan's wife Ljubica and later due to the care of her brother's descendants, the Krstić family, Cvijić's legacy was substantially preserved from the destruction of the Second World War, although a large portion of his library, notes and papers, as well as material concerning the study of settlements, went up in flames in the autumn of 1944, during the German bombing of the new building of the Faculty of Philosophy where the Geographical Institute had been located.

Nowadays, Cvijić's legacy is processed and arranged in compliance with museological standards, and the house itself is completely rehabilitated. The City of Belgrade is the owner of both the building at Kopitareva Gradina and the Jovan Cvijić Legacy. Cvijić's extensive correspondence is kept, processed and studied in the Archives of SASA,

providing a profound insight not only into his scientific, research and pedagogical work, but also into his responsibilities as Rector of the Belgrade University and President of the Serbian Royal Academy. Future research should certainly keep track of a considerable material stored in other public and private archives, not just those within the former Yugoslavia, but the eminent European archives as well.

The Legacy of Jovan Cvijić at the Belgrade City Museum consists of 1,467 items with the status of cultural goods. The Legacy is of complex nature, containing manifold material such as manuscripts, correspondence, documents, photographs and photographic records, books, magazines, geographical maps, objects of applied and fine arts, personal belongings, diplomas, medals and furniture, representing an authentic testimony of the life and work of Jovan Cvijić and a unique source material for scientific processing and museum exhibitions.

A selection of representative items – exhibits from the Legacy of Jovan Cvijić – is offered by the Museum, depicting him as a worthy and restless scientist of extraordinary intuition and working abilities, but also as a person of great fruitful strength and emancipatory energy. The complexity of Cvijić's personality and the multiplicity and multitude of his engagements are pretty suggestive. These activities include scientific research of karst and writing papers in the field of geomorphology, setting up foundations of scientific geography and establishing the first scientific and educational institutions of geography in Serbia, organising research trips to the Balkan Peninsula and acquiring anthropogeographic knowledge of its population. Also notable are his activities whereby he, being a responsible intellectual, put himself at the service of national and state interests, making efforts to establish national institutions during peacetime, and propagating Serbia's war objectives or the idea of the unification of the South Slav nations during wartime.

Until recently, it was thought that, apart from Cvijić's manuscripts, the fire likewise consumed his other papers and records housed in the Geographical Institute. However, his wife Ljubica preserved many of Cvijić's letters, concepts of manuscripts and notes, written on little pieces of paper or arranged as small bound notebooks he always carried with him and kept near at hand. In these tiny notebooks

he made notes during seminar classes at the Faculty of Philosophy in Belgrade.

We know that Jovan Cvijić had 42 notebooks, he kept a sort of "logbook" during his research trips. The drawings, comments and notes in Serbian, English, French and German, made *in situ* all across the Balkan Peninsula and European regions, are still unresearched material, precious in terms of reconstructing Cvijić's work and methodology of discovering scientific evidence in the field. Of those dated, the earliest known notebook dates from 1898, and the last 1925. Through further analysis and interpretation of the undated field notebooks, additional datations and site reconnaissance are very likely to occur.

Jovan Cvijić paid great attention to collecting field data, undertaking the exploration of numerous and diverse natural and social geographical (and not only geographical) phenomena, processes, features and events, hence the preserved notebooks represent original and invaluable research material. He maintained that this was a very important part of the work, considerably contributing to the understanding and determining of sites and activities within a particular terrain, where the cause-and-effect relations, as well as similarities, convergences and differences in relation to the neighbouring regions can and must be emphasised. The material gathered on field trips had been and remained the basis of his entire scientific work.

Not sparing himself physically, Cvijić would walk tirelessly, crossing through Serbia, Montenegro, Bosnia, Herzegovina and the surroundings of Thessaloniki. He climbed Mount Olympus, explored the Bosphorus and the Dardanelles and descended into the caves of the Dinaric and the Trieste karst. From the peak of Midžor he observed the giant Rila Mountain at whose highest sections he investigated traces of glaciation. He visited the area of Đerdap, mapped the Vlasinska Tresava [Vlasina peat-bog], explored the Boka Kotorska Bay and undertook excursions to the Scandinavian fjords. He visited Karlovy Vary, mounted on the crags of the Alps, and likewise paid visits to the Crimea, the Jajla Mountain, Sicily and the Aeolian Islands.

During the trips, Cvijić made detailed notes and sketches he would later sort out upon returning to Belgrade, giving lectures on the obtained results and publishing articles and books. In doing so, he abstracted the description and romantic enthusiasm in geography. In his works, he insisted on the genesis, the evolution of phenomena and processes, dialectical unity, on merging and permeation, similarities and differences, zonality and azonality, realities of life and the development of human communities. He did not highlight the practical side of his discoveries, but, as time went on, it came on its own, based on proven scientific truths.

Tatjana Korićanac

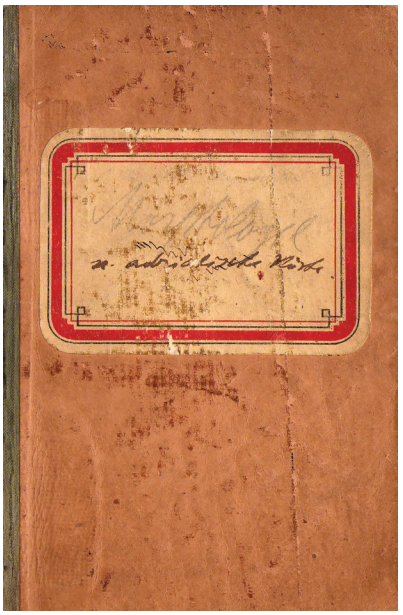
HISTORICAL AND GEOGRAPHICAL CONTEXT OF CVIJIĆ'S NOTEBOOKS

Out of a total of 42 notebooks from the museum collection, the ones available in electronic format, comprising 23 notebooks with a total of 1,762 pages, have been analysed. Special emphasis has been placed on texts written in Serbian, containing a variety of scientific themes and a large geospatial coverage. Due to technical reasons, it was difficult to interpret manuscripts written in German and French, so they are analysed in smaller number, reflecting, nevertheless, the editorial board's effort to include them into the presentation of Cvijić's overall legacy.

Jovan Cvijić was born in Loznica on the 11th or 12th of October (28–29th September Old Style) 1865, and details of his life and education can be found in a book he published in 1923 under the title *Autobiography and Other Writings* (edited by Stojančević, 1965). What we are about to dedicate our attention to concerns his way of organising work and the system of observing the phenomena and processes he studied, as evidenced by the notebooks that have been examined and described for this occasion. However, one should also look at a specific historical account of all the momentous events recorded precisely in these notebooks.

In 1889, upon completing his studies at the Belgrade Great School, Cvijić went to pursue further studies in Vienna, under the auspices of the Ministry of Education of the Principality of Serbia, and there he remained for three years. He attended lectures and passed all exams with excellent grades in general geography, mathematical geography, hydrology, geomorphology, geotectonics, geology, historical geography, anthropogeography, meteorology, and he also participated in the work of seminars and research excursions. More concrete details concerning his studies and curriculum in Vienna can be found through direct insight into the themes explored in certain notebooks written in German (a total of 9 notebooks), since each of these notebooks is neatly marked with an adequate subject matter – geology, morphology, loess, hydrology, meteorology, etc. His professors were the world-renowned geotectonist Eduard Suess, the geomorphologist Albrecht Penck, Julius Han, meteorologist and climatologist, Wilhelm Tomaschek, founder of the famous scientific school of historical geography, and others. On the 12th or 13th of December 1892, Cvijić

Jovan Cvijić, studio portrait, 1909 (Source: Belgrade City Museum, Legacy of Jovan Cvijić)



Jovan Cvijić's notebook

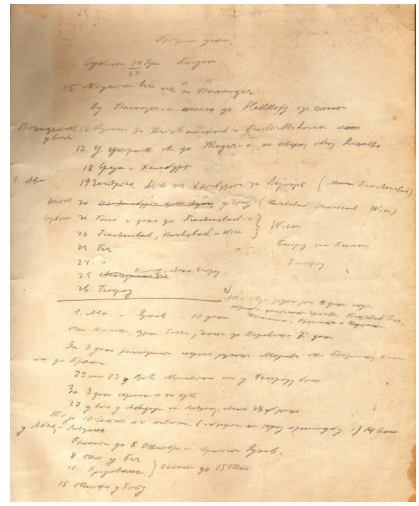
defended his doctoral disertation entitled *Das Karstphenomen. Versuch einer morphologischen Monographie*, written under the supervision of Albrecht Penck. On the 11th of January 1893 he passed the Rigorosum (doctoral oral examination or state exam) in philosophy and psychology, thus completing his studies of geography at the University of Vienna (Stanković, 2015). Cvijić's doctoral dissertation would launch him as a world-renowned scientist, hence it has often been earmarked as a scientific work of lasting value in the field of exploration of karst terrains.

Jovan Cvijić returned from Vienna to Belgrade in mid-February 1893, and already by the end of March was appointed professor at the Higher School of Scientific Geography and Ethnology by the decree of the Ministry of Education. In the same year, he founded the Geographical Institute at the Great School, the forerunner of the present-day Geographical Faculty of the University of Belgrade, which he headed from 1893 to 1927, and within whose institutional framework he conducted most of his scientific research (Stanković, 2015). Being absorbed in the overall geographical problems of the Balkan Peninsula, Cvijić established the Geographical Seminar, as early as 1894, and that same year he launched the journal *Review of Geographical, Geological and Meteorological Literature on the Balkan Peninsula*. At the Geographical Institute, in 1896, he published his first *Guidelines for the Study of Villages in Serbia and Other Serbian Areas*, which served as a rather detailed guide into extensive anthropogeographical research of the settlements and population of our regions. Precisely for this reason, the publication was repeatedly printed and consulted by many researchers during field trips. This is also confirmed by the fact that the first volume of the book series *Settlements of the Serbian Areas – Treatises and Materials* came out in 1902, accompanied with an atlas comprising 23 photographs and maps. By 1923, Cvijić edited up to 24 volumes of the aforementioned series, renamed *Settlements and Origin of the Population* in 1921. In 1910, he founded the Serbian Geographical Society in Belgrade, and in 1912, the first volume of the *Bulletin of the Serbian Geographical Society*, a new journal under his founding editorship, appeared, of which he remained editor for the rest of his life (publishing altogether 12 volumes).

Owing to outstanding scientific results and works published in Serbia and abroad, on the 5th of February 1896, Jovan Cvijić was elected as correspondent member of the Serbian Royal Academy and already on the 4th of February 1899 admitted as its regular member. One of the greatest recognitions for his scientific work was his appointment as president of the Serbian Royal Academy in 1921, which he headed until his death in 1927. Since the establishment of the Belgrade University in 1905, he became one of the eight regular University professors. He was appointed as Rector of the Belgrade University, serving two terms (1906 and 1919). Due to his exceptional contributions to world science, he received honorary doctorates from the Sorbonne (1919) and the Charles University in Prague (1924) and was elected a corresponding member of the Czech Academy of Sciences, Academy of Sciences of the USSR, Yugoslav Academy of Sciences and Arts, Italian Academy of Sciences and the Parnassos Learned Society in Athens. Furthermore, Cvijić was an honorary and highly respected member of numerous geographical, ethnographical, natural and other societies throughout Europe (Vienna, Neuchâtel, Berlin, Munich, Geneva, Budapest, Bucharest, Warsaw and St Petersburg), and received numerous international awards and recognition.

The basis of Cvijić's scientific work includes field research, which he and his associates undertook in Serbia, the Balkan Peninsula and Europe. It can be concluded that most of the notebook material precisely concerns field notes collected during research excursions he organised all over the Balkan Peninsula. Apart from the Balkan Peninsula, Cvijić passed through most areas of the then Austro-Hungarian Empire, the Dachstein Alps, the French Alps and Southern France, Germany, Switzerland, Southern Russia, the Crimean Peninsula, the Scandinavian fjords, across Norway to Trondheim, all of Italy (including Sicily and the Aeolian Islands - Lipari), the Southern Carpathians and Asia Minor at the entrance of the Dardanelles. For this reason, it is necessary to give an overview of Cvijić's research excursions. Cvijić himself wrote commentaries on some excursions (1914; 1923a), as well as other authors, such as Radovanović (1958), Stojančević (1965), Marijanac (1996), Stanković (2007; 2015) and many others.

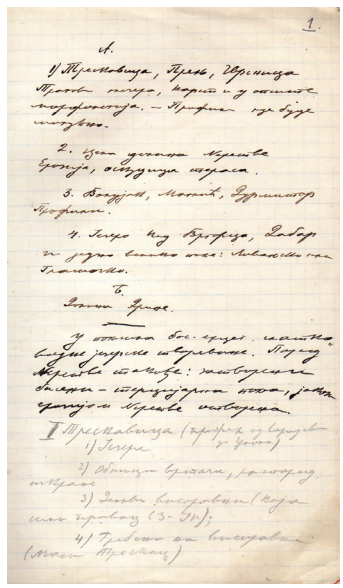
Cvijić visited the Kučaj Mountain, in Eastern Serbia, for the first time in 1888, and the next year, in 1889, he went to the Zagrebačka



Cvijić's itinerary for July 1907, covering the route Bergen-Hamburg-Leipzig-Gotha-Karlsbad [Karlovy Vary]-Vienna-Belgrade

Jovan Cvijić with his Bulgarian colleagues on Rila Mountain in Bulgaria (1896)
(Source: Belgrade City Museum, Legacy of Jovan Cvijić)

Gora Mountain [Medvednica Mountain], then headed to Kranjska, accompanied by Vasilije Ruvarac, explored the surroundings of Postojna, Cerkniško Polje and areas in the vicinity of Ljubljana, whence he continued his journey towards Rijeka, Bakar and the islands of Krk and Cres, and undertook exploration of the most interesting karst areas of Dalmatia and Istria. In his autobiography, Cvijić wrote that in 1890 he set out on a trip to Stara Srbija [Old Serbia], accompanied by professor Jovan Žujović, wherein he visited certain places in the outskirts of Skopje and Mitrovica, and then explored the Šar Mountains (having climbed its peak Ljuboten). In the following year, he studied the karst terrains of Carniola, Trieste and Istria, and proceeded to the marinas and bays of the Dalmatian littoral of the Adriatic Sea. He visited the karst springs of the Ombla and Cetina Rivers, and then departed Dubrovnik for the Boka Kotorska Bay via Konavle. From thence, he headed to Cetinje, and afterwards, to Gatačko Polje via Nikšić, aiming to explore the holokarst of Herzegovina. In the period between 1892 and 1895, he limited his research trips exclusively to Serbia, paying special attention to tectonic problems and relief. Subsequently (in 1896), he was on his way to Bulgaria and with the local geologist Georgi Zlatarski undertook geological survey of the Rila Mountain and the Gorge of the Iskar River, including the Vitosha Mountain (with Dimitar Ilkov), and upon crossing the Verila Mountain, he found himself in the town of Samokov (Cvijić, 1923a). During his stay in Bosnia and Herzegovina, in 1897, he toured the Treskavica Plateau, the entire Neretva River valley, the mountains of Prenj and Čvrsnica, the Drežanka River valley and then arrived in Mostar. From there, he carried out investigation of karst areas in Herzegovina, visiting Stolac, Dabarsko Polje, Fatničko Polje, the surroundings of Bileća and Plana, Gatačko Polje, Čemerno, the mountains of Volujak and Maglić, Trnovačko Lake of glacial origin, Bioč and the region of Pivska Župa. Having reached Žabljak, he himself traversed the Durmitor Mountain and its surroundings and descended into the settlement of Šavnik, whence he returned to Bosnia, heading towards Foča via Šćepan Polje at the confluence of Tara and Piva Rivers, and further continued on to Sarajevo through Goražde and Prača, and further on to Mostar. In Cvijić's notebooks, we have found detailed descriptions of these settlements, as well as their surroundings, with special



Plan for field research of Bosnia and Herzegovina

emphasis on the scenery and aesthetic impressions these areas had made upon him. In the summer of 1899, he embarked on exploratory excursions to Bosnia and Herzegovina. He first travelled to the town of Travnik, and on to Donji Vakuf, Bugojno, the Stožer Mountain, the Kupres valley and small karst poljes Vukovsko and Ravno Polje, and likewise paid visits to Grahovo, Livno, Duvno, Glamoč, Rakita and the Buško Blato Lake (Stanković, 2015).

Upon completing karst field investigations in Bosnia and Herzegovina in 1898, Cvijić went down to Dalmatia to study the consequences of the earthquake in Sinj, continuing by boat from Metković to Thessaloniki. At this period, for the first time, he visited the Albanian port of San Giovanni di Medua, as well as the areas rising above Reç and Lezhë (Maja e Shelbumit), and then proceeded to Durrës and Vlorë, further to Volos (Thessaly) via Corfu and Central Greece, whence he headed for Mount Ossa, and on to Piraeus, finally arriving at Thessaloniki (in late August). Thus, commenced Cvijić's four-year exploration of Macedonia, Serbia and Albania. From here, he embarked on his first major excursions to Mount Chortiatis and undertook trips to Serres and Nigrita, down the Struma River, to Tachinos Lake, then towards Mount Bertiscus, the Gulf of Orfano and Mount Prnar, and up along the norther shore of Tachinos Lake back to Serres, and further across Mount Kroussia to Doiran Lake and Thessaloniki. Next, he departed Thessaloniki for Vodena [Edessa], paid trips to Lake Ohrid and Bitola and ascended the Pelister Mountain, exploring natural phenomena and processes thence detected in nearby Prilep, Kruševo and Mount Selečka, too. He stayed in Mariovo, and through the mountain pass Gavato, went down again to the Ohrid basin. For ten days he explored the city of Ohrid and its lake, and then headed to the Dervenska Canyon and Resen, a settlement in the littoral zone of Lake Prespa.

He travelled again to Macedonia and Northern Greece (accompanied by his student Petar Janković) to map several lakes and their littoral zones (the Vardar valley, Gevgelija, Lake Doiran, Kavadarci, Morihovo, Mount Nidže, Meglena valley, Vodena, Vladovo Waterfalls, pond near Tenovo, Lake Ostrovo [Lake Vegoritida], Lake Petres [Ampelia Amideou], Lake Prespa, Lake Kastoria [Lake Orestiada] and Lake Vrapčinsko [Lake Himaditida]). From Greece and Macedonia, through the Šar Mountains, he set forth for Kosovo and Metohija,

Jovan Cvijić in Vraćevšnica monastery (19 June 1900)
(Source: Belgrade City Museum, Legacy of Jovan Cvijić)

undertook trips to Janjevo, Novo Brdo and the Gračanica Monastery and proceeded on horseback to Vučitrn and Mitrovica. In 1899 and 1900 he explored large Macedonian lakes, in 1901 conducted depth measurements in the Skadar Lake and Lake Ioannina, and it was not until the autumn of 1901 that he completed his extensive research in the area of Macedonia. During 1899, after having obtained "buyuruldu" [permission] from the Ottoman authorities, Cvijić departed Belgrade for Constantinople to explore its surroundings (visiting Dedeağaç [Alexandroupolis], Ainos [Enez] and Kavala). Based on field research, he successfully studied and explained the genesis and evolution of the Bosphorus, the Dardanelles and the Sea of Marmara (Cvijić, 1923a).

In order to implement modern European research methods, already in 1900, Cvijić organised the first student research excursion in Podunavlje region (area along the Danube course in Serbia) downstream from Belgrade and the Šumadija region. Several notebooks testify about these journeys, portions of which have been examined and described on this occasion. From them we learn that on the 13th of June 1900, Cvijić, accompanied by his students, embarked on a journey from Smederevska Palanka, up along the valley of the Jasenica River, towards Pridvorica and further to Žabari, visiting the surroundings of Topola and Oplenac, exploring the mountains of Venčac, Bukulja and Kosmaj; then the mountains of Rudnik and Avala, followed by an extensive field study of Šumadija. He further explored the surroundings of Paraćin, the Velika Morava and Zapadna Morava River basins, the region of Ovčar and Kablar; then travelled from Kragujevac to Čačak and studied the Ovčarsko-Kablarska Klisura Gorge, the mountains of Dragačevo, Jelica, Troglav, Čemerno, Mučanj and Golija, mountains in the Užice surroundings and the Ibar River valley. We found from the notebooks that in this period Cvijić explored the mountains of Rtanj and Stara Planina, as well as the springs, waterfalls and bogs of Eastern Serbia. In addition, in the same year Cvijić conducted field research in the areas of Northern Macedonia, Southwestern Serbia and part of Northern Albania. Skoplje was chosen for the starting point of this journey. From thence he undertook trips to the Skopska Kotlina basin, the mountains of Karadag and Karšjak [Vodno], Kumanovo and Nagoričane and Kriva Palanka; went to explore the Kratovo

mountains, the Kočanska River valley and climbed the mountains of Plačkovica and Obozna near the Bulgarian border. Next, he travelled along the river valleys of Strumica and Bregalnica, and arrived at Štip, whence he returned to Skopje through the Ovče Polje Plain. He then proceeded under a strong-armed escort to explore the Kosovo and Metohija region. From Tetovo he undertook trips across the southern and northern slopes of the Šar Mountains, the Sirinićka Župa valley, the Jezeračke Mountains, Ferizović at the Kosovo Polje, Gnjilane, the area of Novo Brdo; then to Gračanica and Priština, and further to Mitrovica via Vučitrn; from thence he made excursions into the Zvečan Hill and the mountains of Sokolica and Rogozna via Banjska. He then took the road through Mokra Gora to Peć and set off for an excursion to the Prokletije Mountains, and further, across the Metohija Plain, to Đakovica; went to Prizren; from thence to Mount Crnoljeva, and finally arrived at Ferizović (Cvijić, 1923a).

The following year, from 10th to 18th of July 1901, Cvijić organised an excursion through the Podrinje region (area along the Drina course in Serbia and Bosnia and Herzegovina), aimed at exploring the Cer Mountain, Jadar, Iverak, Gračić, Gradac, the mountains of Jagodnja and Gučevo, the Drina River valley and Ljubovija. Then followed the so-called "*Bosnian excursion*". Commencing on the 19th of July, that same year, he toured the areas along the other side of the Drina River. He departed from Šepak and made his way up the Majevica Mountain to Tuzla, continuing on horseback to Kladanj and Olovo, and through Mount Ozren to Sarajevo. From thence he rode over the Romanija Mountain and the Glasinac Plateau to Vlasenica, and further to Zvornik and Srebrenica, and having passed the border crossing at Ljubovija, returned to Serbia. The exact route of some of these excursions, as well as the data collected therein, are summarised in one of Cvijić's notebooks. By 1903, he organised more than 20 research excursions throughout Serbia, during which extensive geographical and anthropogeographical material was gathered.

Subsequently, Cvijić undertook field research through northern Albania, heading from Cetinje to the Skadar Lake and the town of Skadar [Shkodra], and from thence into the mountains of Central Albania: Maja e Velës, Maja e Shilbumit, Shita e Hajmelit and Maja e Kallmetit. He set off from Lezhë to explore the coastal mountains of

Jovan Cvijić with his associates on the shores of the Rikavačko Jezero Lake, Kuči Mountains in Montenegro (1913) (Source: Belgrade City Museum, Legacy of Jovan Cvijić)

Mali Rencit and Mali i Kakarriqit, as well as the entire Skadar Lake basin; then headed west, across the Tarabosh Mountain, Maja e Agrenit, Lake Šas and Bricë, to Ulcinj. From thence he proceeded north, across the mountains of Sutorman and Rumija, to Virpazar to study the Skadar Lake, but faced with the hostility of the Albanian tribes, he had to abort the survey. From Bar he continued towards the port of Santi Karanta in Epirus, further across the mountains above Delvinë [Dhelvinion], to the Pamvotis, Lake of Ioannina, and the town of Ioannina; thence undertook excursion to Mount Mitsikeli and headed to Korçë in Southern Albania via Leskovik and Kolonjë. He explored the Prespa Lake and travelled to Bitola, and further, through Mount Baba, came to Kičevo, and proceeded to the Poreče valley and Mount Golešnica. From thence he arrived at Skopje and came back to Belgrade (Cvijić, 1923a). Of particular importance are Cvijić's 1904 explorations of Italy's Mount Vesuvius and the Phlegraean Fields during the period of volcanic activity, which are referred to in his autobiography and Ljubica Cvijić's diary (Stevanović et al., 1987), as well as in one of his notebooks, written in German.

From a record kept in the Geographical Seminar Minutes, we learned of a field excursion from 9th to 24th of April 1907, attended by Jovan Cvijić, Petar Janković, Vladislav Nešković, Borivoje Ž. Milojević, Vitomir Marinković and Milorad Dragić, and covering the following route: Belgrade – Ritopek – Grocka – Smederevo – Brza Palanka – Podvrška – Sip – Tekija – Oršava – Donji Milanovac – Belgrade (Stevanović et al., 1987). Cvijić's notebooks and autobiography likewise reveal that during May 1908 he embarked on an excursion in the vicinity of Ralja (5th May), accompanied by Pavle Vujević and Risto Nikolić, as well as in Kosmaj (11th May). After that, as early as the 20th of May, he set out on a scientific excursion to Dalmatia, Herzegovina and Montenegro, one of his more important and larger excursions, but had a lot of trouble during the journey, being constantly under the vigilant eye of the Austro-Hungarian officers, who seized his notes and restricted his movement. Borivoje Ž. Milojević and Jevto Dedijer were his companions on that journey.

From thence, he travelled to Venice, Geneva and Neuchâtel, to attend the 9th International Geological Congress, held in Geneva on the 9th of July. From the notebooks we found out that the same year he

travelled to Munich, Paris, Gotha and Berlin, and thence to London where he was making final preparation for the publication of some of his works, including the then current, politically coloured discussion on the Austro-Hungarian annexation of Bosnia. In October 1909 he organised a geological two-day excursion to Kopaonik Mountain, on the occasion of the arrival of the Bulgarian King Ferdinand, who himself took participation therein. In his excursions, Cvijić came a long way from Burgas and Varna to Dubrovnik and Split, from Mount Olympus to the Carpathian Mountains in Romania; he climbed the highest peaks of Olympus, Pelister, Šar Mountains, Durmitor, Triglav, Maglić, Prenj, Čvrsnica, Treskavica, Midžor, Rtanj, the highest peaks of the Balkan Mountains (Mount Stara Planina) in Bulgaria, from Vrška Čuka to Cape Emine and Rila (Musala). In 1913, Cvijić embarked on a great excursion through Eastern Serbia, and then to the Prokletije Mountains, which lasted for two months (Stanković, 2015).

Following the Austro-Hungarian declaration of war on Serbia, on the 28th of July (15th July Old Style) 1914, Cvijić was urgently summoned to Niš at the request of Crown Prince Aleksandar Karađorđević, and from thence, at the invitation of the Supreme Command, went to Kragujevac, and then back to Niš to provide the Government with some guidance concerning the grouping of the commanding officers. Already at the beginning of 1915, at the initiative of the Government, he departed for London, and paid visits to Rome and Paris along the way. He stayed four months in London to negotiate matters of national significance. After that, in July 1915, he arrived at Priština, spending three months there, engaged in his work and scientific excursions. From thence he went to Raška via Kosovska Mitrovica, and then continued to Thessaloniki, stopping there briefly, thence proceeding to Switzerland (Neuchâtel). He remained in Neuchâtel for the whole year 1916, delivering lectures at the University and the Geographical Society. Near the end of the year, he received an invitation to deliver a lecture as a guest speaker at the Sorbonne, *On the Ethnography of the Balkan Lands*, for the academic year 1917 and 1918, later to be extended for the year of 1919, thus being equated with other professors at the Sorbonne. Among the notebooks written in foreign languages, we encounter one written mostly in French, which, judging from its content, represents preparatory notes for lectures held by Cvijić at the

Jovan Cvijić with the locals in Cazin (1921)
(Source: Belgrade City Museum, Legacy of Jovan Cvijić)

Sorbonne in 1925. Bearing in mind that it was precisely in Paris that Cvijić gave lectures on the anthropogeographical problems of the Balkan Peninsula, he had his capital work *La Péninsule balkanique* also published therein (Cvijić, 1918b). The very year he was commissioned by the American Geographical Society of New York (USA) to assemble an ethnographic map of the Balkan Peninsula. During the Paris Peace Conference, Cvijić was appointed Head of the Committee on Territorial Affairs of the US Delegation in Paris and as expert in the Section for Ethnographic Boundaries of the delegation sent by the Ministerial Council in Belgrade. He was likewise elected President of the Territorial Section within the delegation of the Kingdom of Serbs, Croats and Slovenes. He was present at the signing of the peace treaty in Versailles, after which he headed to Brussels in the capacity of a delegate to the Serbian Academy of Sciences. After the end of the First World War, in late August 1919, he returned to war-torn Belgrade (Stanković, 2015). The contents of individual notebooks refer to data on the ways and principles of making the ethnographic map of the Balkan Peninsula, as well as many other methods that Cvijić used in that process.

In mid-1920 he travelled to Slovenia, paying visits to Carinthia, Dole and Otok on the Vrbsko Jezero Lake [Wörthersee], and organising excursions to Mount Triglav and the Pasterze Glacier. After that, he went for treatment to Vienna, Karlovy Vary and Prague. In early 1921, he visited Sarajevo and Dubrovnik. In 1922, he held anthropogeographical lectures in Split and Osijek, and in the following year was invited to hold lectures at the Sorbonne. In 1924, he departed from Prague for Dobrna, and on to Trieste for the scientific examination of the surroundings and caves, and it was through his initiative that the Speleological Section of the Serbian Geographical Society was founded that same year. After that, in early 1925, he went to Paris, where he delivered lectures on karst at the Sorbonne, and then embarked on an excursion through Southwestern and Southern France, visiting large caves, including the Padirac Chasm and the Grottes de Lacave. This turned out to be his last excursion. Though gravely ill, Cvijić did not give up his plans for future scientific research, arranging excursions through Western Bosnia and the area of Plitvice Lakes, and further to Popovo Polje and the Vjetrenica Cave, but due to his

illness, none of these plans was realised. Jovan Cvijić passed away on the 16th of January 1927 at his home in Belgrade.

Methodology of Cvijić's notebooks interpretation

For the purpose of adequate scientific interpretation of manuscripts contained in Cvijić's notebooks, the methodological principles to be applied in this publication were first determined. Given that this is archival material of large volume and exceptional value from both scientific, primarily geographical, and historical point of view, it was decided that the book should include a selection of the most representative and most readable manuscripts to be analysed. After choosing the scientific team, composed of a large number of researchers and scientific associates from different scientific fields, the texts were selected and analysed in accordance with the scientific expertise of associates. A detailed overview of the entire archive material was carried out, that is a total of 23 notebooks which the Belgrade City Museum made available to the Geographical Institute "Jovan Cvijić" SASA.

At first, a total of 190 pages were selected for analysis (by 15 contributors), but as the associates grew in number, so grew the number of manuscripts to be considered, ultimately reaching slightly more than 300 manuscript pages and sketches analysed by 23 associates. The equal representation of texts dealing with physio-geographical and anthropogeographical problems, as well as the inclusion of texts relevant beyond national boundaries, were taken into account. Then followed the transcription of the manuscripts into a more readable form, as well as the necessary analysis of both scientific themes and spatial determinants Cvijić dealt with in his notebooks. It was further necessary to carry out a detailed analysis of Cvijić's biography and entire scientific opus, published in numerous books, both in Serbian and in foreign languages, in order to determine the temporal dimension and confirm the assumption that these are the authentic fieldwork notebooks which were the basis of Cvijić's subsequent publications.

The notebooks, as has already been remarked, are consisted of various manuscripts, so we sought to determine the origin of each

individual manuscript, in order not to attribute to Cvijić those that differed significantly from his original ones. For this reason, it was necessary to inquire into a complete bibliography of works of both Cvijić and his students and associates who, around the same time, and under his guidance and editorship, published a significant number of papers in the area of geology, geomorphology, geography, anthropogeography, ethnography and so forth. To point out the significance and influence of Cvijić's work on later generations of researchers, we also sought to refer to papers published in later periods, those relying on the original Cvijić's research and addressing the same topic and geographical areas. The basic idea in dealing with the research approach to these manuscripts was to set up parallels between scientific ideas and contributions of the period which saw their creation and the contemporary scientific domain under which the manuscripts have been considered, from the distance of a century. Furthermore, we investigated whether there are texts and research surveys that have so far not been published, which would give this publication a special scientific contribution.

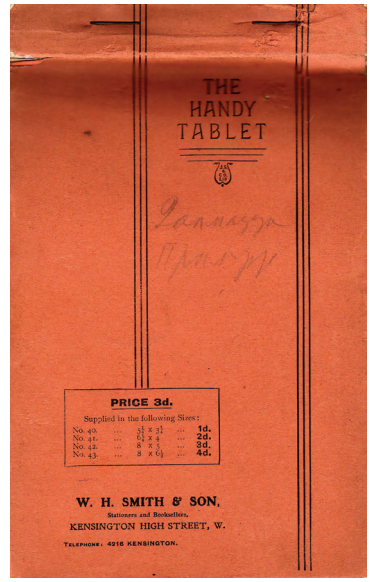
The synthesis of the inductive and deductive principles has proved necessary in the analysis of the manuscripts. Furthermore, since certain texts sparked off a scientific discussion, the editorial board organised, on several occasions, meetings to discuss problems in the interpretation of records and the principles for their analysis, adequate formulation and form in which they would be presented. Mutual consultations between collaborators and editors were also conducted to provide more adequate and comprehensive overview of scientific fields and areas discussed in various parts of the manuscripts, as there had often been overlap between the two. For the purpose of achieving scientific objectivity in the interpretation of manuscripts, all the conclusions here presented are exclusively supported by scientifically recognised facts, on the basis of which the authors have derived their professional opinions on Cvijić's notebooks.

On the analysed notebooks

The dominant themes of the analysed notebooks are those related to the natural features of certain parts of the Balkan Peninsula. When it comes to Eastern Serbia, we find notes on Mount Kučaj, the Đerdap Gorge [Iron Gate], river terraces, levelled surfaces and gorges in the Timok River basin, Mount Ozren and the Crna Reka River valley. In relation to Southern Serbia, there are original manuscripts on the Vranje valley and the Grdelička Klisura Gorge. As for the Western Serbia, the notebooks cover the following subject matters: the mountains of Dragačevo, the Ovčarsko-Kablarska Klisura Gorge, the mountains in Užice surroundings, Mount Golija, the Ibar River valley, the mountains of Jagodnja, Boranja and Gučevo, and the Pešter Plateau. With respect to natural features of these areas, the topics of karst and glacialation are mostly discussed, therefore we found the mentions of Popovo Polje, Fatničko Polje, Dabarsko Polje, Livanjsko Polje, as well as high mountains, with special emphasis on Mount Prenj. The notebook entitled *Dalmatia and the Littoral* contains notes taken during trips to Kvarner, the vicinity of Knin, Šibenik, Split and Dubrovnik (Ćalić & Stošić, 2015).

Among the analysed manuscripts, we encountered considerations on the naming of the Balkan Peninsula, geomorphological processes in the territory of Serbia, relief of the Raška region, the genesis of the river valleys of Lepenica, Jasenica, Golijska Moravica, Zapadna Morava, Južna Morava, Timok and Drina, the abrasion terraces of the gorges of Grdelička and Đerdap [Iron Gate], the Zlotska cave, Mount Rudnik, physio-geographical research of Bosnia, Herzegovina, Montenegro, Dalmatia, the Adriatic coastal zone, etc.

Anthropogeographical topics are also represented in the analysed notebooks. Among them are parts dedicated to defining the types of settlements, censuses and characteristics of the population of Eastern Serbia, Kosovo and Metohija, Ibarski Kolašin, migration drifts, descriptions of settlements and traditional vernacular architecture in different parts of Serbia, Dalmatia, Bosnia and Herzegovina, etc. We also find definitions of certain psychological types,



Notebook *Dalmatia and the Littoral*

paragraphs dedicated to historical and political geography, which include the notes under the headings of: *"The Impact of European Countries on the Development and Expansion of Serbia", "Archpriest Mateja Nenadović", "Karađorđe", "Kosovo", "Croats", "Bulgarians", "German Culture", "Metanastasic Movements"*, etc. This opus also includes a special notebook (with a total of 28 pages) containing exclusively drawings, mostly professional, some of which are of artistic character, which primarily represent exercise in perspective drawing, with very few text entries, originating from the earlier period, perhaps from university days. Prior to publication, these texts were supplemented, modified and paraphrased, since the notebooks are, for the most part, characterised by shorter formulations. Nevertheless, it is possible to follow the basic topics Cvijić dealt with, which is evident from his scientific opus and the subjects of published works.

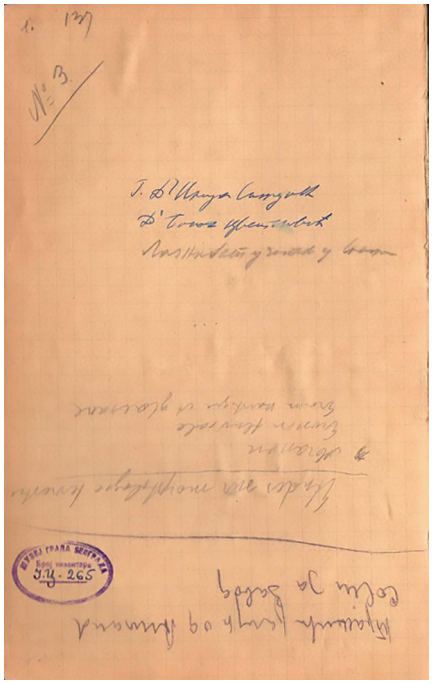
The quotes by Cvijić's associates and contemporaries provide us with an insight into his work methods: "Cvijić wrote in such a manner that he would first compile his thoughts and notes into one whole as his primary concept, then he would fill in and revise the concept until he would find necessary to rewrite it (that is, to dictate it). There were occasions when he would broaden and revise even that final concept, and if necessary he would have it rewritten" (Erdeljanović, 1931, p. 3).

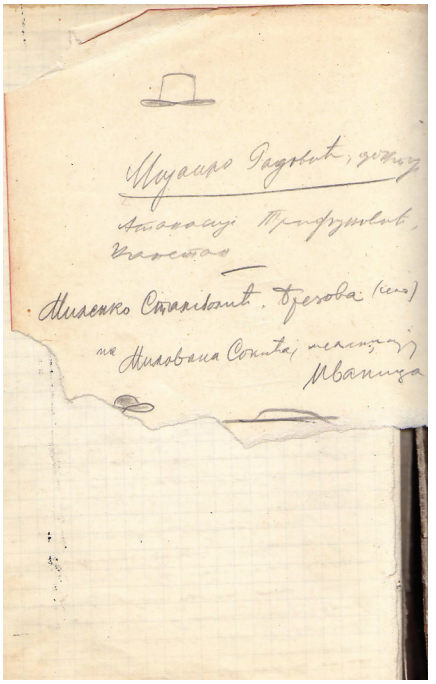
For the purposes of this publication, experts from various scientific fields gathered several hundred pages from Cvijić's notebooks, which have been analysed for this occasion. However, the pages shown here, a total of 80 original pages to be precise, are only a selection of the most representative ones. It should be emphasised that, for the purpose of this publication, all the authors of the accompanying texts have performed a detailed analysis of the manuscripts and devoted themselves to extensive study of Cvijić's scientific work, as well as the work of his followers and disciples, in order to show and explain, in pretty concise terms, the content and significance thereof.

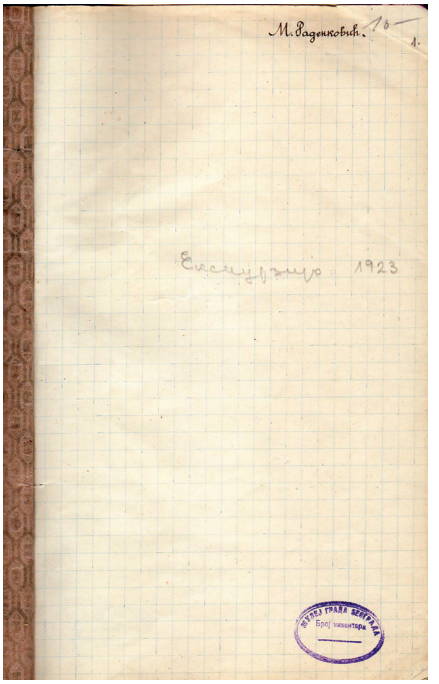
Apart from the original and dominantly present Cvijić's handwriting, there are pages written in different handwriting. We suppose these pages might have been written by his associates and students, or by his wife, who at a later period often accompanied him on his journeys. The list of Cvijić's associates consists not only of university professors and students, but a multitude of literate individuals from

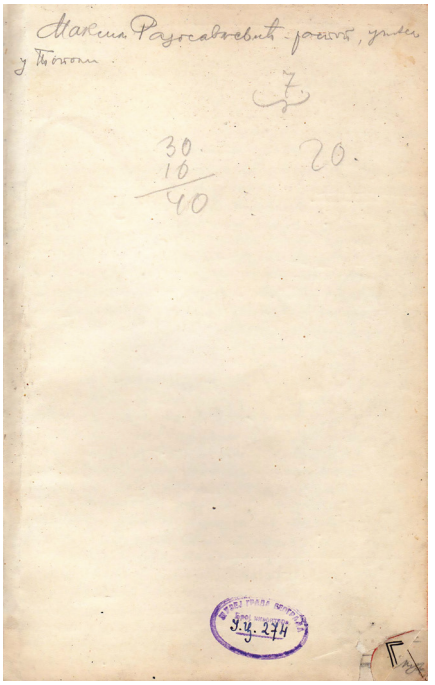
various parts of Serbia, and most often these include priests, teachers, clerks and public notaries. Since we are mainly talking about people who are unknown in the scientific and historical domain, their full names and concrete contributions remain a puzzle.

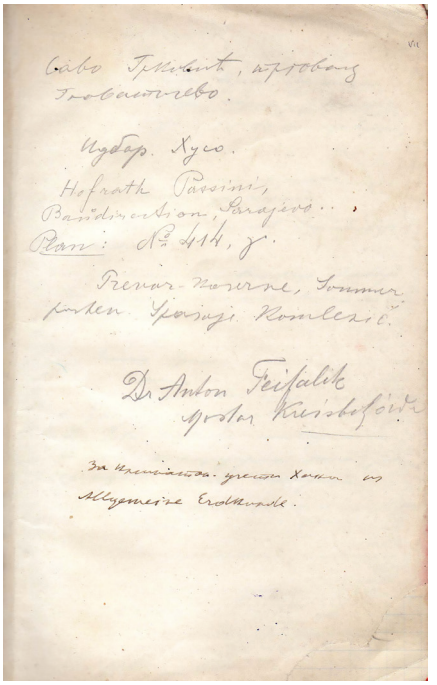
Some notebooks also contain personal names in the header, which can be interpreted as scientific contributions of individuals, followers of Cvijić's school, whom he wholeheartedly supported and advised, whereas they, in return, would send their own research results and field reports to him as their mentor, but also editor of the leading journals of the time. Let us name some of them: A. Vujadinović, M. Radenković, Antonije Lazić, M. Radosavljević, Ljubomir Lotić, Ilija Sindik, B. Cvetković, S. Grković, Idbar Huso, Hofrath Passini, etc. They are supposed to have collaborated with Cvijić in certain domains of his scientific work and participated in some of his scientific excursions. Although there are only a few name entries, the identity of handwriting remains unclear, for different handwritings are interwoven within the notebook itself. Only at one spot in the notebook we read the remark "Sketched by Lazić", which is supposed to refer to Cvijić's technical drawer Antonije Lazić. The sketch of a large doline known as Ponikva, near Bakar at the Kastav levelled surface, is one of the few dated, 20th March 1923, and marked by an indication of its creators Lazić and Radenković, and given the contents of the pages, we assume that these represent notes taken during a scientific excursion. After having been subjected to technical processing, many of the sketches from the original notebooks were published in some of Cvijić's papers or books, but there are also sketches for which it is virtually impossible to determine whether they were published in Cvijić's works or in the works of his associates. Among the notebooks of Jovan Cvijić, we also find volumes, although only a few of them, completely written in different handwriting. Certain parts of these volumes were being used and published by Cvijić himself, and also under the names of some of his associates and students, very often in bulletins under Cvijić's editorship. By their analysis, we come to the conclusion that Cvijić's scientific work is, in many respects, deeply intertwined with the work of his associates and students, hence it is almost impossible to absolutely determine the authorship of some of the notes, as well as to whose scientific and research contribution they











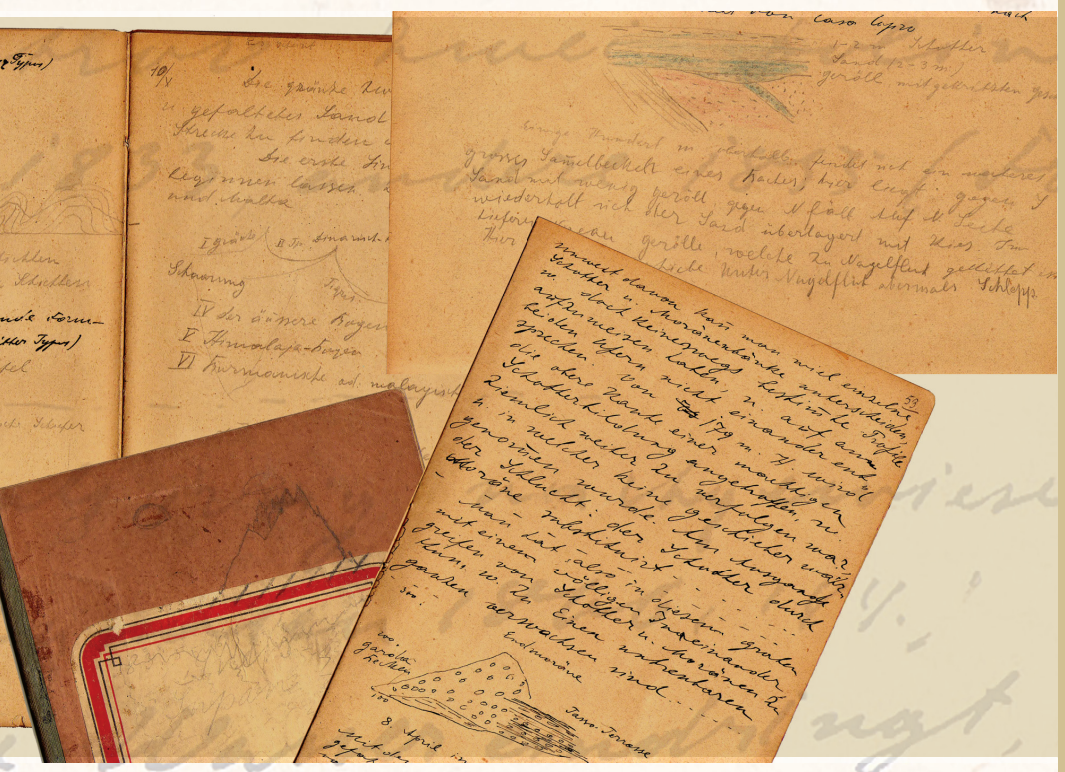
Manuscripts from Jovan Cvijić's notebooks

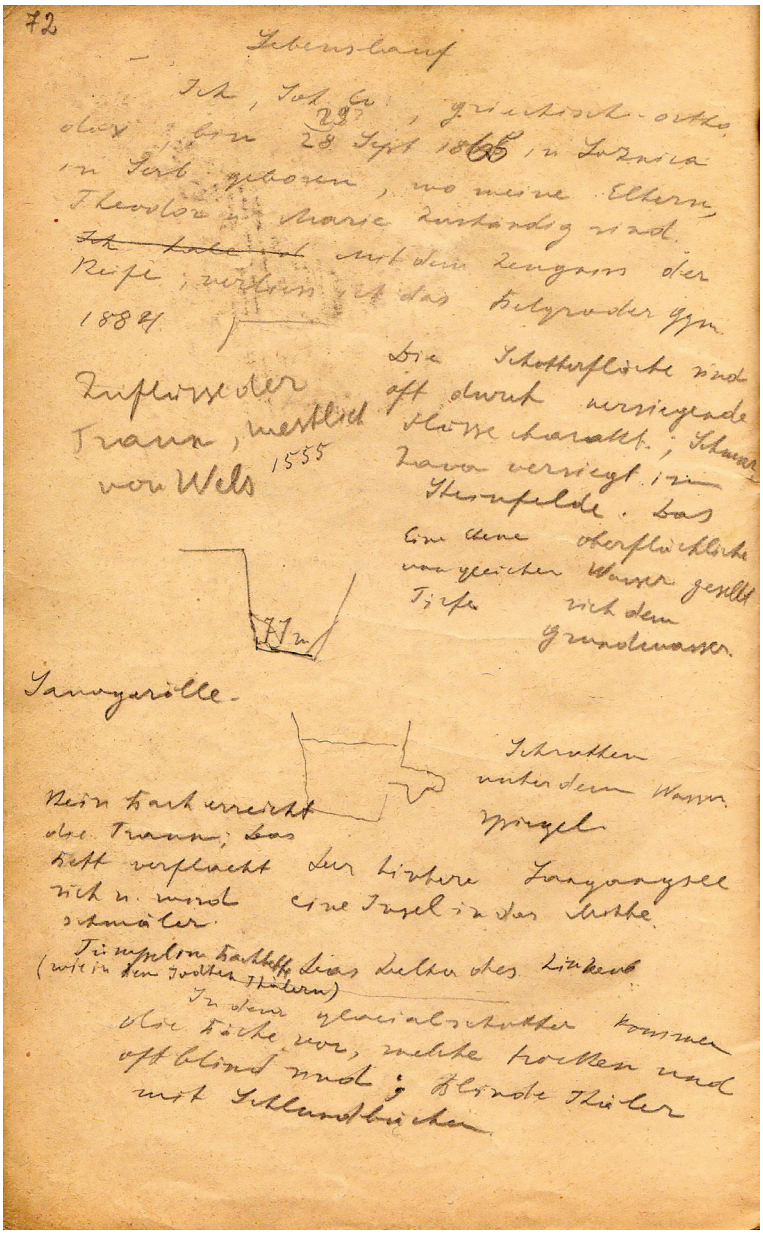
refer to. For this reason, the authors of this publication do not enter into discussion on the originality of the manuscripts, but they rather consider the contents of selected pages from the notebooks, which have been examined and interpreted for this occasion, in the wider domain of Cvijić's long-standing scientific research work of which they are undoubtedly a part.

The principal aim of the editorial board with respect to the notebooks analysed has been to provide the reader with a special scientific insight into Cvijić's work and his contributions to different scientific disciplines, and to allow the authors to give their own analysis of this extraordinary archival material. Expressed authors' statements within this publication do not necessarily reflect the editors' viewpoints. Authors undertake the legal and moral responsibility for the ideas expressed in their own interpretations published in this publication.

Aleksandra Terzić

NOTES IN GERMAN (1889–1893)





JC_251_39

On the last page of Jovan Cvijić's notebook on the Balkan Peninsula, written almost entirely in German, we encounter a part of his biography, also in German, which the author wrote of himself. It is assumed that the entries were compiled for administrative purposes prior to the completion of his doctoral studies.

"Lebenslauf

Ich, Jov. Cv., grichisch-orthodox, bin 28. (29?) Sept. 1865. in Loznica in Serb. geboren, wo meine Eltern, Theodor u. Marie zuständig sind.

Mit dem Zeugniss der Reife verliess ich das Belgrader Gym. 1884"

"Curriculum Vitae

I, Jov. Cv., an Orthodox Christian, born on 28th (29th ?) September [Old Style – A/N] 1865, in Loznica, Serbia, where my parents, Teodor and Marija, lived.

In 1884, I graduated from the Belgrade Gymnasium, thus obtaining a Certificate of Maturity."

The page also contains text entries and sketches referring to some of the characteristics of "blind valleys" in fluvioglacial sediments (deposition of pebbly sediments, emergence and inflow of water – groundwater). Examples provided by the sketches refer to the Traun River, located west of Wels near Linz in Austria. The first sketch shows the case when gravel deposit is dry, the latter when it is below the water level. The text further states that none of the streams (tributaries) feed into the Traun River (sketch no. 2), and that their valleys are flattened and narrowed. It also states that blind valleys with sinks are a feature of streams flowing out of the pebbly sediments of glacial origin, that these streams dry up and that their valleys are often blind.

Jelena Kovačević-Majkić

JC_276_18

From autumn 1889, Jovan Cvijić began attending Eduard Suess's lectures on geology. The first notebook contains lectures on regional geology of the world, starting from the Indian Peninsula, then Africa, Australia, New Zealand, South America and the Arctic.

The page comprises a geological sketch of Northern Africa and the Sinai Peninsula.

Shown in purple are red granite and syenite (mostly dating from the Archean).

Shown in blue are Paleozoic shales.

Shown in green is the Cretaceous.

Shown in yellow are Tertiary sediments, specifically the Miocene in Barca (marked on the sketch).

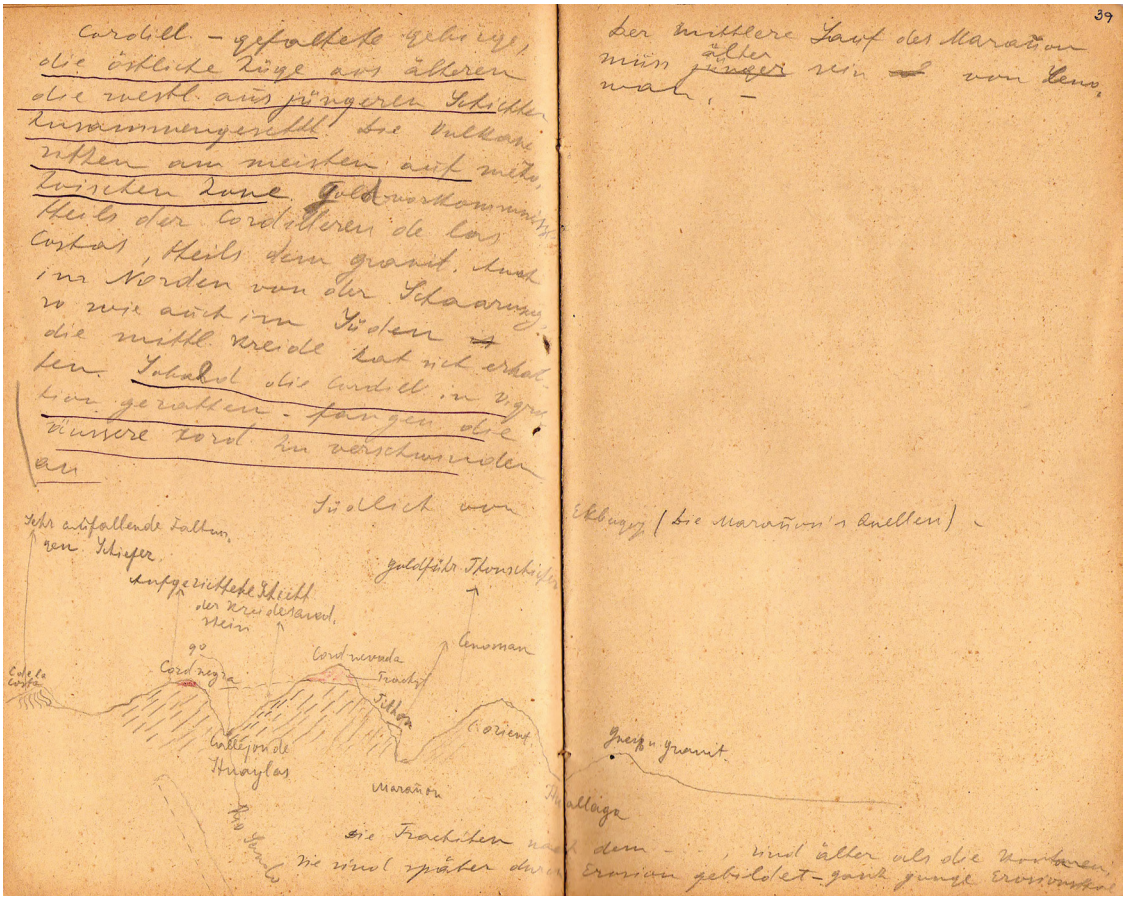
The Eocene and Oligocene are shown in orange. The well-known Farafra Oasis (marked on the sketch) is of Eocene age.

It is also pointed out that the northwestern Red Sea coast, rich in fossils, belongs to the Cretaceous zone.

Depressions are below the sea level. These are deep trenches on the border of Eurasia and Indo-Africa.

Like other notebook pages, the one presented here abounds in pretty illustrative sketches with numerous details. The sketch includes the following toponyms: Tibesti, Ahaggar (Hoggar), Algeria, Darfur, and so on.

Jelena Kovačević-Majkić



On another page from the notebook the lecture notes in geology, comprising text entries and sketches related to the Cordillera are shown.

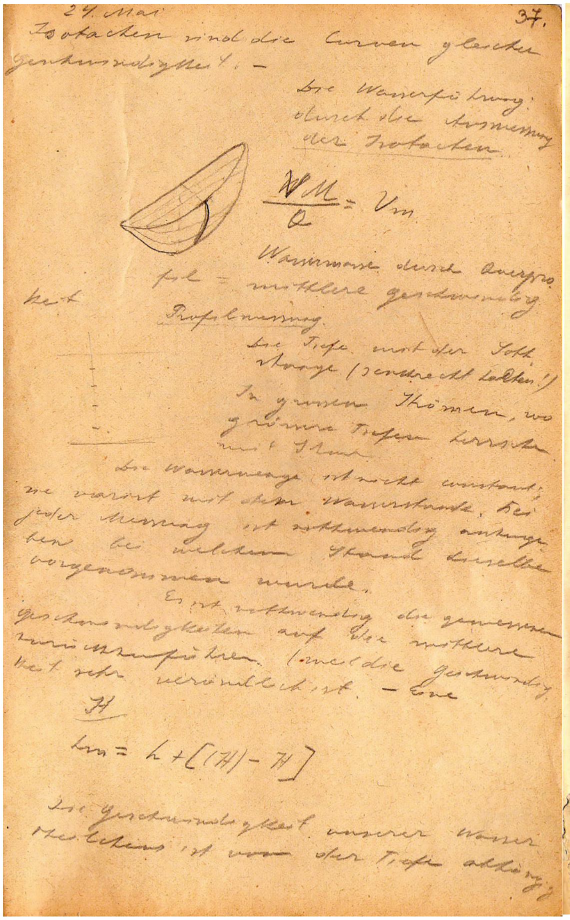
Jovan Cvijić noted that the Cordillera are fold mountains, and that their eastern range consists of older schists, whilst the western range is composed of younger schists. Between these zones, volcanoes are most commonly found. In the Coastal Cordillera, there are sporadic occurrences of gold and granite, respectively.

The sketch refers to the area south of Ecuador (sources of the Marañón River). There is also a note saying that rocks in the middle reaches of the Marañón River must be of older age than that of the Cenomanian.

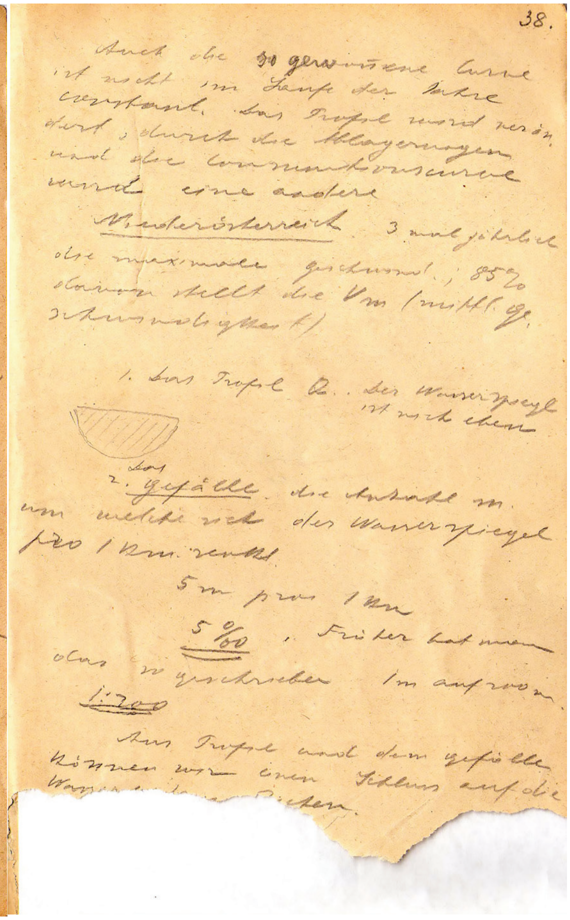
There is also the inscription which reads that river valleys shown on the sketch, "*…formed by processes of erosion at a later stage – are quite young erosive valleys*".

Certain sentences in Cvijić's notebooks could not be properly interpreted, given that they contain toponyms for which we are not sure what they refer to, either because of the impossibility to claim with certainty what he wrote down or because of the lack of knowledge of the toponyms used.

Jelena Kovačević-Majkić


24. Mai 37.
Isotachen sind die Curven gleicher Geschwindigkeit. –
Die Wasserführung durch die Ausmessung der Isotachen
$$\frac{WM}{Q} = Vm$$
Wassermasse durch Querprofil = mittlere Geschwindigkeit
Profilmessung
Die Tiefe mit der Sondierstange (senkrecht halten!)
In grossen Strömen, wo grössere Tiefen herrschen mit Lot
Die Wassermenge ist nicht constant, sie variiert mit dem Wasserstande. Bei jeder Messung ist notwendig anzugeben bei welchem Stand dieselbe vorgenommen wurde.
Es ist notwendig die gemessenen Geschwindigkeiten auf die mittlere zurückzuführen. (weil die Geschwindigkeit sehr veränderlich ist. – Eine
H
$$Lm = h + [(H) - H]$$
Die Geschwindigkeit unserer Wasserläufe ist von der Tiefe abhängig

JC_259_56


38.
Auch die so gewonnene Curve ist nicht im Laufe der Jahre constant. Das Profil wird verändert, durch die Ablagerungen und die Consumtionscurve wird eine andere.
Niederösterreich 3 mal jährlich die maximale Geschwind.; 85% davon stellt die Vm (mittl. Geschwindigkeit)
1. das Profil Q. der Wasserspiegel ist nicht eben
2. das Gefälle die Anzahl m um welche sich der Wasserspiegel pro 1 Km. senkt.
5 m pro 1 km
5 ‰. Früher hat man das so geschrieben 1 m auf 200 m
1:200
Aus Profil und dem Gefälle können wir einen Schluss auf die Wasser… ziehen.

JC_259_58

On the last four pages of a notebook for lectures given by Eduard Suess, there is a handwritten text referring to the speed of flow in rivers.

A method for measuring the mean water velocity by the use of isotachs (curves connecting points of equal water velocity) is presented, as well as ways of determining the cross-section at which the water velocity shall be measured by means of different instruments for water depth measurement, depending on its dimension. Then follows the basics on the relation between flows and water levels (the amount of water is not constant and varies with the water level, and when determining the cross-section it is important to know at which water level the cross-section, that is, the amount of water, is to be measured, hence it is necessary to determine its mean velocity), the dependence of water velocity on its depth (water level), its quantity, alluvium and discharge. The River Elbe is taken as an example, and we also read quotations from Harlacher (Harlacher, 1881), who considers as examples the Elbe and the Danube.

There are also entries on the necessary procedures for determining the annual quantities of water (to determine annual flows, it is necessary to construct the water discharge curve for different water levels). It is also noticed that the water discharge curve is not constant during the course of the year. The cross-section alters due to sediments, and therefore the water discharge curve becomes different.

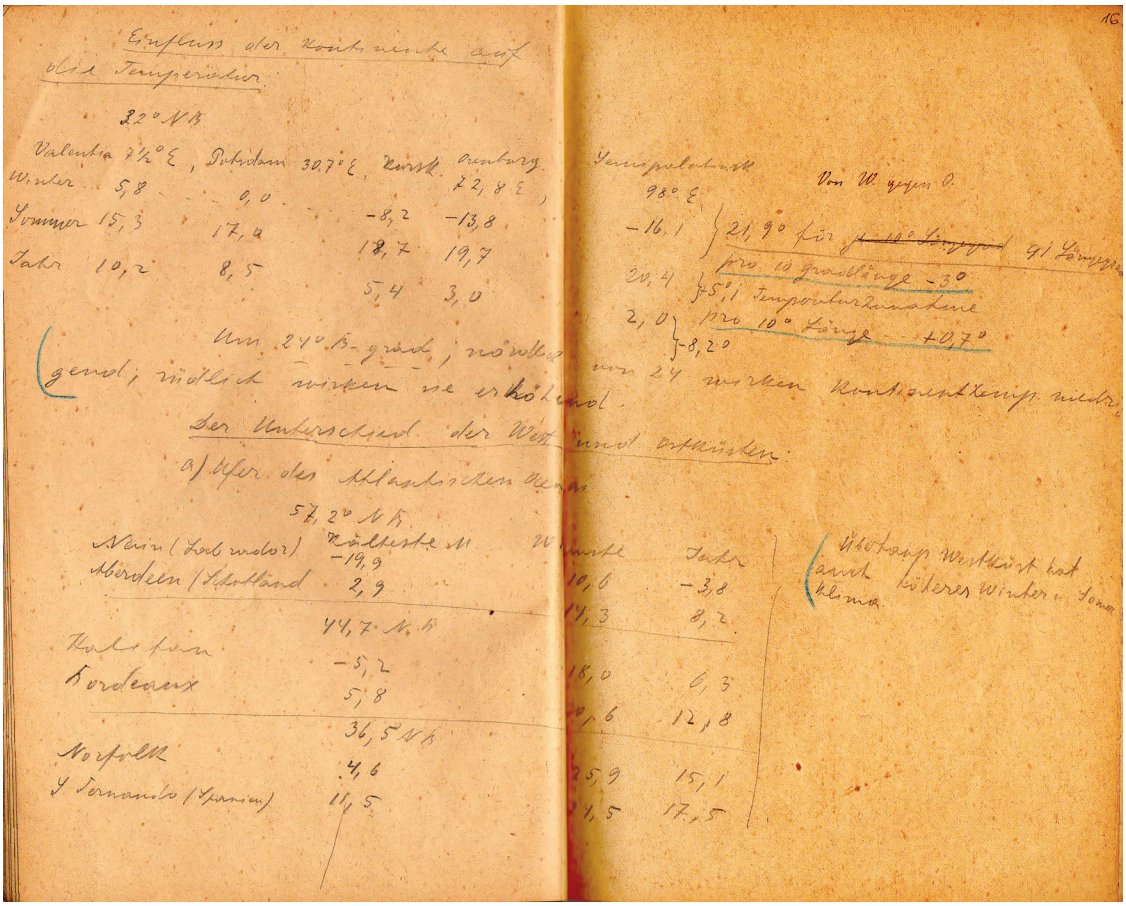
The text further reads:

– In Lower Austria, based on the measurement of the maximum water velocity, performed three times a year, the average water velocity is calculated as 85% of the values obtained;

– In determining water velocity it is necessary to know the cross-section and water mirror areas, its slope along the flow, as well as the relation between the inclination of the riverbed and water velocity. There is also a note that the slope, expressed in ‰ (m in each 1000 m), was previously expressed as a ratio of 1 m at a certain length given in m (for instance, 1:200). We likewise read that a conclusion on the water velocity can be made based on the cross-section and inclination of the flow. As the inclination increases, so does the water velocity in rivers. Friction (R) works in the opposite direction and depends on the roughness of the riverbed. We assume that friction force depends on the square of the water velocity.

At the end of the last page there is a literature reference *"Boblay, Journal de geologie (1831)"*. The full bibliographical reference is: Puillon Boblaye (1831). *Notice sur les alterations des roches calcaries du littoral de la Grèce*. Journal de géologie, pp. 144–165.

Jelena Kovačević-Majkić



During the first year of his university studies in Vienna (1889–1990), Jovan Cvijić attended Julius Han's lectures on meteorology. The notebook contains notes on climatic elements (air temperature, air pressure, air circulation, precipitation, and the like and their characteristics).

Here we present the page containing notes on the effect of continentality on air temperature. The data are presented in tabular form, showing the winter, summer and annual temperatures in five cities (Valencia, Potsdam, Kursk, Orenburg and Semipalatinsk), moving from the Atlantic Ocean to the east, after which the gradients are calculated. It turns out that north of 24 degrees North latitude the air temperature decreases with continentality, whereas south of 24 degrees North latitude it increases.

The differences between the western and eastern ocean coasts are also presented in tabular form and shown at different latitudes during the coldest and hottest months of the year, as well as on an annual basis:

a) Data concerning the Atlantic Ocean are based upon records kept at the stations of Nain, Halifax and Norfolk on the eastern coast of the Atlantic Ocean, as well as upon records available through stations in Aberdeen, Bordeaux and San Fernando on the western coasts of Europe. It is concluded that temperatures along the western coasts of Europe are generally higher, both in winter and summer, than those measured on the eastern coast of North America.

b) Data for the eastern coasts (of the Pacific Ocean) are based upon records available from weather stations in Ayan, Vladivostok and Shanghai on the eastern coasts of Asia, and Sitka, Umpqua and Santiago on the western coast of North America.

Jelena Kovačević-Majkić

Die mittlere Jahrestemperatur der nördl. u. südlichen Hemisph.

15° C.

Erde

	Jan.	Juli
Nördh.	8,0	22,5
Südh.	17,5	12,4
Erde	12,8	17,4

Unterschied 4,6

Die Bestrahlungswerte können nicht erklären warum die Temp der ganzen Erde von Jan gegen Juli zunimmt das ist Effect der ungleichen Wasserverteilung. Zur Zeit der Perih. die Temp. der Erde die niedrigste; zur Zeit der Aph. – die grösste ~~[illegible]~~

1. Was wäre die Temperatur einer ganzen Land- und Wasser Hemisph.

Landhemisph. 18,7
Wasserhemisph. 14,5

90° – 45° Land
45 – Äqu Wasser } 11,1°

Pol – 45 Wasser
45 – Äqu Land | ~~[illegible]~~ 22,8.

JC_260_36

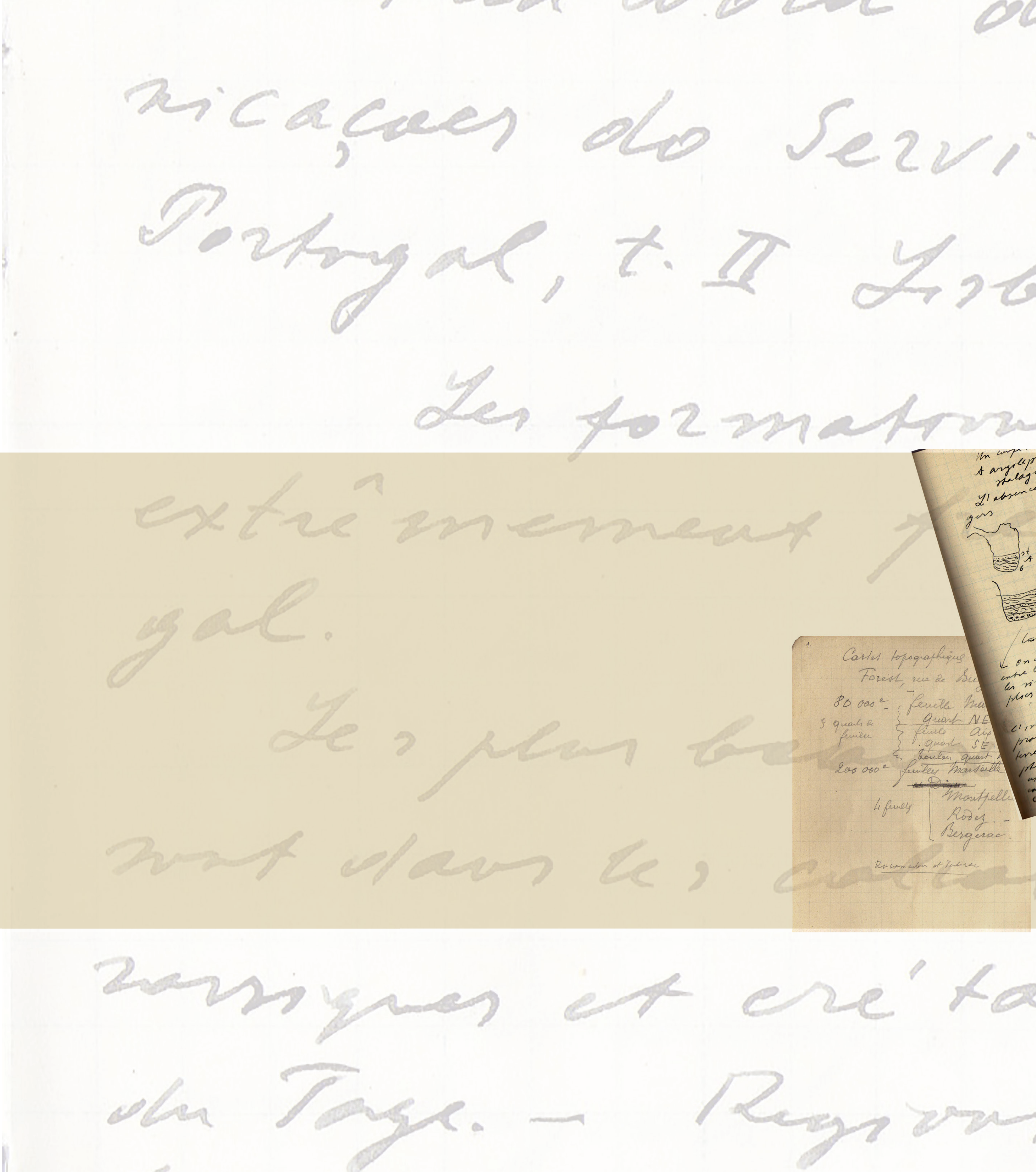
In one of the notebooks for lectures on meteorology and climatology, that Jovan Cvijić used during his student days at the Vienna University, there is a page listing the mean annual air temperature on Earth (15.0°C). We also read entries relating to the mean January air temperature in the Northern (8.0°C) and Southern (17.5°C) Hemispheres, including the mean July air temperatures: 22.5°C in the Northern Hemisphere, and 12.4°C in the Southern Hemisphere. The average January air temperature on Earth is 12.8°C, and the mean July air temperature is 17.4°C.

The knowledge of meteorology and climatology would, inter alia, serve Cvijić for the making of a climatic map of the Balkan Peninsula, accompanying his book *The Balkan Peninsula*, originally published in French (1918b), as well as in Serbian edition (1922a). As far as we know, this map of climatic zones, or as Cvijić himself says, "*klimske zone*" [climate zones], represents the first cartographic presentation of the climate, that is, the climate regions of the Balkan Peninsula (excluding the 1912 map of the January and July isotherms by Pavle Vujević).

The map itself shows the distribution of the "Central European climate", "Mediterranean climate", "Mediterranean climate bays", "the steppe climate impact", "moderate climate župas" and the "Alpine climate", whilst the accompanying text describes the spatial distribution of these climates, as well as factors (primarily geomorphologic) determining thereof, based on the "geographical distribution of the loose materials covering the soil" and the observed type of vegetation (Cvijić, 1922a).

Taking into account the size of the observed area, as well as the available climate data at that time, it is no challenge to grasp why the climate regionalisation was not determined from the point of view of quantitative values of climatic elements.

Boško Milovanović


nicações do Servi
Portugal, t. II Lisb
Les formations
extrêmement f
gal.
Les plus bea
sont dans les calca
massiques et crétac
du Tage. — Reg
Cartes topographiques
Forest, rue de Bu
80 000e
feuille Ma
Quart NE
feuille
Quart SE
200 000e
feuilles Marseille
Montpellier
Rodez. –
Bergerac.
4 feuilles
L'absence

NOTES IN FRENCH (1917–1925)

Lapiés 10

Ernest Fleury: Les lapiés des cal-
caires au Nord du Tage. — Comu-
nicações do Serviço Geologico de
Portugal, t. II Lisbonne 1917.

Les formations lapiaires sont
extrêmement frequentes en Portu-
gal.

Les plus beaux lapiés portugais
sont dans les calcaires liassiques, ju-
rassiques et crétaciques du Nord
du Tage. — Regions sèches et avec un
la moyenne de precipitations at-
mospheriques de 950 mm. Les eaux
de ruissellement travaillent les roches
dures par corrosion chimique et par
usure mécanique. Les precipitations
très fortes favorisent davantage
l'usure mécanique que la corrosion
chimique, en ce sens, qu'elles don-
nent à celle-là la force suffisante
pour devenir prépondérante; inverse-
ment les precipitations faibles limitent
ou restreignent l'action de l'usure et
facilitent celle de la corrosion.

JC_272_6

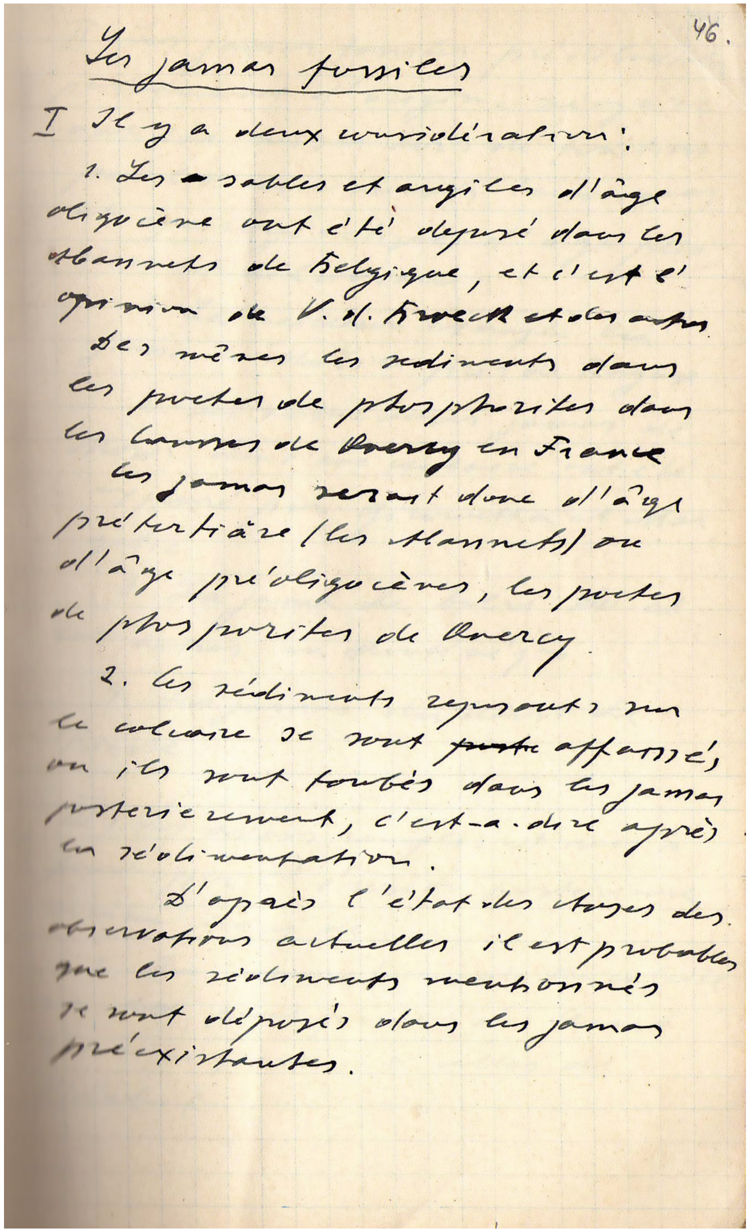
Within the notebooks of Jovan Cvijić there are a number of pages written in French. The pages are all numbered, and the text entries primarily appear on the right-side pages, that is, on the even-numbered pages. The odd pages appear to have been left for subsequent notes. Some pages have only partially been preserved. The manuscripts in French are mostly based on literary sources. Bearing in mind the year of their publication, it is clear that the first texts were entered no earlier than 1917.

At that time, Cvijić stayed in Paris, where he had come up from Neuchâtel at the end of 1916. On the 15th of January 1917, he began giving lectures at the Sorbonne University, and on the 29th of June of the same year he received an official document from the Ministry of Education in Paris that he had been appointed to deliver a course of lectures "On the Ethnography of the Balkan Lands" at the Faculty of Philosophy of the Paris University. The document referred to the academic years 1917 and 1918, later to be extended to 1919. Thus, Cvijić was equated in both rights and duties with his colleagues at the Sorbonne (Stevanović et al., 1987).

The page numbered 10 is the first of four pages containing notes from Ernest Fleury's book "Les lapiés des calcaires au nord du Tage" (Fleury, 1917). Apparently, Cvijić came into possession of the book very soon after its publication. The book is about karst in Portugal, and Cvijić's notes relate primarily to the formation and description of lapiés [karren]. Cvijić noted: "*Limestone formations are very common in Portugal. The most beautiful Portuguese lapies are to be found north of the Tagus River, in limestone rocks belonging to the Lias (Jurassic) and Cretaceous periods. These are bare regions with average atmospheric precipitation of 950 mm. Water runoff causes effects on hard rocks either mechanically or through chemical corrosion.*" He also stated that large amounts of precipitation are more likely to cause mechanical damage than chemical erosion. In contrast, a small amount of precipitation diminishes the effect of mechanical erosion in favour of chemical erosion.

In subsequent pages we read Cvijić's notes on karst, as well as a description of the lapiés at several locations in Portugal. He also added a few sentences on lapiés in Normandy (France) and in the United States, which he obtained from other sources. From the foregoing, it can be concluded that these notes were used for purposes of scientific research work (Cvijić, 1924d; 1927), as well as for the preparation of textbooks.

Gaëlle Hallair, Milan Milenković



46.

Les jamas fossiles

I Il y a deux considérations:

1. Les sables et argiles d'âge oligocène ont été déposé dans les Abannets de Belgique, et c'est l'opinion de V.d. Broeck et des autres.

De même les sédiments dans les poches de phosphorites dans les causses de Quercy en France.

Les jamas seraient donc d'âge prétertiaire (les Abannets) ou d'âge préoligocènes, les poches de phosphorites de Quercy.

2. Les sédiments reposants sur le calcaire se sont ~~[illegible]~~ affaissé, ou ils sont tombés dans les jamas postérieurement, c'est-à-dire après la sédimentation.

D'après l'état des choses des observations actuelles il est probables que les sédiments mentionnés se sont déposés dans les jamas préexistantes.

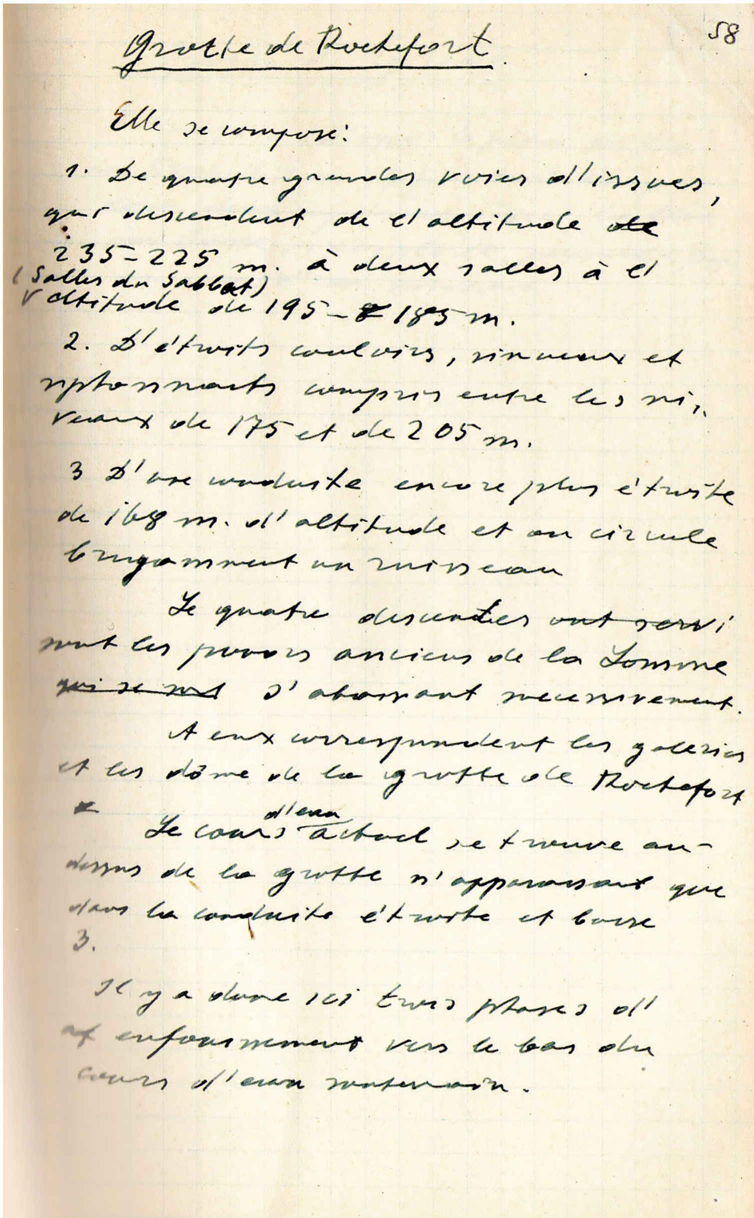
JC_272_24

This page contains a handwritten text on fossil vertical caves ["jama" in Serbian]. Concerning their genesis, Jovan Cvijić set up two hypotheses. According to the first, the sand and clay were deposited in the Oligocene epoch, an opinion also shared by Van den Broeck and others. This type of sediment is found in pockets with phosphorite in France, in the region of Causses du Quercy. Therefore, vertical caves probably originate from the period before the Tertiary or before the Oligocene. Sediments overlying the limestone deposited into the caves later, that is, after sedimentation. It is likely that these sediments were deposited in the already existing caves. According to the second hypothesis, fossil caves are probably of Neogene origin, formed of cracks caused by tectonic and epirogenic shifts during the Pliocene and "Diluvium" (Pleistocene) epochs. The best example for this is a cave near Močila in the vicinity of Dubrovnik. We also find a mention of vertical caves in France, the Dobri Do Cave and others in Montenegro, as well as those in the vicinity of Trieste. Furthermore, Cvijić recorded the presence of calcite formations at the levelled surfaces of the Montenegrin karst, as well as on Mount Velebit. These examples are mentioned in *the second volume of Geomorphology* (Cvijić, 1926). The example of Causses du Quercy is given in the chapter *Morphological Types of Limestone Terrains*, under subheading *Transition Types* (Cvijić, 1926, p. 457).

Most of the subsequent pages contain descriptions and explanations of caves in different parts of Europe, as well as in North America. Among others, Cvijić elaborated on the La Grotte de Han [Han Cave] and the underground stream of the Lesse River in Belgium. This review was likewise included in *the second volume of Geomorphology* (Cvijić, 1926, p. 449). As the basis for obtaining data on the Lesse River, Cvijić used an article authored by E. Van den Broeck and E. Rahir (Van den Broeck & Rahir, 1903).

For the manuscripts on groundwater, Cvijić's sources were the book by Auguste Daubrée (Daubrée, 1887), as well as E. Fournier's paper on the Serre River, flowing through the Aveyron Department in Southwestern France (Fournier, 1902).

Gaëlle Hallair, Milan Milenković



58

Grotte de Rochefort

Elle se compose:

1. De quatre grandes voies d'issues, qui descendent de l'altitude ~~de~~ 235-225 m. à deux salles à l'altitude de 195-~~1~~185 m. (Salles du Sabbat)

2. D'étroits couloirs, sinueux et syphonnants compris entre les niveaux de 175 et de 205 m.

3 D'une conduite encore plus étroite de 169 m. d'altitude et où circule longuement un ruisseau

Le quatre descentes ~~ont servi~~ sont les parcours anciens de la Lomme ~~qui se sont~~ s'abaissant successivement.

A eux correspondent les galeries et les dôme de la grotte de Rochefort

Le cours d'eau actuel se trouve au-dessous de la grotte n'apparaissant que dans la conduite étroite et basse 3.

Il y a donc ici trois phases d'~~a~~enfoncement vers le bas du cours d'eau souterrain.

JC_272_30

The page here presented contains a handwritten text referring to the La Grotte de Rochefort [Rochefort Cave] in Southern Belgium.

Jovan Cvijić wrote the following about this cave:

"It consists of:

Four large channels descending from 235–225 m into two chambers (Salles de Sabbat) at a height of 195–185 m;

Narrow curved siphon channels between 175 and 205 m;

An even narrower channel at 168 m above sea level, where the stream flows, giving out a roaring sound.

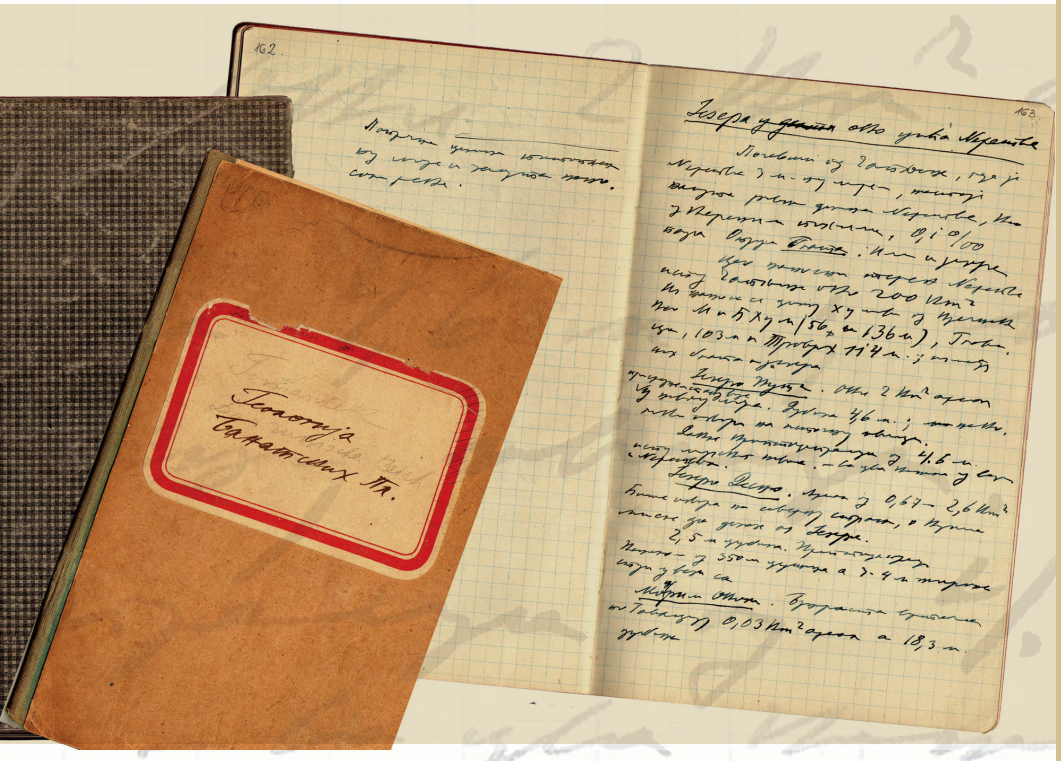
The four channels are actually the former ponors of the Lomme River, which gradually descended. They match the galleries and domes of the Rochefort Cave. The present-day currents are below the cave and occur in narrow and low channels. Therefore, these are the three phases of the lowering of the underground stream."

Jovan Cvijić published this manuscript in Serbian, in slightly modified form, in *the second volume of Geomorphology* (1926), page 449. On that same page, we read a sentence – also derived from his manuscripts in French – on the La Grotte d'Eprave [Eprave Cave], located near the Rochefort Cave.

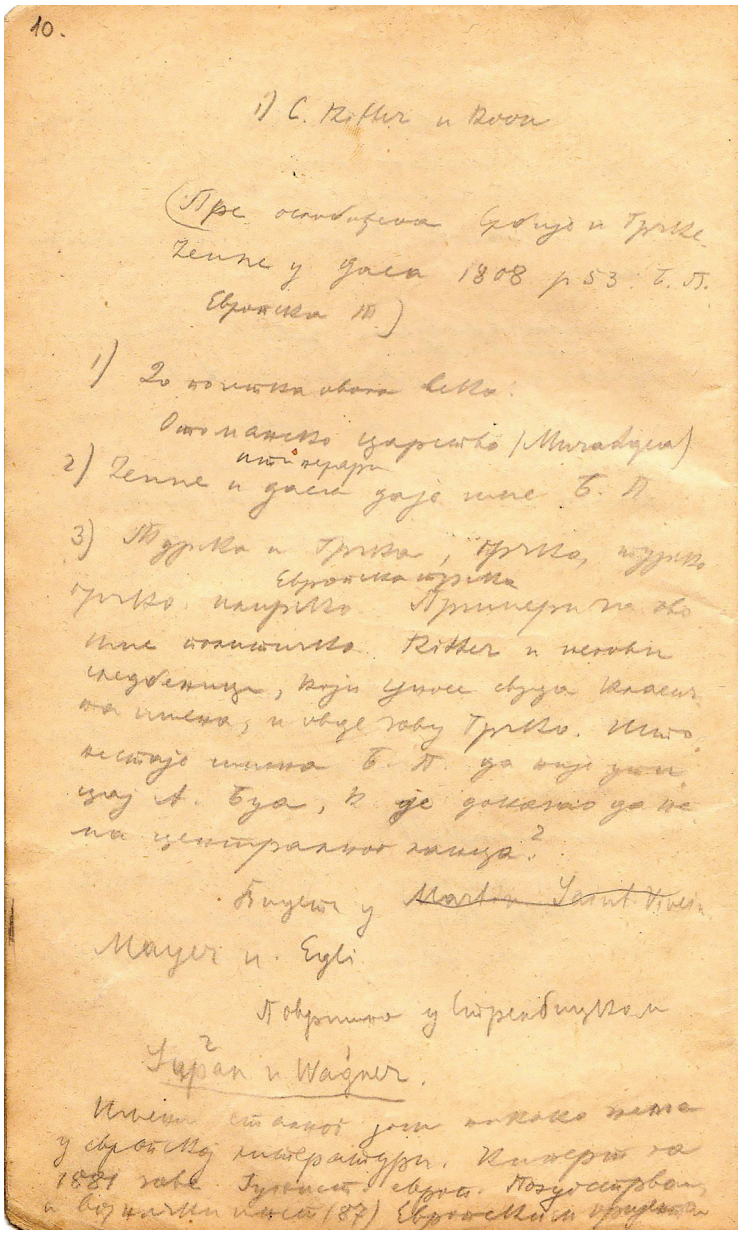
The manuscripts likewise contain data on the La Grotte de Remouchamps [Remouchamps Cave] and La Grotte de Tilff [Tilff Cave], located near the city of Liege in the east of Belgium. These caves are shown on page 451 of the aforementioned book.

During the academic year 1924–1925, J. Cvijić stayed in Paris, where he held lectures on karst at the Sorbonne University. By then, he was already gravely ill, but despite that fact, there are records indicating that he visited several caves in Southwestern and Southern France during this period (Stevanović et al., 1987). It can be assumed that manuscripts in French date from the period of his sojourn in France.

Gaëlle Hallair, Milan Milenković



NOTES IN SERBIAN (1888–1927)



JC_251_10

Several pages from Jovan Cvijić's notebook, mostly written in German, during or immediately upon completing his studies in Vienna (1889–1893), contain notes on the designation of the Balkan Peninsula. The first two pages, which were written in Serbian, continuing with a handwritten text in German, treating the same topic. The text under consideration is included in the review of Theobald Fischer's book "Die südosteuropäishe (Balkan-) Halbinsel" (Cvijić, 1894), in which Cvijić discussed various names of the Balkan Peninsula, and which was published already in 1894, the fact that can confirm the assumption to when the manuscript was written.

Right at the beginning of the page, Cvijić writes in brackets, that before the liberation of Serbia and Greece, in the book "Gea (Gaea)", published in 1808, page 53, August Zeune (Zeune, 1808) coined the designation "Balkan Peninsula", referring to the area then called "European Turkey". Further, Cvijić discusses changes in names of the peninsula:

"*1) Ottoman Empire (Muradgea) – in itineraries until the beginning of this century*

2) In 'Gaea', Zeune coined the term B. P. (Balkan Peninsula – A/N)

3) Turkey and Greece, Greek, Turkish Peninsula, European Turkey, Greek Peninsula, Illyrian Peninsula. All of these are examples of this political designation. Ritter and his followers, generally use classical names, hence in this case they prefer the designation Greek Peninsula. Under the influence of A. Boué, who proved that there is no Central Mountain Range, the designation B. P. (Balkan Peninsula – A/N), *has been withdrawn from usage, as well?"*

At the end of the page, in the last paragraph, Cvijić adds the following commentary: "*There is still no definite designation in European literature. In 1881, Kiepert used the term Southeast. Eur. Peninsula* (Southeastern European Peninsula – A/N), *whilst the military inst.* (Military Institute – A/N) (87) *uses the designation European Orient.*"

After having been reformulated and completed with explanations, this text was published in the undermentioned review. Therein Cvijić presented different names of the peninsula that had been used successively in literature, criticising Fischer's designation "Southeastern (European) Peninsula", and providing arguments for retaining the term "Balkan Peninsula". By applying the evolutionary (genetic) approach, he interpreted the political, historical, cultural and physio-geographical context of the geographical nomenclature. By means of the same method, Cvijić complemented and synthesised these conclusions, publishing thereof 25 years later in his book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a).

Jovana Todorić

Guthe Wagner p 92

Од када се не зове више Европска
Турска, има 3-4 имена: <u>Грчко</u> 1),
Турско, Грчкотурско и Илирско.
Напоменули су, као Wagner, да се
с истим, ако не и већим правом
може назвати Југоисток, пошто ње(н) већи
део његов насељен Србима и Бугарима,
по броју надмашују остале народе ос.
Југоистока и северна етногр. граница
јужних Словена у главноме се покрива
са линијом, к. дели полуострво од
трупа европског. Лепсиа (Leipold:
Die mittlere Höhe Europas 1874 S 52
Anm.) је предложио Источно-Гримско.
Географски карактер целог
налаза, к. би се протезао од Црног
до Јадр. М. дао је име целом полуострву
Балк. Набудући изгледа да је први
употребио Zeune у Gaea 1808 p 53

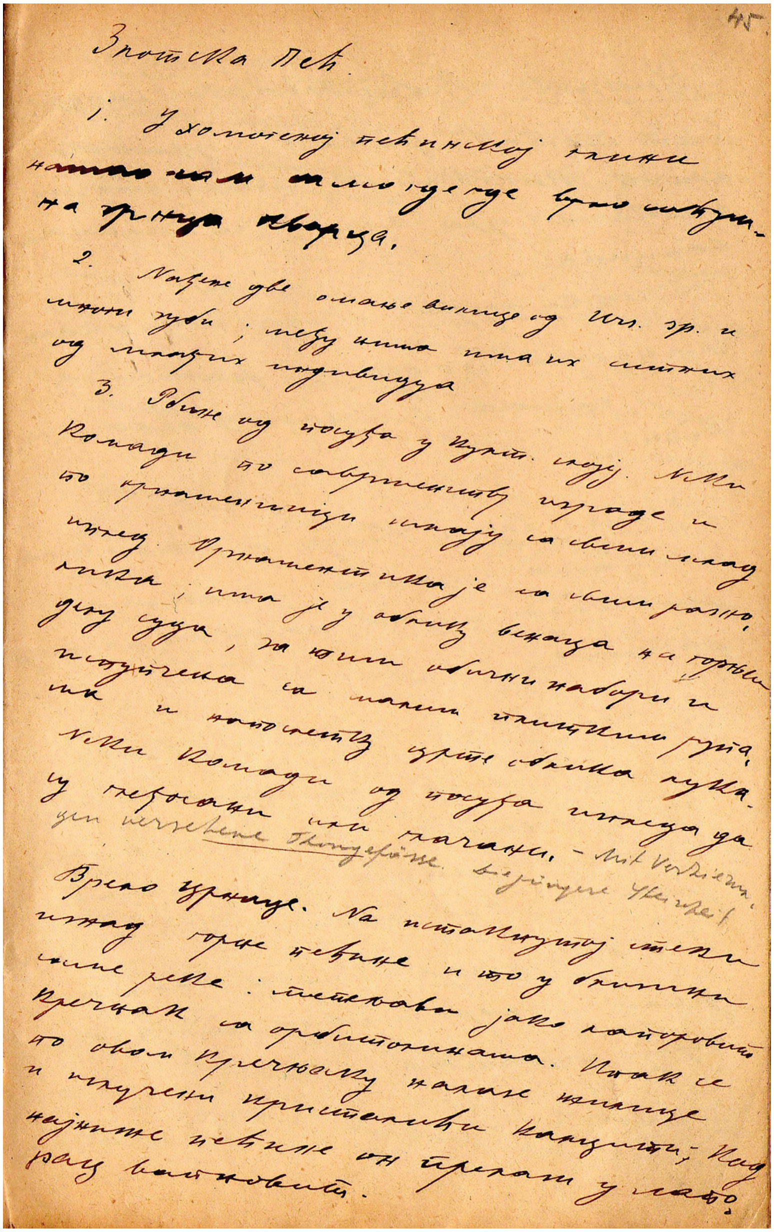
JC_251_11

The page presented here provides insight into Jovan Cvijić's handwritten notes on naming the Balkan Peninsula: *"Guthe Wagner p 92., Since it has no longer been called European Turkey, it has got 3–4 names: Greek Peninsula*[1)]*, Turkish Peninsula, Greco-Turkish Peninsula and Illyrian Peninsula. It was noted, as Wagner did, that it could be with equal, if not greater, right called South Slav* (South Slavic – A/N) *Peninsula, since most of its territory is inhabited by Serbs and Bulgarians who exceed in number other peoples of the peninsula and since the northern ethnogr.* (ethnographic – A/N) *boundary of the Southern Slavs mainly covers a line which divides the Peninsula from the European hull. Leipold proposed the designation East Roman Peninsula (Leipold: die mittlere höhe europas 1874 _52 Anm.)."*

Cvijić published this text almost literally in the aforementioned review entitled *Various Names of the Balkan Peninsula* (1894), adding that the confusion with the name of the peninsula (1830–1880) influenced the emergence of new names, such as the "European Orient" (1877, 1887), "Southeastern European Peninsula" (1881, 1892) and alike. Furthermore, in his notebook Cvijić concluded: *"The orographic character of the central chain, which would extend from the Black Sea to the Adr. S.* (Adriatic Sea – A/N) *borrowed its name to the whole Balk. Peninsula* (Balkan – A/N). *Misconception. It seems that Zeune first coined the term in 1808, in 'Gaea', p. 53."* He cited the same data in the remaining portion of the published paper, explaining that it was Johann August Zeune who in 1808 first coined the designation "Haemus Peninsula" (after the Hämus Mountain – now known as the Balkan Mountain), believing that there was a great Central mountain chain, extending from the Black Sea, across the middle of the peninsula, to the Adriatic Sea. He highlighted the influence of Humboldt and Ritter's ideas and an analogy with the names of the Apennine and the Pyrenees Peninsulas, as well as the name America, given by error.

In the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), Cvijić complemented the chronological changes in the name, and he likewise provided a systematic and more detailed review concerning the understanding of the relief of the peninsula through history, especially the Stara Planina Mountain [Balkan Mountain]. Unlike his first work (1894), in which he marked one of the two "Balkan misconceptions" (misunderstanding of orography, that is the nonexistence of the Central mountain ridge), in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), he posits another misconception (In Turkish, Balkan means "mountain" in general, a term whereby the Turkish population distinguished only the eastern part of the old Haemus Mons, the lowest and the least significant, whereas the examiners mistakenly used this name for the entire classical Haemus at the beginning of the nineteenth century). On the basis of these two misconceptions, in 1808 Zeune gave the name Balkan Peninsula to the whole area. In the text below, Cvijić determined the problematic northern border of the peninsula, pointing to the physio-geographical, ethnographic (anthropogeographical) and political aspects of demarcation. In the abovementioned publications he concluded that the name of the Balkan Peninsula should be by no means changed.

Jovana Todorić



45

Злотска Пећ.

1. У хомогеној пећинској глини [illegible] тамо где где [illegible] на [illegible].

2. Нађене две омање вилице од Urs. sp. и [illegible] зуби; међу њима има их [illegible] од младих индивидуа

3. [illegible] од посуђа у култ. слој. Неки комади по савршенијој изради и орнаментици имају са свим млад изглед. Орнамент има је са свим разно[illegible]; има је у облику венаца на горњи[illegible] [illegible] са [illegible] и напослетку црте [illegible]. Неки комади од посуђа изгледа да у [illegible] или [illegible] пачани. – Mit Verzierung [illegible]

Време црнице. На [illegible] изнад горње пећине и то у [illegible] речи: [illegible] јако [illegible] са [illegible]. Ипак се и [illegible] најниже пећине он [illegible] у [illegible] [illegible].

JC_250_38

Within his systematic and extensive field research of Mount Kučaj, undertaken in 1889, 1890 and 1891, Jovan Cvijić explored the Zlotska Pećina Cave, close to the village of Zlot (today known as the Lazareva Pećina Cave) (Cvijić, 1893). In the *Introduction* he reminded that A. Boué, F. Hoffman and J. Žujović had already written on the Kučaj Mountain, paying the greatest attention to the Hoffmann's observations, citing his "Report to the Minister of Finance on the Occurrence of Stone Coal and the State Limitation on the Ore Area in Senje in 1875". In his field notebook on the Zlotska Cave, Cvijić wrote:

"*1. In a homogeneous cave clay, I found just occasional very tiny quartz grains.*

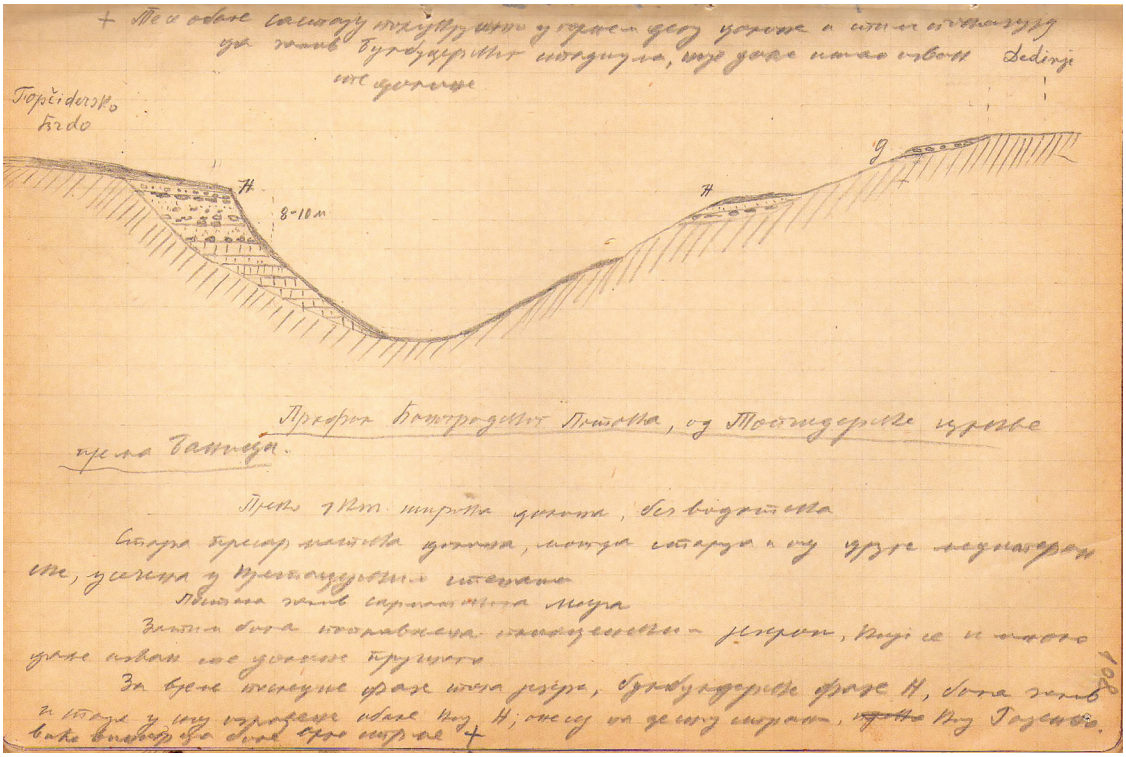
2. Two smallish jaws of Urs. sp (Ursus spelaeus – Cave Bear, A/N) *and many teeth found; these include tiny ones, belonging to younger specimens.*

3. Pieces of pottery found in cult. layer. In terms of design and perfection of ornamentation, some pieces have fresh appearance. Ornaments are quite diverse; they appear in the shape of a wreath on the upper part of the vessel, then in the form of ordinary creases and protrusions with petite shallow holes, and ultimately as arc-shaped lines. Some pieces seem to be enamelled or polished."

Interestingly, the notebook manuscript is much shorter than the text published in the article entitled *Geographical Study of the Kučaj Area in Eastern Serbia* (1893). In the paper, Cvijić emphasised: "Many difficulties have hindered me during my first field trip to the Zlotska Cave, on the 1st and 2nd of August 1890, hence I could not better examine it (…). For that reason, on the 2nd and 3rd of September 1891, I explored it once more" (Cvijić, 1893, p. 150). This leads to the conclusion that the notebook manuscript was most likely written in 1890. In the published paper, he thoroughly examines the geomorphological characteristics of the cave, likewise devoting much attention to the sediments. In addition, the author provides a cross-section with the marked layers and compares his findings with the aforementioned Hoffmann's results from 1875. Apart from the analysis of sediment layers, he also addresses the protection issues, thus being the precursor of contemporary activities aimed at pointing out the necessity of protecting geoheritage. In this regard, he stated: "In recent years the biggest devastators of the Zlotska Cave have been nature-loving visitors of the Brestovac Spa, who, as I had a chance to witness, come here in groups, vigorously and mercilessly digging and fumbling about on the ground for bones, to have 'a souvenir' of the spa" (Cvijić, 1893, p. 157).

Jelena Ćalić

SKETCH OF "THE CROSS-SECTION OF THE AREA OF VINOGRADSKI POTOK STREAM, FROM THE CHURCH IN TOPČIDER TOWARDS BANJICA"



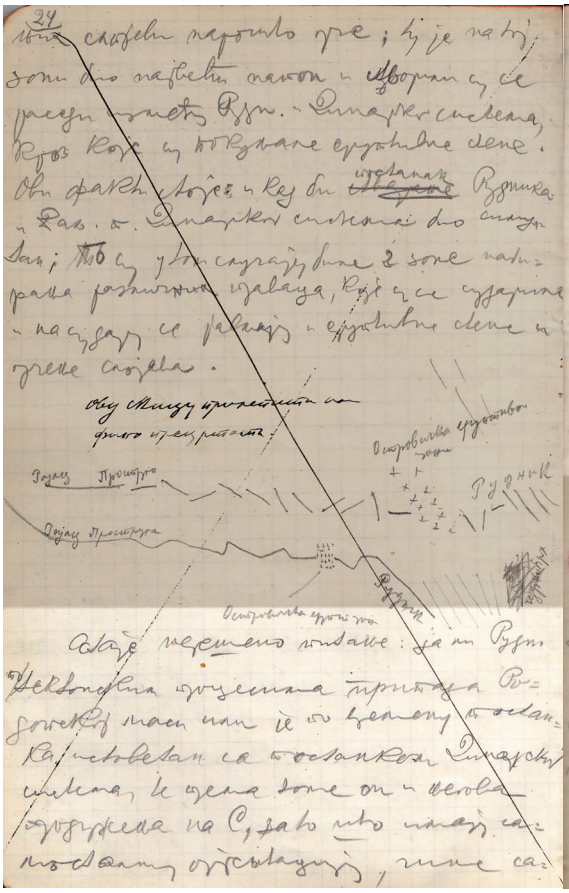
JC_265_57

The sketch, made during the field research in the vicinity of Belgrade, shows a synthetic cross-section of the Vinogradski Potok Stream from the Church in Topčider towards Banjica, with lithological characteristics and morphogenetic elements of the relief. In this cross-section, Jovan Cvijić presented the shores of the Pliocene lake with marked Bulbuder Stage (labelled with the letter *"N"*). Above the sketch he wrote: *"These shores meet in a semicircle in the upper part of the valley, thus showing that the Bulbuder Stage bay did not extend further beyond that valley."* The text below states that the valley is of Cretaceous limestone, about 1 km wide, with no watercourse. Cvijić thought that the valley itself was once a bay of the Sarmatian Sea, and that it was then flooded by a lake of the Pliocene Epoch, extending even beyond its borders to the last phase (of the Bulbuder stage), and covering only the area of this valley. On the sketch, he defined the lowest, Belgrade levelled surface, at the height of 120–140 m and the terrace stair (Bulbuder Stage of the Belgrade phase) at a height of 110–120 m.

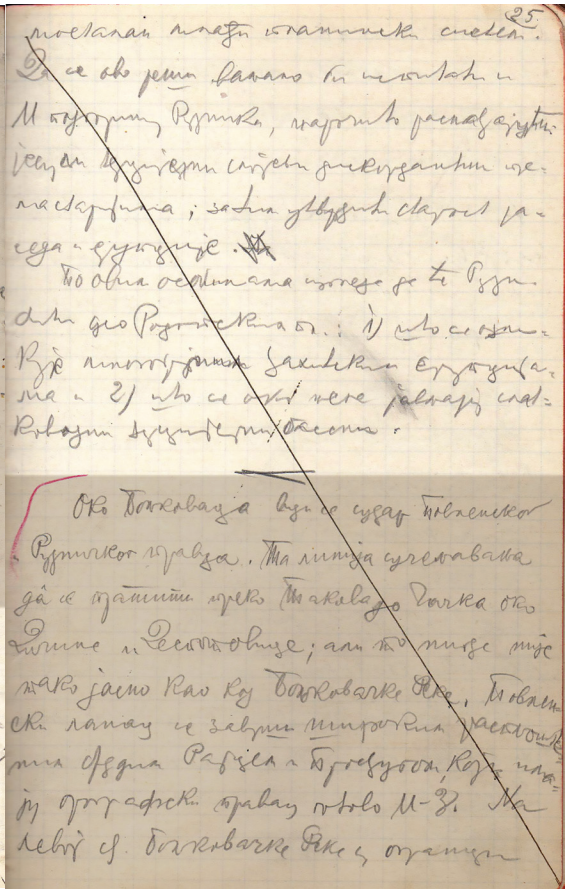
Cvijić's sketch of this cross-section, as well as others created during field trips, served him in determining the coast lines of the Pannonian Sea or lake of Pliocene age, and in hypothesising on the abrasion origin of levelled surfaces in Šumadija. He published the results of this research in several papers and studies, among them, *Lacustrine morphology of Šumadija* (1909), *Abrasion and Fluvial Levelled Surfaces* (1921a), *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a) and *the first volume of Geomorphology* (1924b). In the work *Lacustrine morphology of Šumadija*, he presented the Belgrade levelled surface in detail and, inter alia, described the cross-section of the sketch under consideration. "In the vicinity of Belgrade there are very wide old valleys: the Bulbuder, Mokri Lug, Banjica and so on… From the Church in Topčider, a road runs past Pčelarnik to Banjičko Brdo through a wide, real valley, with no stream or sign of its ever having been therein. Around these valleys there is a coastal line cut into the Belgrade levelled surface and lower as compared to it" (Cvijić, 1909, p. 14). The author graphically modified this sketch and officially published it in his work *Abrasion and Fluvial Levelled Surfaces* (1921a).

J. Cvijić's conclusions on the origin of the Šumadija relief was supported by his students and associates, including Petar S. Jovanović who relied upon thereof in his doctoral dissertation "Lake Relief Rim of Belgrade Vicinity" (1922). Among foreign scientists, only Norbert Krebs (1922) expressed a dissenting opinion, and later Jovan Žujović (1929), as well. However, in the 1950s, in his paper "Review of Cvijić's Understanding of the Abrasion Relief Around the Pannonian Basin Southern Rim", P. S. Jovanović revised both his and Cvijić's understanding of the genesis of the Šumadija levelled surfaces, defining them as fluvio-denudational. This interpretation was later accepted by other geomorphologists (Roglić, 1952; Jovanović, 1956; 1969; Lazarević, 1957; 1960; Zeremski, 1957; Marković, 1965; 1978; Petrović, 1988). Still, some authors have not completely rejected Cvijić's hypothesis, considering that the formation of levelled surfaces in Šumadija can be viewed as combination of abrasion and fluvio-denudational processes (Jovičić, 1957; Lazarević, 2007).

Ana Milanović Pešić



JC_274_27



JC_274_28

The manuscript entitled *"Rudnik and Os(t)rovica"* was created in June 1900, during the field research of Šumadija. By examining other handwritten texts from the notebooks, it can be concluded that the handwriting does not belong to Jovan Cvijić, but to one of his associates who noted down his words.

Observations on Rudnik include 14 field notebook pages, containing a description of the morphology and genesis of this area, data on geological composition of the terrain, volcanism and paleovolcanic forms in relief, hydrological watersheds of individual watercourses, and the like. Based on the entries, it can be concluded that Cvijić reached the highest peak of Rudnik Mountain – Veliki Šturac, now renamed Cvijićev Vrh [Cvijić's Peak] (1132 m a.s.l.) in his honour.

Cvijić wrote a number of synthetic character works and studies on Rudnik Mountain. In discussing this subject matter, he likewise expressed his versatility in scientific work and opus regarding various topics, from the analysis of paleovolcanic relief and tectonic processes, to the development of the hypothesis on the abrasional relief in Šumadija, whereby he used parts of this manuscript.

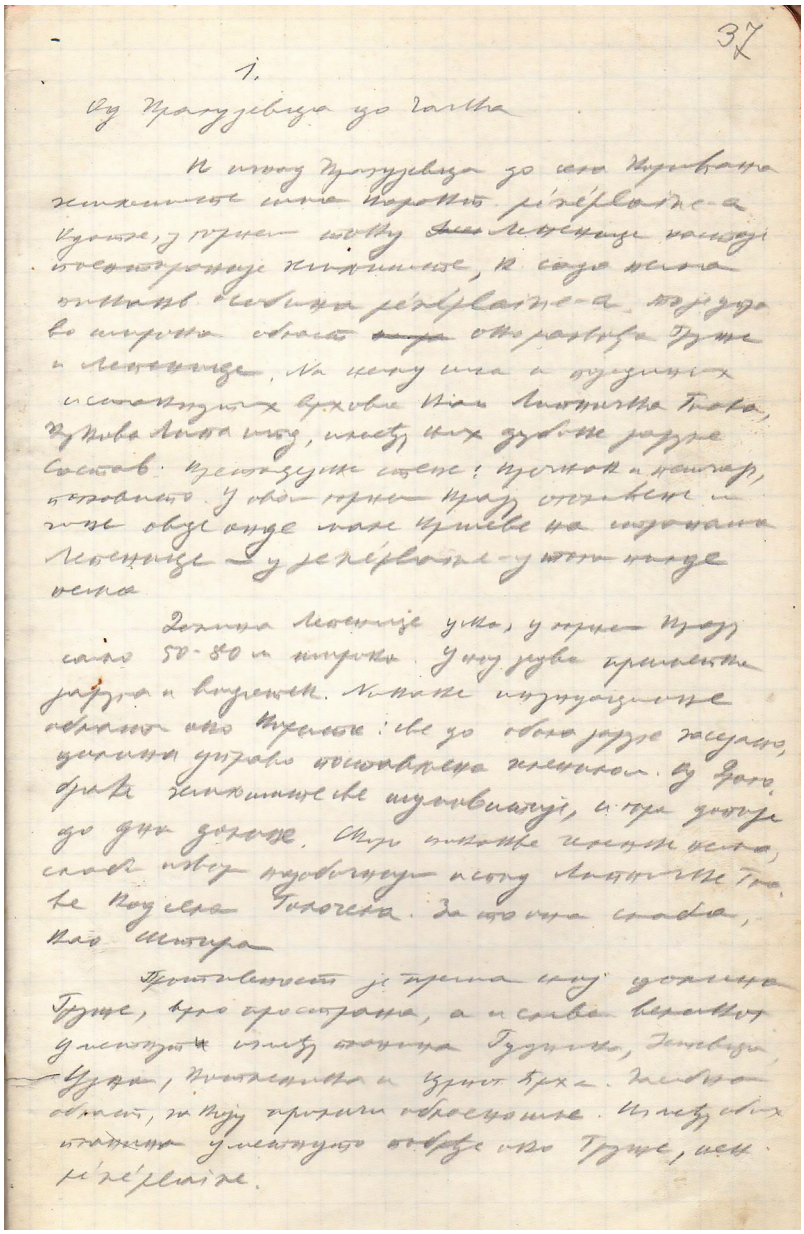
Particularly interesting are pages considering the dilemma on the belonging of Rudnik Mountain to a certain tectonic unit: *"The question remains: whether, in terms of tectonic processes, Rudn.* (Rudnik – A/N) *belongs to the Rhodope Mass, or its formation coincides with the Dinaric system genesis, thus forming an independent mountain system together with its extension in a direction N* (*north – A/N), due to their unique orientation."*

In the rest of the manuscript, ideas and plans for further research were laid out, such as paying visits to the eastern part of Rudnik Mountain, determining the age of faults and eruptions and geological surveys, aiming to clarify the origin thereof. Based on the previously conducted tests, Cvijić considered Rudnik as probably belonging to the Rhodope Massif.

This field research served Cvijić to gradually develop the hypothesis on transitional zones between the Rhodope Massif and fold mountains. He first distinguished "the Rudnik group of mountains" within the "Dinaric system", to which the mountains of Rudnik, Venčac, Bukulja, Kosmaj and Avala belong, emphasising that they have specific tectonic and other features (Grubić, 2015). Later, Cvijić marked off these transition zones in other areas as well, naming them "Übergangszone" [Transition zones] in his paper *Die Tektonischen Vorgange in der Rhodopenmasse* (1901), once more discussing thereof in the paper *Die Tektonik der Balkanhalbinsel* (1903). More detailed explanations about Rudnik and the isolated zone of Šumadija mountains could be found in *the first volume of Geomorphology* (1924b).

Contemporary geological and geomorphological research has contributed to the formation of numerous different interpretations and tectonic regionalisations, but Cvijić undoubtedly gave an important contribution to the formation of preliminary ideas and defining the initial research directions.

Ana Milanović Pešić



37

1.

Од Пландишта до Гаљева

К нашој Пландишта до села Кулина
живописне има Кадино ре'ке'ре'ла-а
Кулине, у горњи шуму ~~Лесковице~~ чашоју
високогорње живописне, к сеоје села
оптиче Кадина ре'ке'ре'ла-а, пруже
се широка свака ~~пруга~~ откраја Пруте
и Лесковице. На чему има а оудини-х
исконитих брегова Кина Кадитка Гора,
у Кива Кина шуд, шкеђ ових дубоке разре
Састав: Кеоградске сосне; Кедар и шимар,
Кадинаста. У ова горње Кадр стоиче и
ниске обреанде шаке Криве на сеоска
Лесковице — у ре'ке'ре'ла-у што чаде
сена

Дожина Лесковице уска, у горњи Кадр
сако 50-80 м широка. У шуд дубе прилике
разра и Кедеревк. Кивате шуд сеоске
обичаи ако Кривом: све до обоа разре засеоа,
сеоска дубе Кадинаста Кадинска. Од Гаљ.
фока живописне шуд ивиа, а горњи дубе
до два дорове. Ако ошкоре Кадни сеоа,
сваки ивор подиже а сеоу Кадинске Гра
ке подсеа Гаљева. За ово сеоа сваки,
као шкоре

Пространство је горња шуд сеоска
Пруте, Кад ораспрана, а и сваки Кедеревк
у Кадиноју ошкоре Гаљева, Гаљева,
Чуда, Пландишта и Црни Кад. Кадно
обиа, за Кад горњи обреанске. Из Кедеревк
Кадиноја у Кадиноју обиде ако Пруте, шеа
ре'ке'ре'ла.

JC_274_40

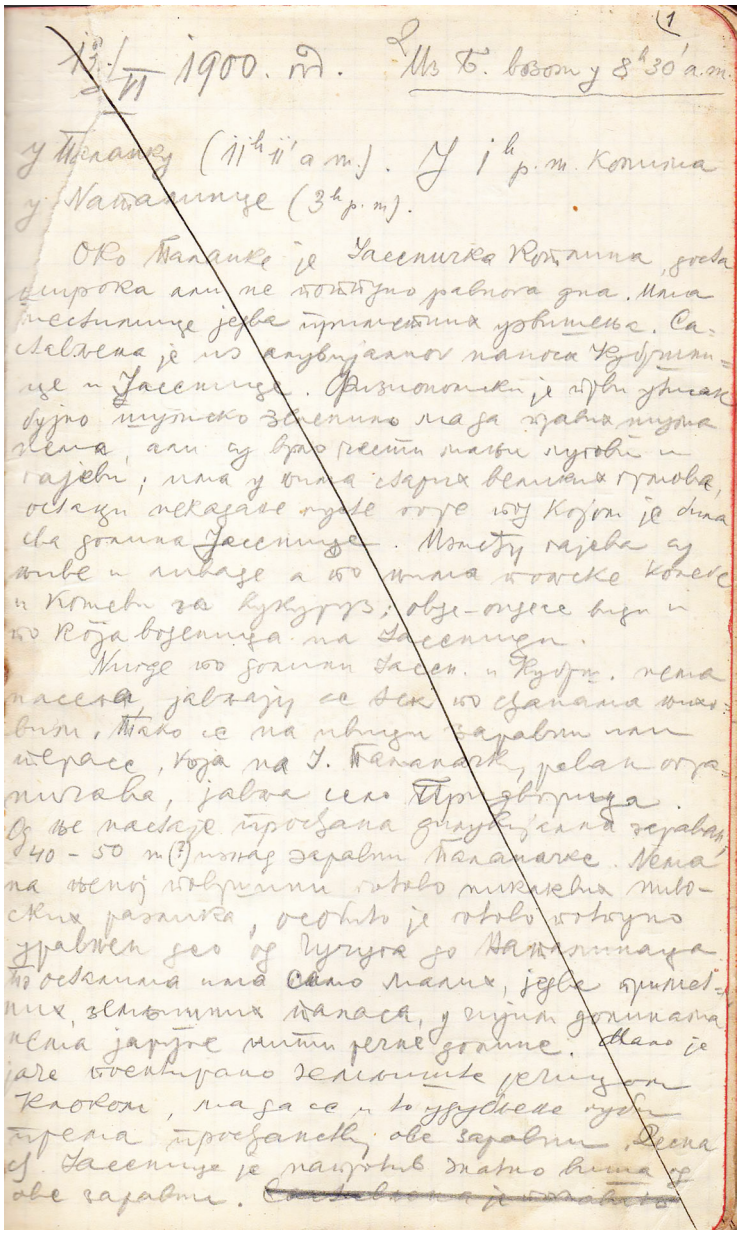
In a notebook written by Jovan Cvijić and his associates, in June 1900, during field investigations in Šumadija, we encounter the manuscript bearing the title *"From Kragujevac to Čačak"*. At the beginning of the text, which includes both physio-geographical and anthropogeographical surveys, Cvijić recorded his observations on the Lepenica River valley. On the first page there are data on the morphology of the terrain, geological and pedological characteristics, as well as comparisons with the Gruža River valley. It was noted that the area of the upper Lepenica River basin, from Drača, was more covered with wood. The watershed divide between the Lepenica and Gruža River basins was also defined and the prominent peaks highlighted, such as "Lipnička Glava" (Lipova Glava, 534 m a.s.l, in the southwestern part of the watershed divide from Korićani towards the Gledić mountains). Concerning the geological composition of this part of the basin, Cvijić noticed limestones and sandstones, stating that *"here and there they form small karsts on the Lepenica shores."*

In this manuscript Cvijić noted that *"the Lepenica River valley is very narrow in its upper course, 50–80 m"*, compared to a much wider Gruža River valley. During these field investigations, he also visited the source of the Lepenica River in the Goločelo settlement on the Gledić mountains, which he thought to be of a rather meager volume. In his interpretation, he compared the source of the Lepenica River with the one pertaining to the Štira River of his native region, without mentioning quantitative data. More recent field research of this area has found that Studenac (380 m a.s.l), the source of Lepenica River, has been harnessed for the water supply of Goločelo settlement, and that only excess water flows into the Lepenica riverbed. Until 2004, there was a faucet at the very source, when additional work on harnessing was made, and the area around it closed. In comparison with the former vast forests, anthropogenic influence is evident today, therefore only partially preserved forests of oak and beech remain on the slopes of Gledić mountains around the spring (Milanović, 2007a).

J. Cvijić used field research in the Lepenica River basin to develop a hypothesis about the lacustrine morphology of Šumadija and in order to publish his results. His numerous works on this subject include *Lacustrine Morphology of Šumadija* (1909), *Abrasion and Fluvial Levelled Surfaces* (1921a), as well as *the first volume of Geomorphology* (1924b).

Cvijić's research of the Lepenica River basin was also the subject of J. Džajević's writings (1965). The actuality of the topic generated the subsequent geomorphological surveys of this territory, among them the ones conducted by Branislav P. Jovanović (1969) and Miloš Zeremski (1983a, 1983b). Geomorphological study in several cross-sections from Žeželj to Lepenica River valley was undertaken by Branislav P. Jovanović, who in the paper "Relief of the Middle and Lower Parts of the Velika Morava River Valley" (1969) claimed that there was no reliable evidence of the existence of abrasion levelled surfaces in the lower Lepenica. The results of the hydrogeographical exploration of this basin were presented in the monographs authored by Živadin Stepanović (1974) and Ana Milanović (2007a), as well as in several works by the same authors (Stepanović, 1966, 1969; 1974; Milanović, 2006; 2007b).

Ana Milanović Pešić



JC_274_4

In June 1900, Jovan Cvijić conducted field research of Šumadija, as evidenced by this manuscript from the field notebook. Based on the analysis of other texts, it can be concluded that the handwriting does not belong to Cvijić, but to one of his associates, who took record of his research. At the beginning, we learn that the journey began on the 13th June of 1900, by train from Belgrade (marked as *"B"*). About 11 am, Cvijić arrived in Palanka (Smederevska Palanka), whence he continued his research down the Jasenica River valley. By analysing the entire text, shown on several pages, it can be concluded that Cvijić was heading down the Jasenica River valley from the lower to the source section, from Palanka, to Rudnik Mountain via settlements Natalinci and Topola, and carried out physio-geographical and anthropogeographical research.

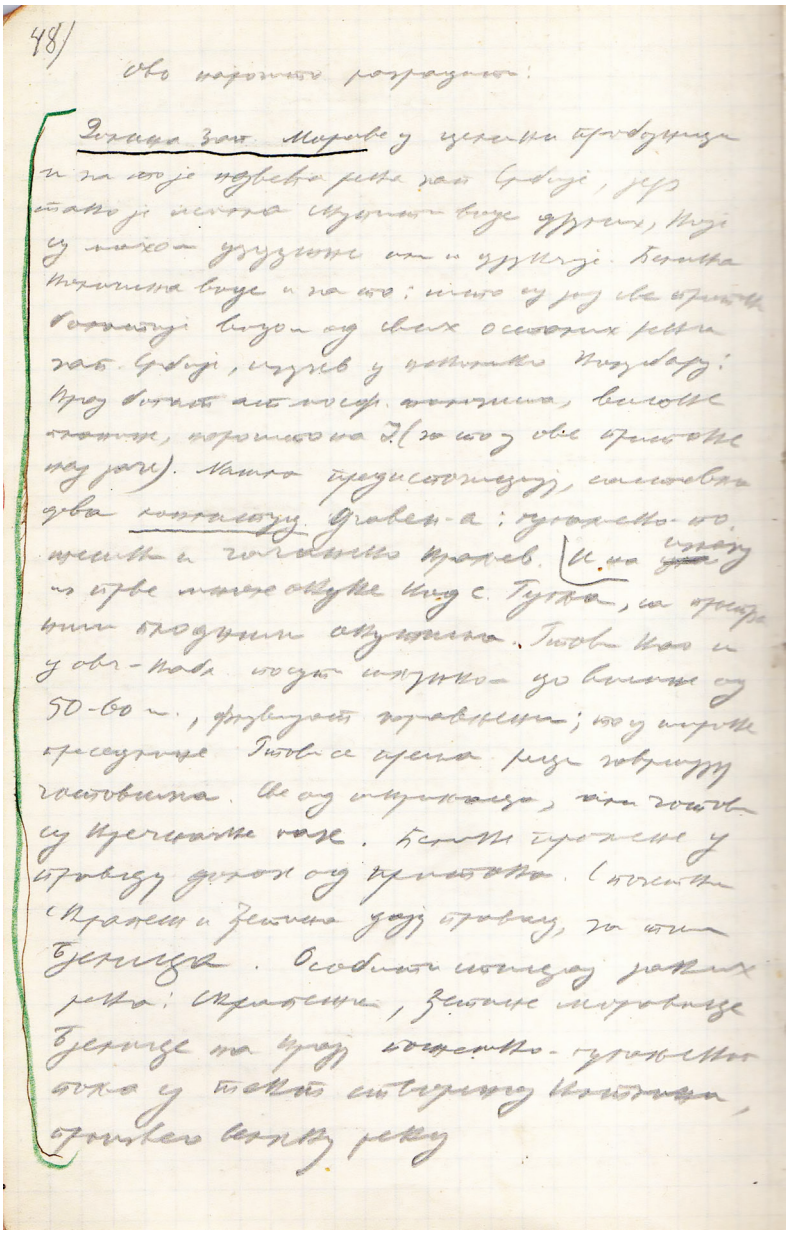
The selected page contains a description of the lower sector of the Jasenica River and its alluvial plain. At the beginning we read the following commentary: *"The Jasenica River valley is situated near Palanka and its bottom is quite wide but not completely flat. There are barely noticeable uplifts. The valley is composed of alluvial deposits of the Kubršnica and Jasenica Rivers."* It is further noted that there are no settlements in this area, only groves and farmlands, with only a few watermills. It is concluded that the settlements occur only *"on the edge of the plateau or terrace"* and the village of Pridvorice is given as example. By analysing the morphology of the terrain, he also distinguishes river terraces, a lower plateau around Palanka and *"a diluvial plateau 40-50 m (?) above the Palanka Plateau."*

The text below includes the description of the morphological features and genesis of the terrain, followed by the analysis of the geological composition, as well as the characteristics of the soil and types of vegetation. In addition, the manuscript contains data on population and settlements.

The manuscript here presented, as well as several others from the same field notebook, served J. Cvijić for posing a hypothesis about the abrasion levelled surfaces of Šumadija. Thus, in his work *Lacustrine Morphology of Šumadija* (1909), he pointed to the abrasion origin of the levelled surface in the Jasenica River basin, singling out the Ripanj levelled surface near the Blaznava village. Further in the text he wrote: "From Žabari, through Junkovci, Natalinci and downwards, the Jasenica River valley takes asymmetrical form. The left lower sides represent the lowest parts of the Pinosava Plain, whilst the right sides, steep and about 100 m higher than the left ones, belong to the Ripanj levelled surface" (Cvijić, 1909, p. 46). Upon these premises, he concluded that, following the outflow of the Pinosava Lake, the Jasenica River is cut along the lake shore at the border between the two above mentioned levelled surfaces. In his work, he presented his conclusions on the genesis and morphology of the Jasenica River valley. He considered that the original branch of this river, running to the Rudnik village, is the young V-shaped valley without defined river terraces, whereas downhill ridges, which represent traces of an old plane, are visible downstream, from the Rudnik village to the river mouth. The river has cut a V-shaped younger valley with two distinguishable river terraces, 23 m and 5–10 m high (Cvijić, 1909).

The results of later geomorphological surveys of the Jasenica River basin were also published in the monograph by Radenko Lazarević (1959) and scientific papers authored by Miloš Zeremski (1982) and Čedomir Milić (1985), whereas the results of hydrogeographical surveys were published in the monograph by Radoslav Glišić (2002).

Ana Milanović Pešić



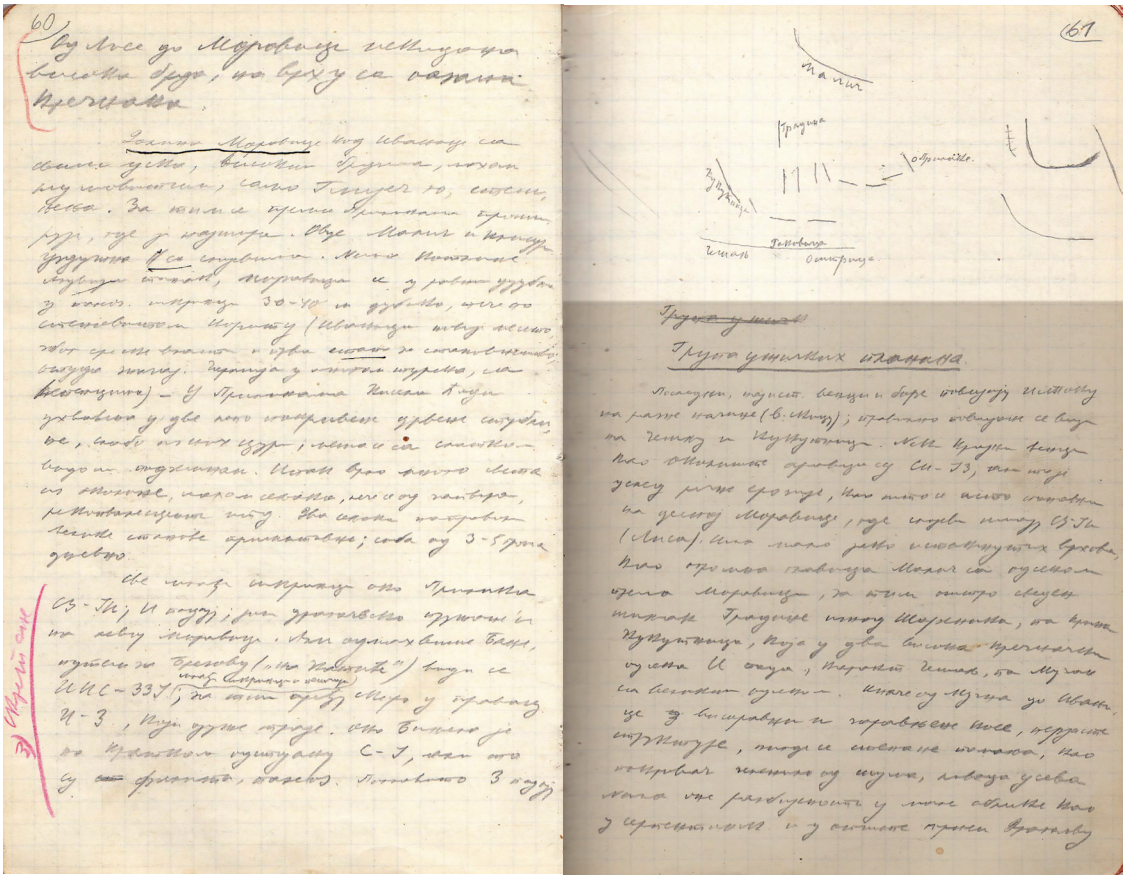
JC_274_51

Observations of Jovan Cvijić on the Zapadna Morava River valley were recorded on several pages, written during the field research of Šumadija, with a special reference to the Požega basin. He pointed out that the valley of the Zapadna Morava River is an incising river all along its course and the largest river in Western Serbia, with large amounts of water flowing from tributaries, which are richer in water than all other rivers of Serbia. The river basin is characterised by significant amount of precipitation and high mountains, especially in the south (which is why these tributaries are the abundant in water resources). According to Cvijić, two characteristic basins are distinguished in this drainage area – the basins of *"Gugalj-Požega"* and *"Čačak-Kraljevo"*. Later on, he provided a description of the Zapadna Morava River banks on the section Gugalj – Ovčarsko-Kablarska Klisura Gorge, including the morphological description and the geological composition of the terrain. He stated that the rivers of Skrapež and Đetinja tend to flow in the same direction as the Bjelica River. *"A particular confluence of the swift rivers of Skrapež, Đetinja, Moravica and Bjelica at the end of the Požega-Gugalj Polje into a basin of tectonic origin has formed a large river."*

In the text below, Cvijić considered the influence of the geological composition and morphology of the terrain on the positioning of the settlement. *"The height reached by the schist and sandstone determines the height of the village, for the slopes are milder over the eluvium and farmlands."* It is noted that houses and villages of the dispersed type reach the higher altitudes in comparison with the settlements in Eastern Serbia, whilst villages surrounding the Ibar River are the highest. In addition, he examined in greater detail the Požega basin, noting that the Paleozoic schists are collected in small folds on the northern edge of the Požega valley, expanding exclusively in the Dinaric direction, NW–SE. He also analysed the way land is used in the Požega basin, stating that the rich land is flat and often flooded by the aforementioned rivers, and that settlements are located along the rim and on the slopes surrounding the basin.

This manuscript proved useful to Cvijić in summing up the results of his research on fluvial erosion, publishing thereof it in *the second volume of Geomorphology* (1926). The geomorphological features of this part of the Zapadna Morava River basin were also scrutinised in the monographs by Borivoje Ž. Milojević (1948) and Miloš Zeremski (1983b).

Marko Urošev



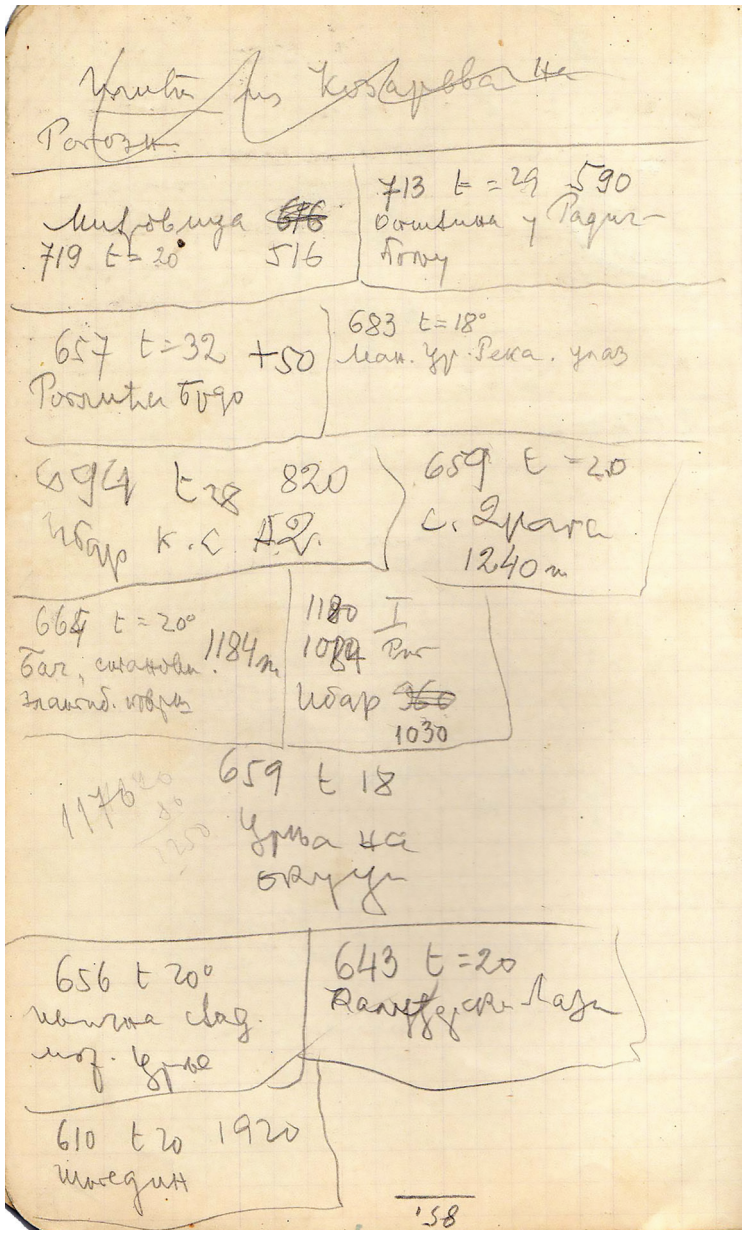
JC_274_63 JC_274_64

During his field trips through Western Serbia, heading from the Dragačevo mountains towards the mountains in the Užice surroundings, Jovan Cvijić kept records of his observations on the Golijska Moravica River valley, as shown on the first page of this manuscript. One part of the valley from Ivanjica to the Manastirska Klisura Gorge, located between Malič, Gradina and Obla Glava is described. Inter alia, Cvijić noted that *"The Moravica River valley near Ivanjica is completely narrow, clustered between high hills, mostly covered with wood."* He then concluded that the valley extends to Prilike, being widest in that part of the basin. Therein Moravica encounters Mount Malič and the Gradina Gorge where the river carved, flowing along the rocky riverbed. In addition, he described the mountains on the route Prilike – Katići, on the left side of the Moravica River basin.

On the next page, Cvijić sketched the direction of ridges and folds of the eastern parts of the group of mountains in the Užice surroundings: Malič, Gradina, Kukutnica, Mučanj and Prilike settlement.

Cvijić used these notes in his survey of the Mačkat levelled surface and other forms of relief rim, publishing them in *the first volume of Geomorphology* (1924b). Subsequent surveys were carried out by Radovan Ršumović (1960), whose monograph represents the most comprehensive geomorphological study of this basin. The results of hydrogeographical exploration of the Golijska Moravica River basin were also presented in the work of Ljubinko Sretenović (1955) and the monograph by Marko Urošev (2007).

Marko Urošev



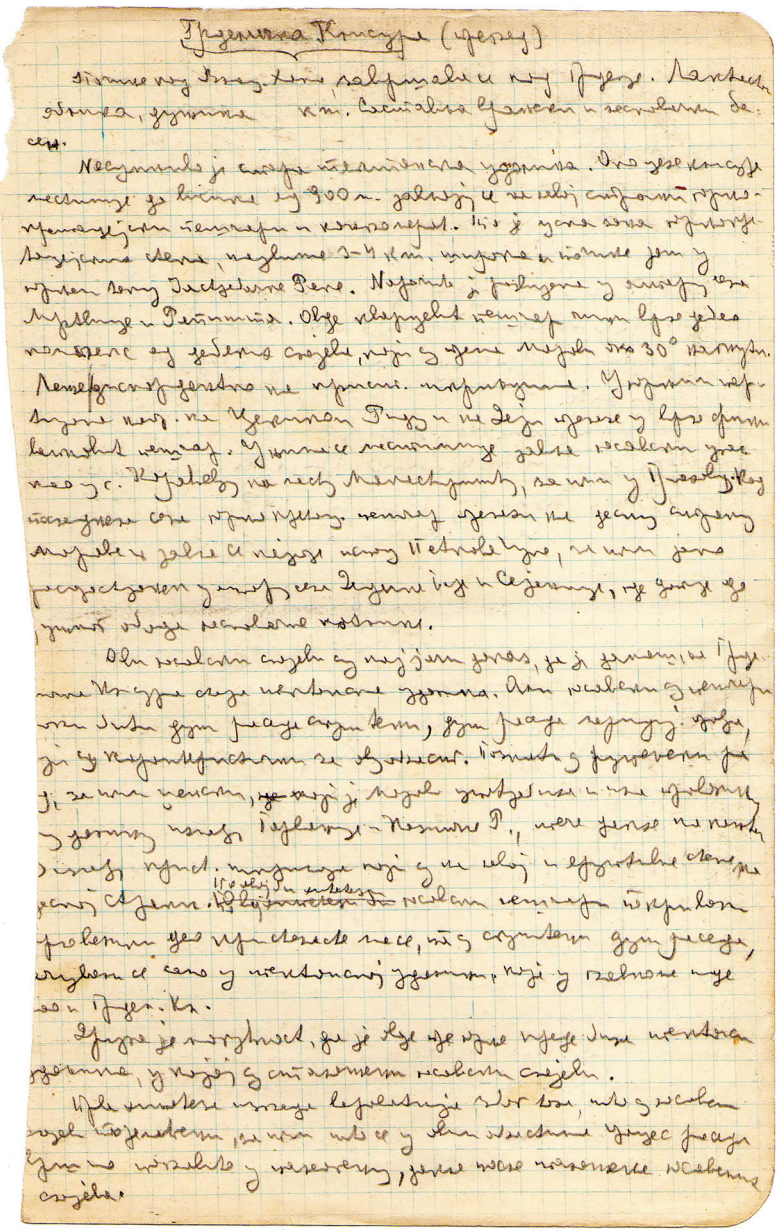
JC_267_49

This manuscript, totalling four pages, is an integral part of a field notebook compiled during the physio-geographical and anthropogeographical research of the northwestern and northern parts of Kosovo and Metohija, the Raška region and the Zlatibor levelled surface. The record refers to the measuring of altitudes, relative heights (possibly terraces) and air temperature, in some cases. Data were provided for altogether 28 locations in the Raška and Ibar River valleys, from Kosovska Mitrovica to the mouth of Raška into Ibar.

In this manuscript, Jovan Cvijić provided the same sort of data for several parts of the Ibar River basin, that is, for higher basins, for example, the Koštam Polje. In this respect, it can be assumed that this basin was regarded as a lake basin in the previous stages of its evolution. The data shown in this manuscript (altitude, relative heights) indicate that J. Cvijić studied river terraces as a segment of a general geomorphological process in the Ibar River basin. The data are systematical, indicating the intention to place a particular process within a wider context, that is, to connect the data to the entire area of the Morava River basin. From all of this, it can be noted that the main goal of Cvijić's field research, recorded in his notes, was aimed at exploring old lake basins and lacustrine abrasional relief.

Parts of this research Cvijić published in the Bulletin of the Serbian Geographical Society (1921d), in the paper *Conformal and Inverse Relief, Polygenetic Valleys and Entrenched Meanders*, whereby "these three morphological features of the land, most often related to the area of old lakes and old lacustrine landforms, which were more developed on the Balkan Peninsula than anywhere else in the world, starting from the Ibar River valley, through Kosovo and Metohija and the Preševo watershed to the Sub-Balkan array of basins" (Cvijić, 1921d, p. 95). In the same paper, from page 95 to page 108, Cvijić explained in more detail his research of this terrain. Parts of his findings likewise appeared in the paper *Abrasion and Fluvial Levelled Surfaces* (1921a).

Milovan Milivojević, Željko Bjeljac

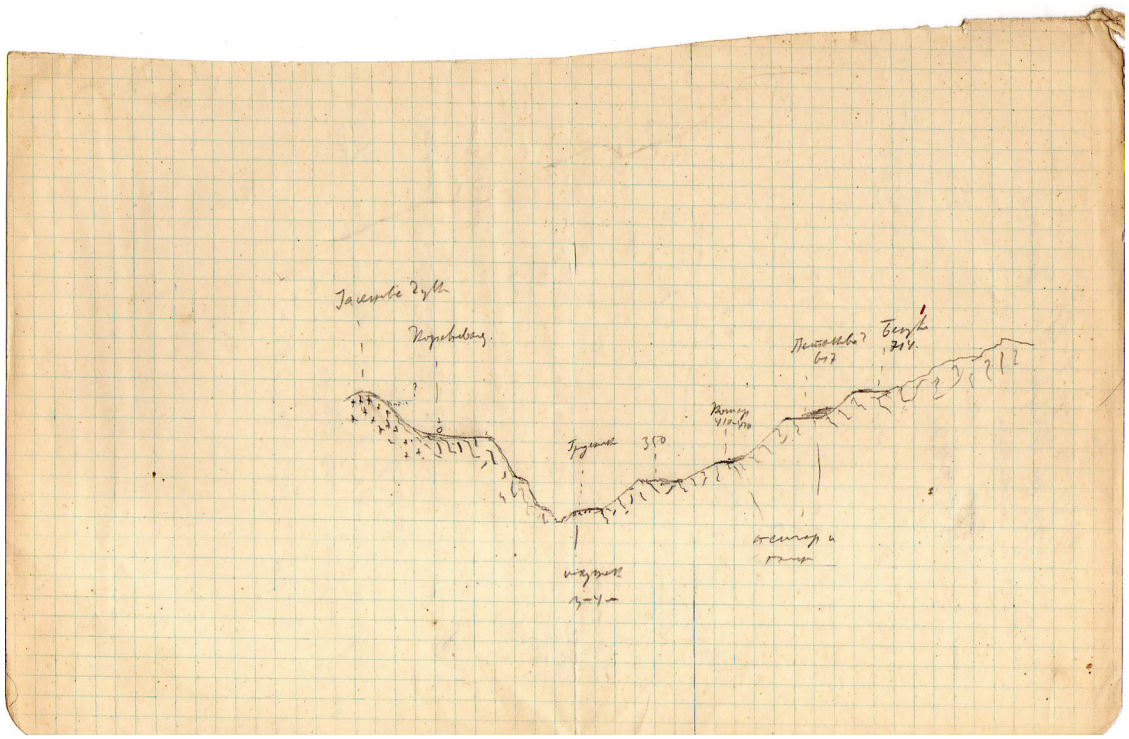


JC_266_41

Based on the analysis of texts from the field notebooks, it can be concluded that the handwriting from the text on the Grdelička Gorge does not belong to Cvijić, but to one of his associates. Still, the text was written from the point of view of Jovan Cvijić, who later published it in one of his monographs.

This text, written during Cvijić's research trips through Southern Serbia, gives a description of the Grdelička Gorge position, its tectonic setting, including the hypotheses regarding its genesis. During the field trip to the Grdelička Gorge area, Cvijić noticed Gosau coal formations in the villages of Koraćevac, Manastirište and Grahovo, on the basis of which he concluded that the gorge was an old tectonic depression. The geological composition of the gorge is simple, on the left side there are crystalline schists, and the igneous rocks on the right. Cvijić posed two hypotheses on the genesis of the gorge. According to the first hypothesis (which Cvijić regarded as more probable), the Gosau sandstones occupied more space than today, covering a part of the crystalline mass, *"downthrown along the fault and being preserved only in the tectonic depression."* According to the second hypothesis, *"a tectonic depression with the Gosau layers existed here before the Upper Cretaceous."*

Stefana Matović



JC_266_35

The text here presented brings forth the observations on the former existence of two lakes in this area, which communicated through the present-day Grdelička Gorge. The Northern lake (part of the Pannonian Lake) stretched to Grahovo, whereas the Southern lake (part of the Aegean Lake), streched through the present-day ridges, between Vladičin Han and the Momina Klisura Gorge and Kozarice village, to the terrace of 405 m. Based on research and terrain survey, Cvijić wrote the following about the abrasion terraces: the Petakova Čuka Plateau is the terrace at 610 m, the Beluće Plateau at 714 m, *"the last one extends to a wide ridge following the Predejanska Reka River along its right side"* at 606 m; the best preserved are terraces around Jasenova Čuka; under the Cekin Rid there is a terrace at 610–620 m, and above it is a plane *"confined by a steep bank and sections of the Tumba and Deja Peaks"* reaching over 700 m (shown on the manuscript sketch).

We further find mention of a significant terrace of 405 m (between Vladičin Han and Džep) which represents ridges of crystalline schists *"stretching along the valley of 300–1000 m, into the valley of the Južna Morava River which "snakes" between them in sharp meanders."* These ridges include: Balinovački Rt, Kržinački Rt, Karaula (village of Manajla) and Džepski Rt at the mouth of the Garvanica River. It is a terrace of ridges 80 m above the Južna Morava River. Further at this altitude, the meanders are epigenetical, and the ridge terraces continue into the Masurička Reka River basin.

Jovan Cvijić published these notes, with further detailed interpretations, in *the third volume of Fundamentals of Geography and Geology of Macedonia and Old Serbia* (1911). He distinguished five groups of terraces mentioned in the monograph: 1. Terraces of Gradac, Grahovo, Petakova Čuka and Beluća, 2. Terraces of Predejane and Repište, 3. Terrace of ridges, 4. Terrace of Masurička Reka valley and 5. Terraces of Vranje.

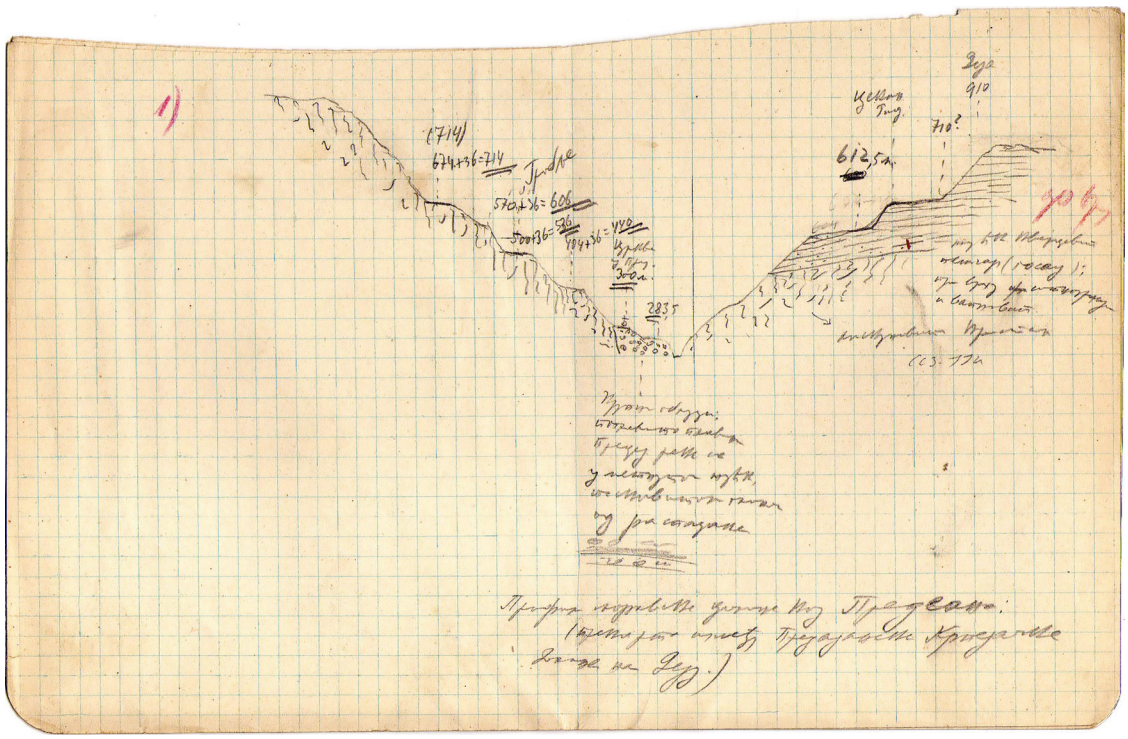
Many terraces are not mentioned in the manuscript, but are listed in the monograph, such as, for example, the Vlasina levelled surface (1100–1200 m). Also, the altitudes of individual terraces in the monograph do not match those given in the notebooks. The monograph describes Fuchs and Neumayr's paleontological botanical survey of the area stretching from Vienna, through Hungary, to Lipljan and further to Trachones near Athens. Based on this study, as well as palaeontological zoological studies, Cvijić concluded that "simple lake areas existed both N and S of the Grdelička Gorge, even after the Pontian Aegean and Pannonian Lakes, therefore in the Levant Age; only some marginal and considerably higher basins separated into independent lakes" (Cvijić, 1911, p. 934).

Apart from Cvijić, the Grdelička Gorge was the focus of research of many geographers (Jovanović, Milić, Zeremski, Kostić, &Ršumović, 1969), such as: Petar S. Jovanović (1932), Živadin Jovičić (1968), Orestije Krstić (1961), Jovan Trifunovski (1964) – published a sketch which is included in the notebook.

Out of all mentioned researchers Petar S. Jovanović (1932) stands out, because he concluded that Cvijić's description is a general solution and that more detailed and systematic research is required. Cvijić studied the basin of Lake Eordaia whereas Jovanović explored the basins of Poreč and Skopje, noting certain discrepancies. For example, the highest level of the Aegean Lake was at a height of over 900 m in some areas, and the connection between isolated lakes, as well as between the lakes and their tributaries differed.

Stefana Matović

SKETCH OF “THE CROSS-SECTION OF THE MORAVA RIVER VALLEY AT PREDEJANE”



JC_266_36

The sketch shows the *"Cross-Section of the Morava River Valley at Predejane"* with measured and marked heights of the lake terraces of Deja and Predejane. The following terrace heights of the terrace were recorded:

The Deja terrace 910 m;

Terrace above the Cekin Rid (710 m?);

Below is a terrace (612.5 m);

The lowest terrace above the Predejane River (283.5 m);

Above is the Church at Predejane settlement (300 m);

Above the Church is a terrace (440 m);

Followed by a terrace (536 m) with a graveyard;

Above it, two terraces (606 m and 714 m).

Lithological characteristics are marked in the cross-section, with a more detailed explanation below the sketch (from left to right):

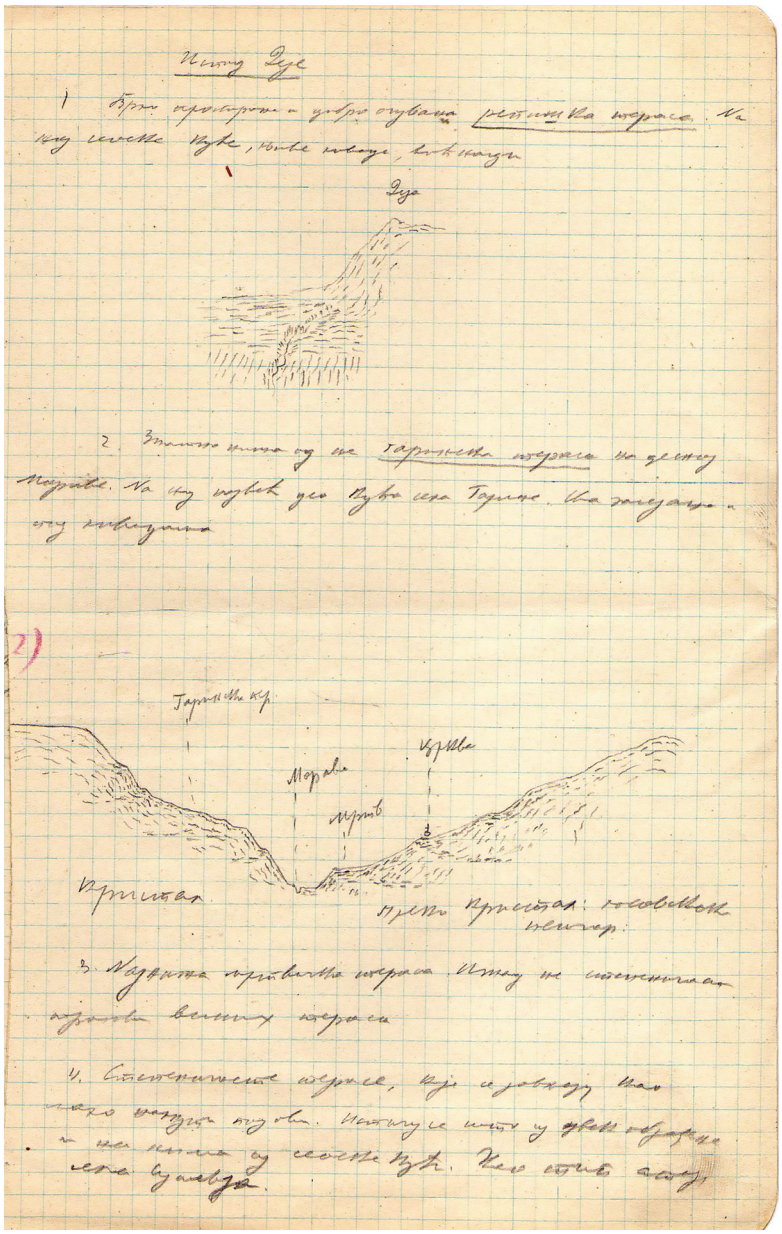
" *- large pebbles, especially fluvial sediments of the Predejanska Reka River with embedded layers of a yellowish sandy clay from decomposition;*

- Mica crystal (NNW-SSI);

- yellowish quartz-bearing sandstone (Gosau), fine-grained and rich in lime at the top."

This sketch was published under the heading *Terraces of Deja and Predejane* in the book *Fundamentals of Geography and Geology of Macedonia and Old Serbia, Including Surveys in Southern Bulgaria, Thrace, the Neighbouring Parts of Asia Minor, Thessaly, Epirus and Northern Albania* (1911), in the section *Terraces of Predejane and Repište*. In the text of this publication, Cvijić stated that above the Cekin Rid there is a wide plane of the highest terrace, whose height he did not measure.

Stefana Matović



JC_266_37

The manuscript entitled *"Below Deja"* comprises two sketches showing abrasion terraces at altitudes lower than the Deja Peak. On the upper sketch, the Deja Peak is presented. According to Jovan Cvijić (Cvijić, 1911, p. 937), "passing along the Morava River from Predejane, and further through the village of Repište, we reached the peaks of Tumba and Deja."

The lower sketch shows the Južna Morava riverbed and Garinska Reka River terrace on one side, and the Mrtvička terrace and (above it) a church on the other side of the river. Below the second sketch, there is a note on lithological composition: *"crystalline, (…) Gosau sandstone."*

Apart from these sketches, Cvijić gave the following remarks:

"The Repiška terrace is very spacious and well preserved,

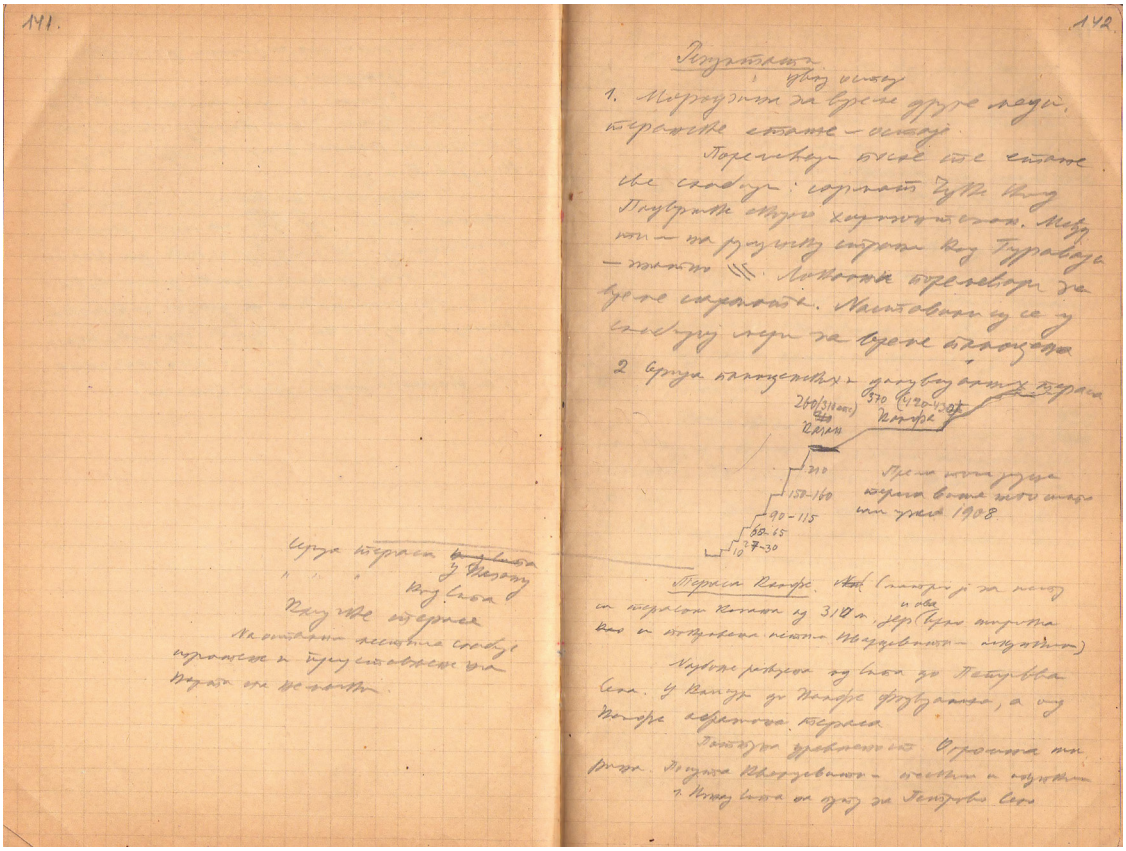
The Garinska terrace on the right bank of the Morava River is considerably lower,

The Mrtvačka terrace is the lowest,

Cascade terraces appear as slightly sloping floors, characteristic for always being cultivated, containing rural houses, as in the area of the village of Suševje."

After he made some stylistic correction to the latter sketch, Cvijić published it in the monograph *Fundamentals of Geography and Geology of Macedonia and Old Serbia, Including Surveys in Southern Bulgaria, Thrace, the Neighbouring Parts of Asia Minor, Thessaly, Epirus and Northern Albania* (1911), under the title *Terraces Near Garinje*. It is contained in the section *Terraces of Predejane and Repište*, as well as parts of the aforementioned text of this manuscript.

Stefana Matović



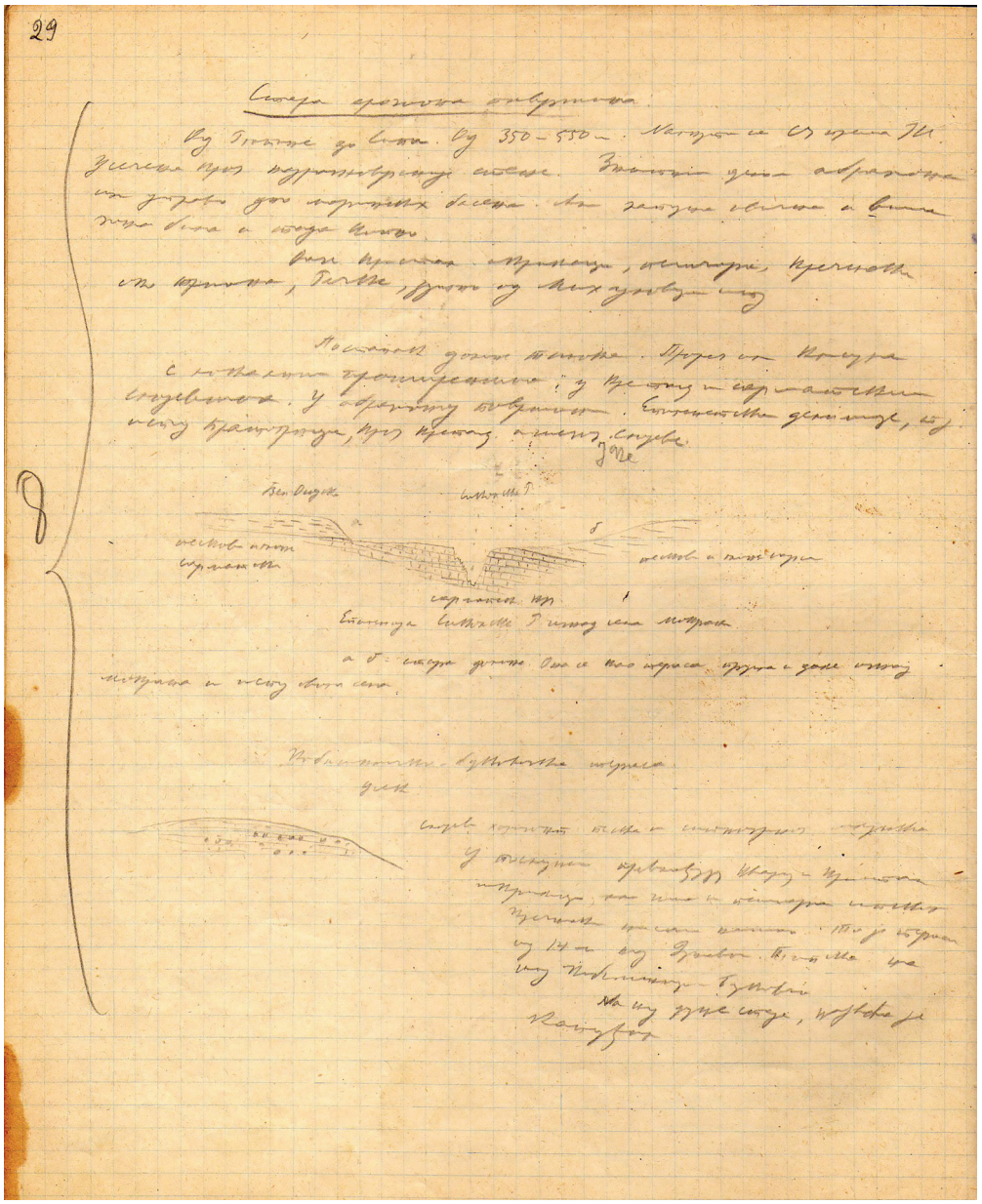
JC_265_73

The contents of the notebook referring to the Đerdap Gorge features around 30 pages. These include the following subheadings: "*The Miroč Levelled Surfaces*", *"Erosion at the Foothill of the Veliki Štrbac Peak*", "*The Đerdap Epigenetic Valley*", and "*The Pliocene Gura Văii Delta*". Within the subtitle "*Results*", Cvijić set a hypothesis on the morphochronology of the basic relief elements – levelled surfaces and river terraces. Under number 1, he interpreted the features of this area during the *"Second Mediterranean Stage*": "*The strait remained during the Second Mediterranean Stage. Disorders taking place after this Stage.*"

Under the number 2 follows a sketch showing a series of fluvial terraces in the Đerdap Gorge. This is one of the most significant and most cited sketches in the fluvial geomorphology of Serbia. A series of *"pliocene and diluvial terraces*" testifies about epigenetic phases of the Danube – from the Miroč levelled surfaces, through the terraces of the Kazan Gorge and Kalfa, to seven successively arranged lower terraces, concluding with the lowest one, just above the Danube level at a relative height of 10 m. The three lowest terraces can correlate visibly with the terraces of the Dunavski Ključ ["Danube Key"] meander near Kladovo.

Cvijić himself published this morphogenetic interpretation three times: in German in 1908 (Cvijić, 1908), in a special paper dedicated to the Đerdap terraces (Cvijić, 1922c), and in *the second volume of Geomorphology* (1926).

Jelena Ćalić



JC_271_30

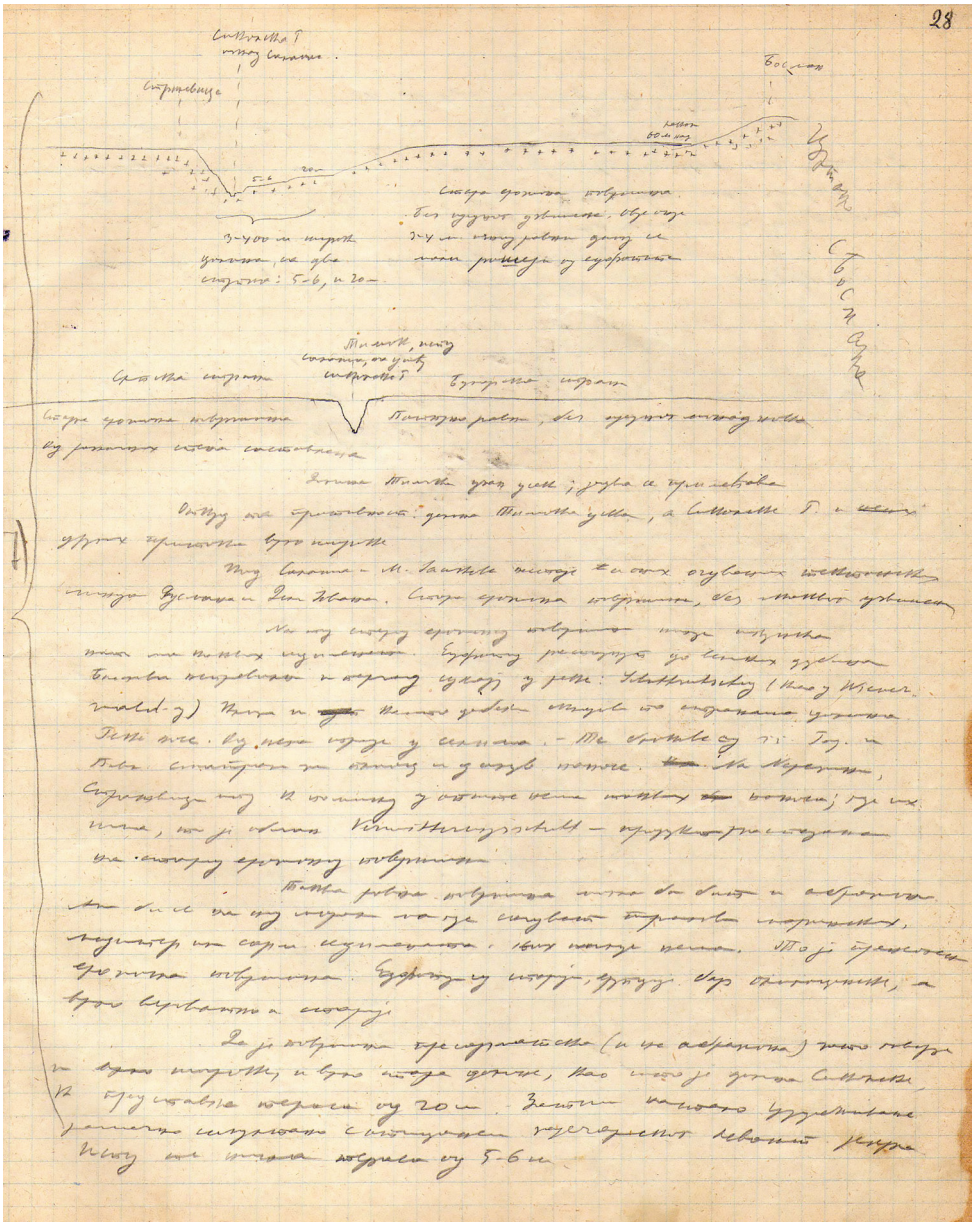
By means of extensive field research of the Timok River basin, Jovan Cvijić gave a significant overview of the genesis of the Timok River valley, river terraces, levelled surfaces and gorges. He described almost every epigenetic phenomena in the basin. The sketches are an integral part of a field notebook written during this research.

On this page Cvijić wrote that the old erosional surface, 350–550 m high, is inclined from the north-west to the southeast and entrenched into diverse beds. He stated that, for a significant part, it is abrasional in origin and that it represents the bottom of a marine basin. In his opinion, the Timok River valley is cut into the Cretaceous and Sarmatian layers of this abrasion levelled surface.

Below this text, on the same page, there is a sketch of the epigenetic valley of the Sikolska Reka River below Veliko Osoje, which is cut into the Sarmatian limestone of the old valley, overlain by Sarmatian sands and clays. With *"ab"*, he marked the old valley which, as a terrace, extends above and below the village of Mokranje. This sketch, as well as the results of Cvijić's scientific research were published in *the second volume of Geomorphology* (1926). In this publication, he added a caption accompanying the sketch, which reads: "A common feature of some of epigenetic valleys of the Timok River tributaries is that Neogene layers are present on the abrasional levelled surface and the epigenetic character of the valley is obvious, for instance, on the Sikolska Reka River north and on the Grliška Reka River south of Zaječar" (Cvijić, 1926, p. 224).

Starting from Cvijić's premises, Dragutin Petrović (1953; 1954; 1956a; 1956b; 1958) dedicated a special aspect of his scientific research to the study of fluvial and abrasional relief in the Timok River basin.

Dragana Milijašević Joksimović



JC_271_29

On the first sketch, Jovan Cvijić presented a cross-section through the asymmetrically widened Sikolska Reka River Gorge. He singled out the levels of river terraces at the relative heights of 5 to 6 m, 20 m and 60 m. As the author claimed, the sketch was drawn at Bosman and it contains data on the width of the valley, ranging from 300 to 400 m.

According to Cvijić, the second sketch refers to abrasion surface the Timok River incised into, presenting the cross-section of the riverbed below Salaš at the mouth of the Sikolska River. The sketch shows that the left side of the valley is located on the territory of Serbia, and right on the territory of Bulgaria. Also, below the sketch he wrote: *"The old erosional surface composed of various rocks, completely flat, without a single monadnock."*

Below the sketch, the author underlined the fact that: *"The Timok River valley is a narrow ravine, barely noticeable (…) the Timok River valley is narrow, whilst those of the Sikolska River and some other tributaries are very wide. All those preserved tectonic lines of Rusman and Deli Jovan disappear near Salaš and Mala Jasika."* Based on field research, Cvijić concluded that the flat erosional surface contains no traces of marine or Sarmatian sediments, and that it is pre-Neogene in origin, further commenting that: *"The eufotites are at least Oligocene, most probably even older. Pre-Sarmatian (not abrasional) origin is indicated by very wide and old valleys, such as the Sikolska River valley, represented by a terrace at 20 m."*

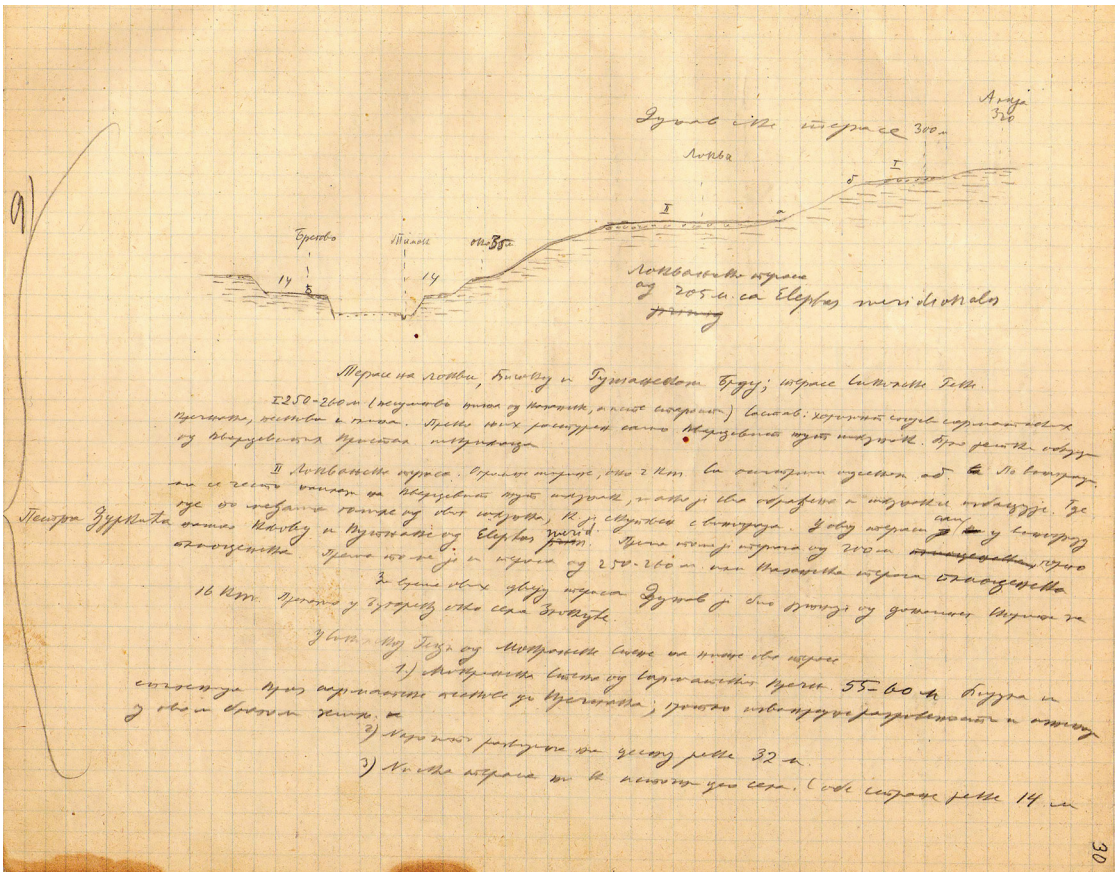
Cvijić published both sketches in *the second volume of Geomorphology* (1926). In this book he presented some comparisons with the abrasion relief and lake level surfaces along the Pannonian basin rim. He highlighted that the lower Timok Gorge downstream from Zaječar was cut into a spacious abrasion levelled surface, which is an extension of abrasion levelled surface from Podvrška in the north and has a height of 320–350 m. The levelled surface is inserted between the Zaječar basin and the Dacian basin and cuts the most diverse rocks, from crystalline schists, serpentinites and Cretaceous limestones to the Sarmatian layers. He was of the opinion that this area corresponds to the Ripanj levelled surface in Šumadija. Below it, there is a lower surface at 270–280 m, possibly corresponding to Pinosava levelled surface in Šumadija.

Commenting the first sketch which accompanies *the second volume of Geomorphology* (1926), Cvijić noted that the lower Timok Gorge is similar to the gorges of its tributaries (Sikolska River, for instance) and that the erosional process thereof was more intense compared with the process in the Svrljiški Timok Gorge.

After Cvijić's death, geomorphological surveys of the Timok River basin were conducted by Sima M. Milojević (1930), who gave certain contribution to the study of abrasion relief of the lower Timok River and the basin of Zaječar, as well as Dragutin Petrović (1953; 1956b; 1958).

Dragana Milijašević Joksimović

SKETCH OF THE RIVER TERRACES IN THE CROSS-SECTION LOKVA – RUŠANSKO BRDO



JC_271_31

The sketch of a cross-sectional view of the Timok valley shows a series of river terraces. At the mouth of the Sikolska Reka River into the Veliki Timok River in the cross-section Lokva – Rušansko Brdo, Jovan Cvijić observed river terraces at the relative heights of 14 m, around 35 m and 55–60 m. Apart from these, he marked another terrace at 200–205 m of relative height (II), covered with quartz pebbles, followed by a terrace of 250–260 m (I) and a 300 m high Danube terrace. Below the sketch he recorded the lithological and chronological elements of the selected terraces:

"I 250–260 m – Undoubtedly lower than the Kazan Gorge terrace, and of the same age. It is composed of horizontal layers of Sarmatian limestone, sands and clays. Above them, only quartz-bearing yellow limestone is to be found. Pebbles formed of quartz crystalline schists are quite rare.

II 200-205 m – The Lokva terraces. Huge in width (approx. 2 km), with a steep scarp (ab)."

During field work, he would often encounter a quartzite yellow limestone intermingled with the cultivated land. In this terrace, in the vineyard of Petar Đurkić, he found a tusk and molars belonging to *Elephas meridionalis*, which he also marked on the sketch. On this basis, he concludes that the terrace at 200 m is of the Upper Pliocene origin, and the one at 250–260 m, known as the Kazan terrace, is Pliocene in age.

In his opinion, during formation of these two terraces, the Danube had a more southern position as compared with the present one, entering Bulgaria near the village of Zlokuće.

The following terraces of the Sikolska River from the Mokranjska Stena downward, were singled out:

1) Mokranjska Stena consisting of Sarmatian limestone 55–60 m.

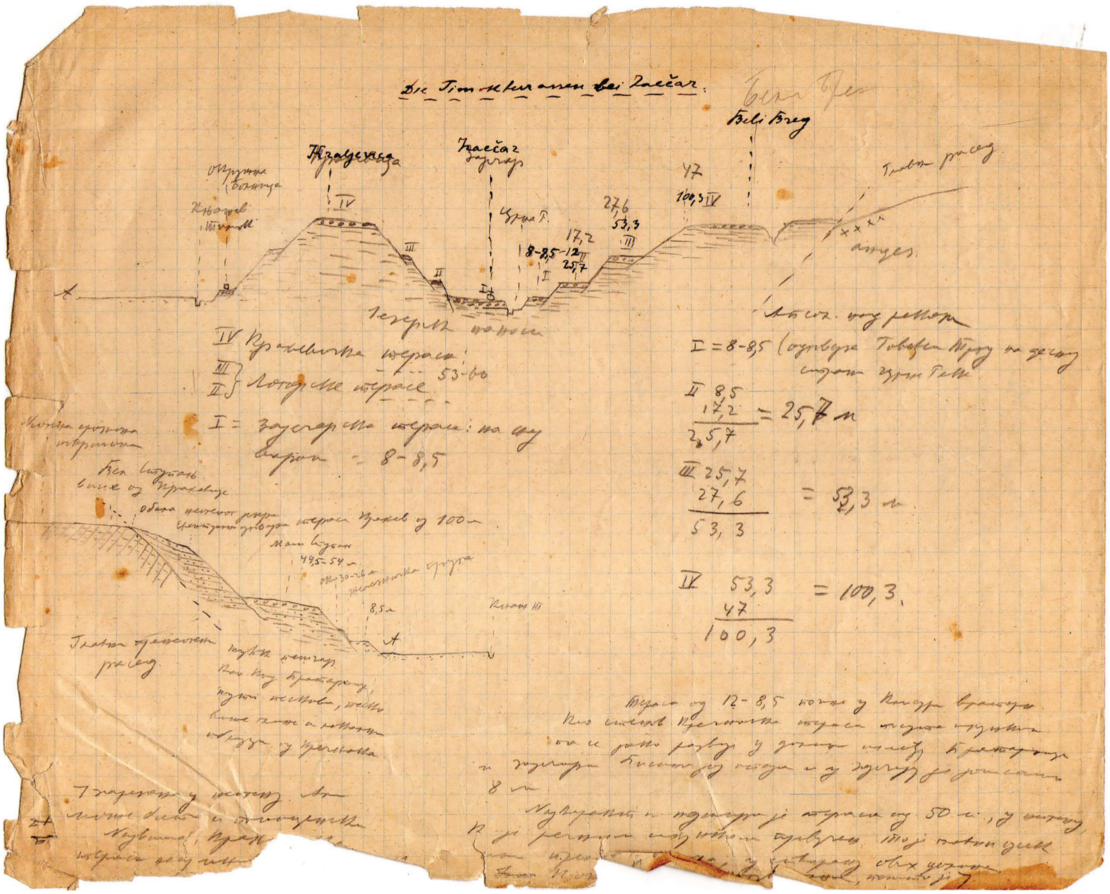
2) A 32 m terrace, particularly developed on the right side of the river.

3) Low terrace of 14 m, developed on both sides of the river.

This sketch was modified by the author and presented in the paper entitled *Entwicklungsgeschichte des Eisernen Tores* (1908), wherein, by analysing the genesis and development of the Đerdap Gorge [Iron Gate], he mentions river terraces in the valley of the Mokranjska Reka River (Sikolska Reka River) at its mouth into the Veliki Timok River. Its terrace of 55 to 60 m is also marked on the sketch. In this paper, he concluded that, going downstream to its mouth into the Danube, the height of the terrace is reduced due to the sinking of the Romanian geosyncline, which further continued during the post-Pleistocene.

Apart from Cvijić, the study of the morphology and morphochronology of the Timok River basin sparked the interest of Dragutin Petrović (1953; 1956a; 1956b; 1958).

Dragana Milijašević Joksimović



JC_271_72

The sketch shows a series of river terraces in the basins of Crna Reka River (Crni Timok River) and Knjaževački Timok River (Beli Timok River) near Zaječar. It is divided into two parts. The first one refers to the cross-section of the Crna Reka River valley with a series of terraces and a portion of the cross-section of the Knjaževački Timok River. In the Crna Reka valley, Jovan Cvijić singled out terraces at the relative heights of 8 to 8.5 m, 25.7 m, 53.3 m and 100.3 m. He marked the Zaječar terrace as the lowest one, the second and third as the Logorske terraces, and the Kraljevska terrace as the highest one. On the sketch, he likewise marked the main fault, and it can be seen that the Crna Reka riverbed is completely cut into lake sediments. Below the sketch he wrote: *"The terrace of 12–8.5 m begins in the Gorge of Vratarnica as a rocky limestone terrace paved with gravel, then develops very much in the valley between the Vratarnica Gorge and Zaječar and its height decreases, totalling still less than 8 m in Zaječar."*

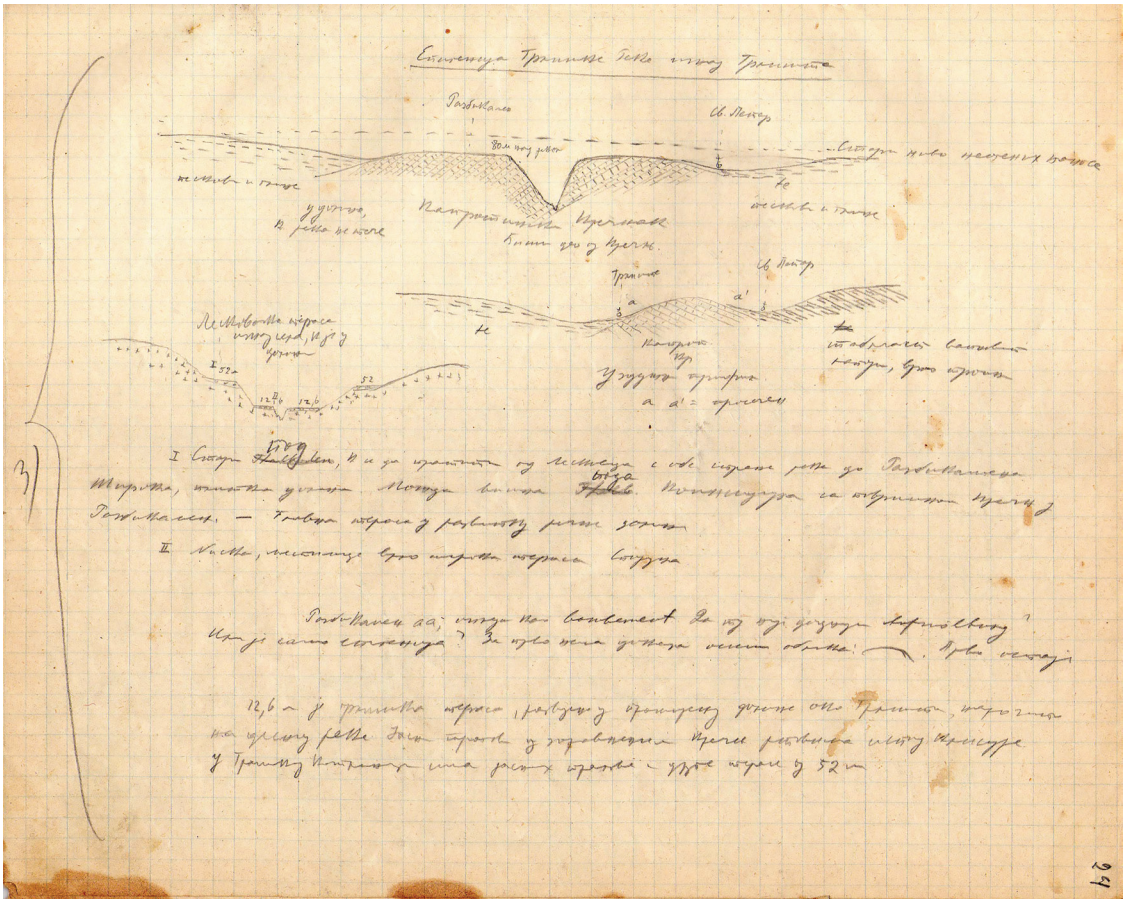
The cross-section of the Knjaževački Timok River is shown below. It features a wide alluvial plain, a terrace at 8.5 m of relative height, a smaller terrace of about 26–30 m of relative height, the Mali Stupar terrace at 49.5 to 54 m and then a terrace at 100 m relative height, thus being equivalent to the height of the Kraljevska terrace. Shown above is a shore of the Neogene lake and Neogene erosional surface (Veliki Stupanj), which Cvijić thought was higher than Kraljevica. He analysed the geological composition of the area and noticed that the valley was cut into a yellowish sandstone (as in the case of Vratarnica), yellow sands, sandy clays, and that there were local limestone pebbles.

On river terraces shown on the sketch, Cvijić wrote in the scientific paper *Entwicklungsgeschichte des Eisernen Tores* (1908). Therein, he presented tabularly the data for the river terraces of the lower Danube and its tributaries, including terraces of the Timok River, at the relative heights of 8–12 m, 20–26 m, 53 m, 100 m and 200–210 m (for the last he placed a question-mark).

Relying upon J. Cvijić's observations, many researchers devoted themselves to the study of river terraces in the Crni Timok River valley (Petrović, 1970; Nešić, 2004). Thus, on a transparent geomorphological map of the Carpathian-Timok region, Miloš Zeremski (1974) marked a series of river terraces in one part of the Crni Timok valley in the Zaječar basin.

Dragana Milijašević Joksimović

SKETCH OF THE "EPIGENETIC VALLEY OF THE GRLIŠKA REKA RIVER ABOVE GRLIŠTE"



JC_271_25

The first sketch presents the cross-section of the river Grliška Reka River upstream of Grlište with lithological, structural, morphological and chronological elements of epigenetic valley entrenched in a dome structure. The old level of Neogene deposits is clearly marked, as well as the Gorge of the Grliška Reka which is cut into the Caprotina limestone for 80 m.

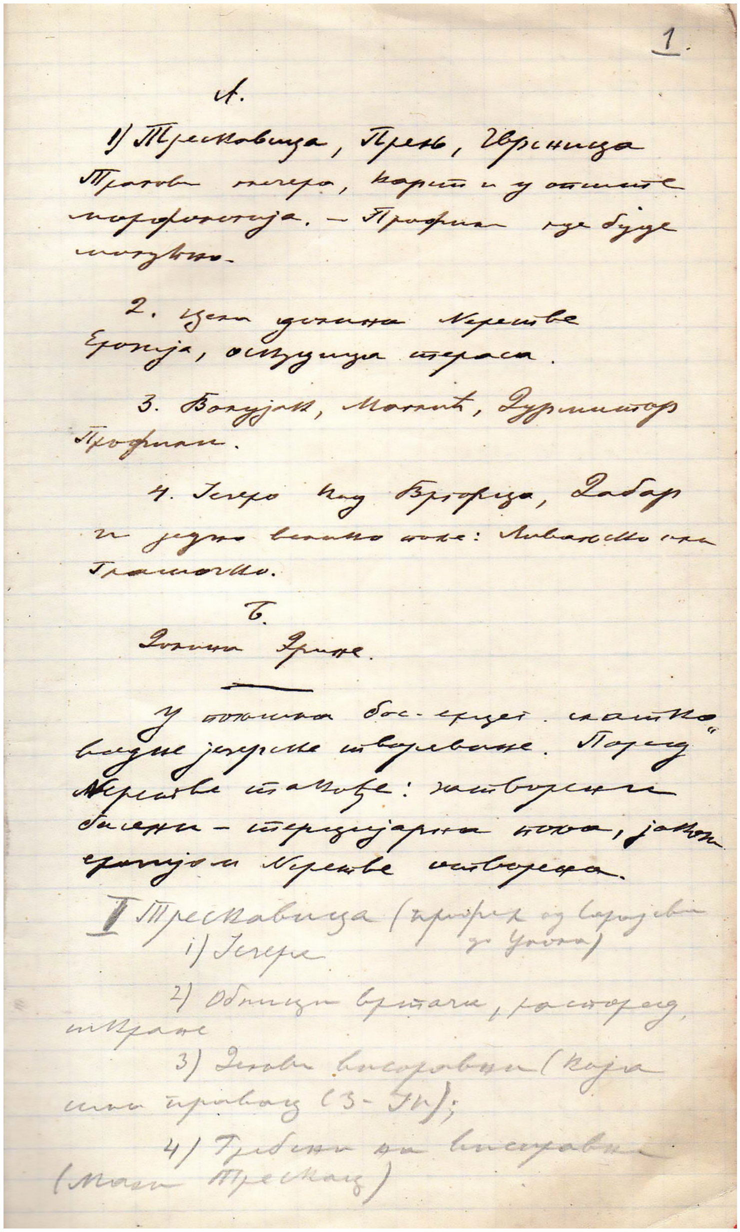
The second sketch shows the longitudinal cross-section between Grlište and the Church of St Peter with lithological elements.

The following sketch represents terraces in the epigenetic valley of the Grliška River upstream from Leskovac. Jovan Cvijić singled out two levels of river terraces in the epigenetic valley: the Grliška terrace, very wide in some areas, with a height of 12.6 m and a terrace of 52 m. He noticed that the lower terrace, the Grliška terrace, was formed in the widened valley around Grlište, especially on the right side of the river. The author stated: *"There are clear traces indicating yet another terrace of 52 m in the Grliška Gorge."*

These sketches and results of the research obtained by examining the valley of the Grliška Reka River, Cvijić published in *the second volume of Geomorphology* (1926). In this publication he points out that some epigenetic valleys of the Timok River tributaries often have preserved Neogene layers on the abrasion surface. Thus, the epigenetic phenomenon is obvious, and as an example he mentions the valley of the Grliška River south of Zaječar.

Apart from Cvijić, Dragutin Petrović (1953; 1954; 1956a) gave a significant contribution to the study of the gorges in the Timok River basin and the genesis thereof.

Dragana Milijašević Joksimović


1.

А.

1) Трескавица, Прењ, Чврсница. Трагови глечера, карит и у опште морфологија. – Профили где буде могућно.

2. Цела долина Неретве. Ерозија, [illegible] тераса.

3. Волујак, Маглић, Дурмитор. Профили.

4. Језеро под Вргорцем, Дабар и једно велико поље: Ливањско или Гламочко.

Б.

Долина Дрине.

У долини бос.-херцег. слатко водне језерске творевине. Поред Неретве [illegible]: [illegible] басени – терцијарна поља, јако ерозијом Неретве отворена.

I Трескавица (профил од Сарајева до [illegible])
1) Језера
2) Облици [illegible], распоред, [illegible]
3) [illegible] висоравни (која има правац (З-И));
4) [illegible] висоравни (Мали Трескавац)

JC_273_4

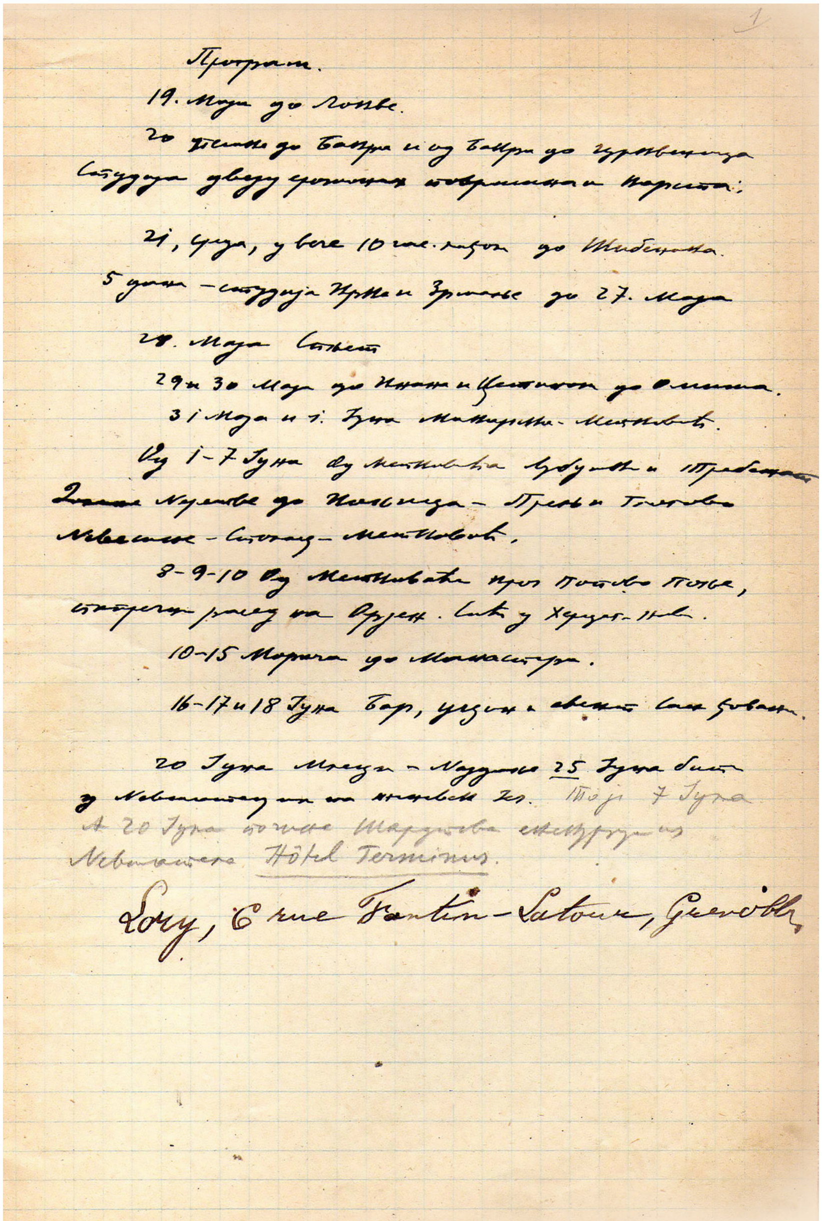
This page from Jovan Cvijić's notebook represents field documentation, that is, the plan of his field research during the summer of 1897. As can be concluded from the notes, during this period, he carried out field researches in Bosnia, Herzegovina and Montenegro. Of all the routes undertaken, he paid special attention to high mountain areas, such as Treskavica, Visočica, Prenj, Čvrsnica, Volujak, Bioč, the Piva Mountain and Mount Durmitor. In this area, he systematically performed instrumental measurements of air pressure (mmHg), air and water temperatures (^{O}C) at springs, rivers and lakes, and conducted measurements or estimates of dimensions, usually for the relative heights of forms and features he was investigating.

Apart from notes on the morphogenesis of the relief and estimated dimensions, the notebook records of this field survey also include Cvijić's sketches, predominantly geological cross-sections, and to a lesser extent plan-views (geomorphological sketches) of the explored areas. By analysing these field notebooks, it can be concluded that Cvijić had a consistent methodology in the field, which he did not change while touring these mountains, nor did he make adjustments on the run. Since we are talking about a vast area which he had to overcome mostly on foot, it can be noted that any "change of rules on the go" may have negatively impacted the course of field research.

During field research in this area, Cvijić observed the Pleistocene glacial relief, which is the main subject of his later, more detailed consideration. Based on the aforementioned manuscripts, it is logical to conclude that Cvijić was making an effort to reconstruct glacier traces, consequently reconstructing the extent of the Pleistocene glaciation of the highest mountains of the Dinarides. This statement is obviously confirmed by Cvijić's publication *Glacial and Morphological Studies on Mountains of Bosnia, Herzegovina and Montenegro* (1899), in which he presented the collected field and professionally processed scientific material in the exact same order as during the field research.

After J. Cvijić, other researchers also dealt with the glacial phenomena of these areas: Jevto Dedijer and Vasilj Grđić (1905), Borivoje Ž. Milojević (1937), Milovan Milivojević (2007), Đurović, Petrović, & Simić (2010), Hughes, Woodward, Van Calsterenb, & Thomas (2011).

Milovan Milivojević


Програм.

19. Маја до [illegible].

20 [illegible] до [illegible] и од [illegible] до [illegible] [illegible]:

21. Маја, у вече 10 час. [illegible] до Шибеника.

5 дана — [illegible] Крка и Зрмање до 27. Маја

28. Маја [illegible]

29 и 30 Маја [illegible] до Омиша.

31 Маја и 1. Јуна Макарска — Метковић.

Од 1–7 Јуна од Метковића [illegible] и [illegible] [illegible] до [illegible] — [illegible] Невесиње — Столац — Метковић.

8-9-10 Од Метковића преко Попова Поља, [illegible] на [illegible]. [illegible] у Херцег-Нови.

10-15 Морача до Манастира.

16-17 и 18 Јуна Бар, [illegible].

20 Јуна [illegible] — [illegible] 25 Јуна бити у [illegible]. [illegible] 7 Јуна

А 20 Јуна [illegible] Hôtel Terminus.

Lory, 6 rue Fantin-Latour, Grenoble

JC_266_2

In a handwritten text at the beginning of one of the notebooks of Jovan Cvijić, there is a plan of field research through Dalmatia, Herzegovina and Montenegro, probably contrived in 1908, prior to embarking on field trip. Cvijić gained travel permission thanks to support of the Austro-Hungarian minister in Belgrade, Count Forgách (Korićanac, 2015). In his notebooks, Cvijić listed a detailed travel plan, whereby we can gain a clear insight into his route. Thus, on the 19th of May, he departed from Belgrade, boarding the train to Lokva (the station on the Zagreb–Rijeka railway line) and further to Bakar. His fieldwork, dedicated to the study of erosional karst levelled surfaces in the vicinity of Bakar and Crikvenica, he continued on foot. Thence he headed by boat to Šibenik to conduct exploration of the Krka and Zrmanja Rivers, and then surveyed the area of Split and Knin, moving along the valley of the Cetina River to Omiš. He continued his research in the area of Makarska and Metković, and undertook trips to parts of Bosnia and Herzegovina (Trebižat River, Neretva River valley, Prenj Mountain, the settlements of Nevesinje and Stolac), and then, passing through Popovo Polje, he climbed Mount Orjen, whence he descended to the Montenegrin littoral, more accurately, to Herceg Novi. Then he dedicated his attention to the study of the coastal belt of the Adriatic, taking sojourns in Bar, Ulcinj and the Bay of Boka Kotorska. Cvijić had previously explored this area, in 1899, to be more precise (Freeman, 1967). In his works, he recalled this field research: "Engrossed in other concerns, not until 1908 did I embark on an extensive excursion with Mr Borivoje Milojević, to examine levelled surfaces in Dalmatia, Herzegovina and Montenegro" (Cvijić, 1914b, p.193).

From this manuscript, we likewise find out that, upon completing the field research, Cvijić went to the Swiss town of Neuchâtel, where he joined the scientific excursion organised by Hans Schardt. Organising scientific excursions, prior to and after scientific congresses, was common, and the leading geologists and geographers from the world took part in them. Based on detailed travel plan and time schedule, it can be assumed that his trip to Neuchâtel and Geneva was aimed at participating at the Ninth International Geographical Congress (28th July – 6th August 1908). Therein, Cvijić presented his research on topics dealing with the coastal geomorphology (*Flexuratige Dislozierung der Meeresküsten und Talbildung*) and glaciation (*Pleistozane Hebungen und Vergletscherung*), as evidenced by the following text: "Some of the most interesting papers on topics of section 4 (Glaciation) have been presented at a general meeting held in Aula, but out of the numerous papers in this section, the one authored by Prof. Cvijić (from Belgrade), on Pleistocene Uplifts and Glaciation (Pleistozane Hebungen und Vergletscherung), is particularly worth mentioning" (Chisholm, 1908, pp. 369–370).

At the bottom of the page there is a record of the name and address in Grenoble, apparently written in a different handwriting, and it is related to Pierre Lory (1866–1956), son of Charles Lory, the geologist and deputy Director of the Geological Laboratory at the University of Grenoble, who was also one of the participants in this congress.

Aleksandra Terzić

[illegible] Пуштана. [illegible]

[illegible]

Мерења на Волујаку и на Трновичком (Волујачком) Језеру и даље до Дурмитора:

Станови на Вратницама: најнижи B=634,5 t=20; највиши: B=632, t=20.

Снежаница испод Студенца: више плазина B=609 t=20; изнад плазина: B=618, t=21.

1) Прве морене између Студенца и Сталине Греде: B=621 t=21.

2) Најнижа тачка затворене депресије под циркот: B=623,5, t=21.

3) Други моренски бедем: B=623, t=21.

4) Колибе на Штављану: B=626,5 t=22.

Врело на Штављану близу колиба: B=625, t=21; температура воде 7°.

5) Висина, до које допиру морене десно од Штављана: B=621, t=22.

Висина Волујака над језером: B=607,5, t=30,5

Врело под Оштриковцем изнад Трнович. језера: B=612,5 t=30,5; темп. воде 0,5° (на граници шкрилц. и кречњ.).

Трновичко језеро: B=639 t=28; сутра дан: B=638,5 t=20 (изјутра) и B=638,75 t=23 (пред подне); темп. воде 16°

Испод Жарбина код роштонтанеа у 7 сах. и 20' пре подне: B=638 t=19

Одск. изнад Пољане: B=638,5 t=18

У врелу, које тече у понор крај Трнов. језера темп. воде 4°.

Мала језера:

Језеро А: B=638,25 t=23; темп. воде 16°.

Језеро Б: B=638,75 t=23; темп. воде 15°.

JC_273_154

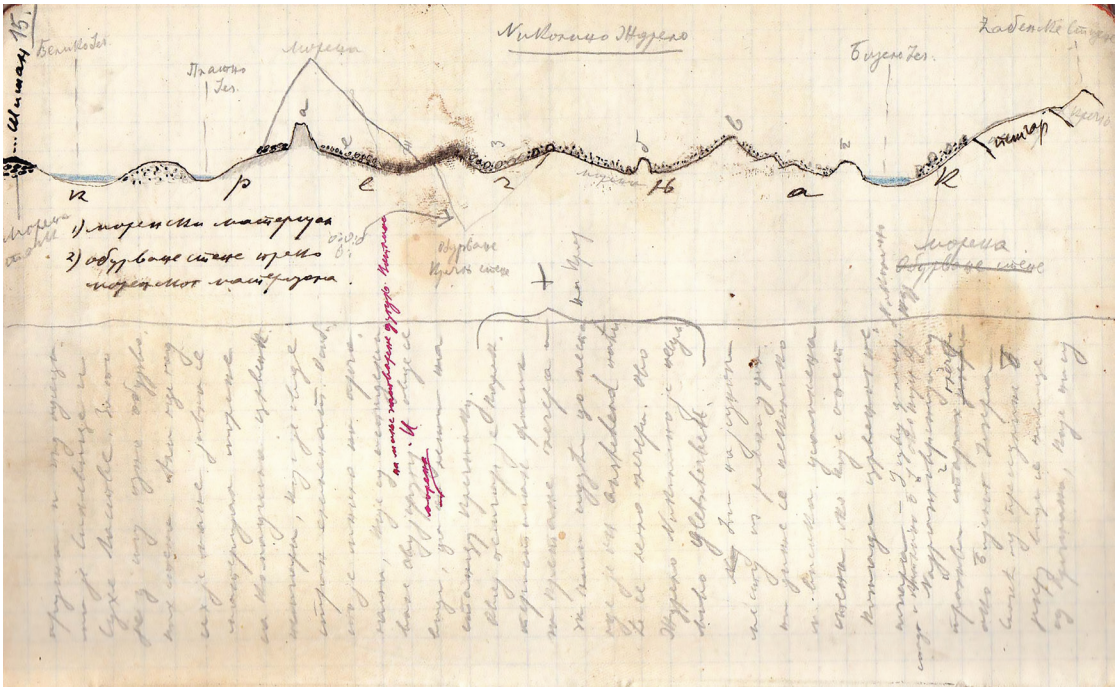
In the latter part of August 1897, Jovan Cvijić undertook field research on the Volujak Mountain. The mention of this research is found in his book *Glacial and Morphological Studies on Mountains of Bosnia, Herzegovina and Montenegro* (1899). Given the chronology of the data presented in this publication, as well as Cvijić's field research route, we can conclude that he was heading from Herzegovina, through the side of Mount Volujak facing Gacko, to the village of Mratinje in Montenegro. During this field research, J. Cvijić described the landforms that caught his attention, genetically determining them from the point of view of morphology. These include mainly glacial traces, the first ever observed and later presented to the scientific public. In addition, during this study, J. Cvijić carried out measurements of climatic elements (air pressure and air temperature) at several locations, as well as water temperature at springs and lakes, and the data obtained was noted down by his associates, which is evident from handwriting. Data on air pressure proved indirectly useful to Cvijić in determining the altitude. Most of the data obtained by measuring Cvijić published in the aforementioned scientific study (Cvijić, 1899).

Although Cvijić's research of this area is of great scientific importance, in the context of the measurements conducted, certain shortcomings can be noticed, mostly referring to the determination of altitudes. Thus, the altitude of Trnovačko Jezero Lake (1513) can serve as an example, the lake of which J. Cvijić found to be at "about 1700 m", which, according to air pressure measured at 638 mm Hg, corresponds to the height of 1680 m. Mistakes in measurements are likewise evident on the example of Mt Maglić ridge above Šarena Lastva and Carev Do. In his fieldnotes, J. Cvijić recorded air pressure values of less than 600 mmHg at several locations, and since the error became apparent on the basis of visual observation of relative height ratio, he did not convert air pressure to altitude.

After J. Cvijić's survey, only a small number of researchers have continued geographical studies of this area. Among the most important are those conducted by Jevto Dedijer and Vasilj Grđić (1905), Borivoje Ž. Milojević (1922) and Milovan Milivojević (2007).

Milovan Milivojević

SKETCH OF “NIKOLINO ŽDRELO”



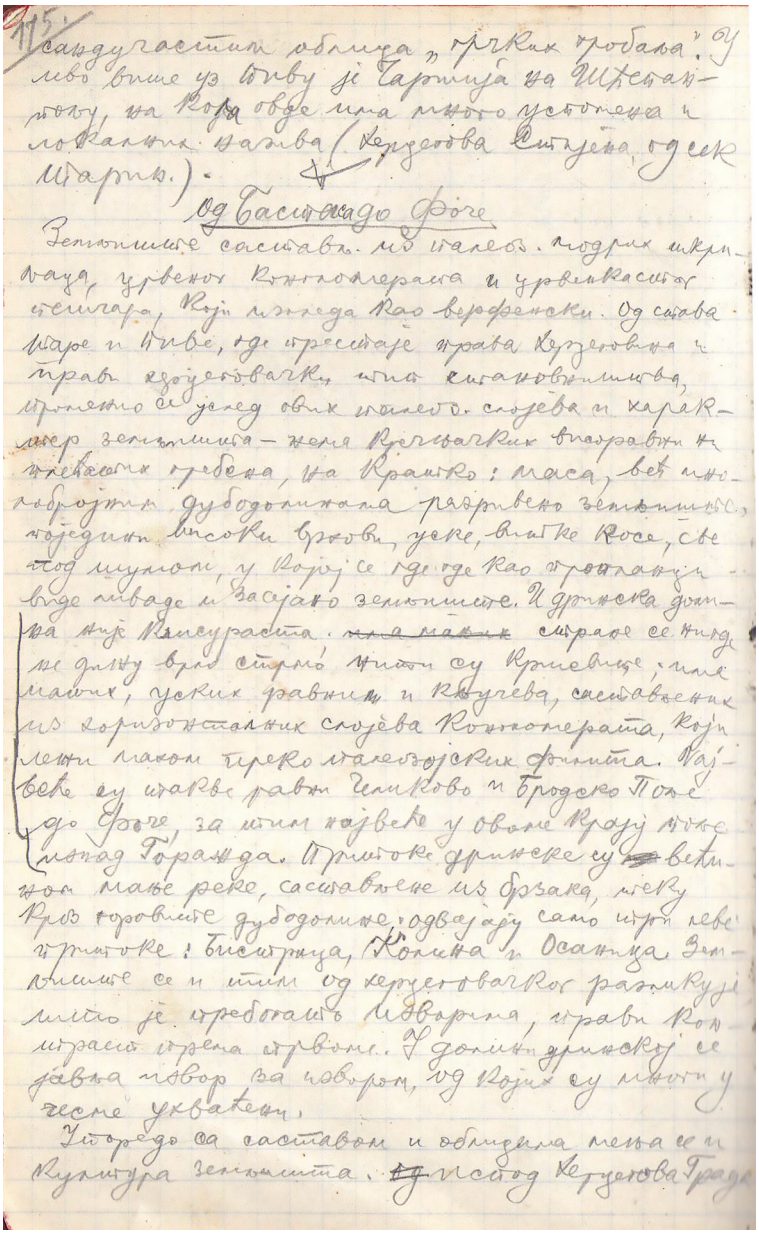
JC_273_18

The sketch is an integral part of a field notebook compiled during the exploration of the Treskavica Mountain and shows the synthetic sketch of "*Nikolino Ždrelo*" trench, with lithological characteristics and morphogenetic elements. Jovan Cvijić conducted this research for the purpose of collecting glacial traces in the Ćabenski Cirque on Mount Treskavica. It is the largest glacial form and the largest Pleistocene cirque along whose bottom stretches a trench formed along the axis of the cirque, known as Nikolino Ždrelo.

In this sketch, J. Cvijić presented a longitudinal profile of the trench, from Bijelo Jezero Lake to Veliko Jezero Lake, at a length of about 2 km. Lithological characteristics of the Ćebenski Cirque are marked with letters, denoting geological formations, whereas a more detailed explanation is provided in the key, within the text of the notebook. Curved line of this profile is marked to show accumulations of moraine material, which Cvijić found to be of primary importance for the reconstruction of the Pleistocene glaciation, together with the morphology of the cirque. Moraine material, as Cvijić described it, are shown on the sketch in several lithological and morphological types, whereby he distinguished the limestone moraine material (shown by angular symbols) and the moraine material consisting of the Werfen sandstone (shown dotted). Several rôches moutonnées [komčići], formed by the ice mass of the Pleistocene glacier, were also observed. Jovan Cvijić published this sketch in the same graphic format, prepared for printing in colours, in the book *Glacial and Morphological Studies on Mountains of Bosnia, Herzegovina and Montenegro* (1899).

After J. Cvijić, this part of Mount Treskavica was explored by Borivoje Ž. Milojević (1934), whereas recent studies have not yet been carried out. One of the reasons for this lies in the consequence of the civil war in Bosnia and Herzegovina (1992–1995), that is, in the fact that Treskavica is one of the mountains covered by dense and unsystematically planted minefields, thus posing a threat to field-oriented researchers.

Milovan Milivojević



JC_273_182

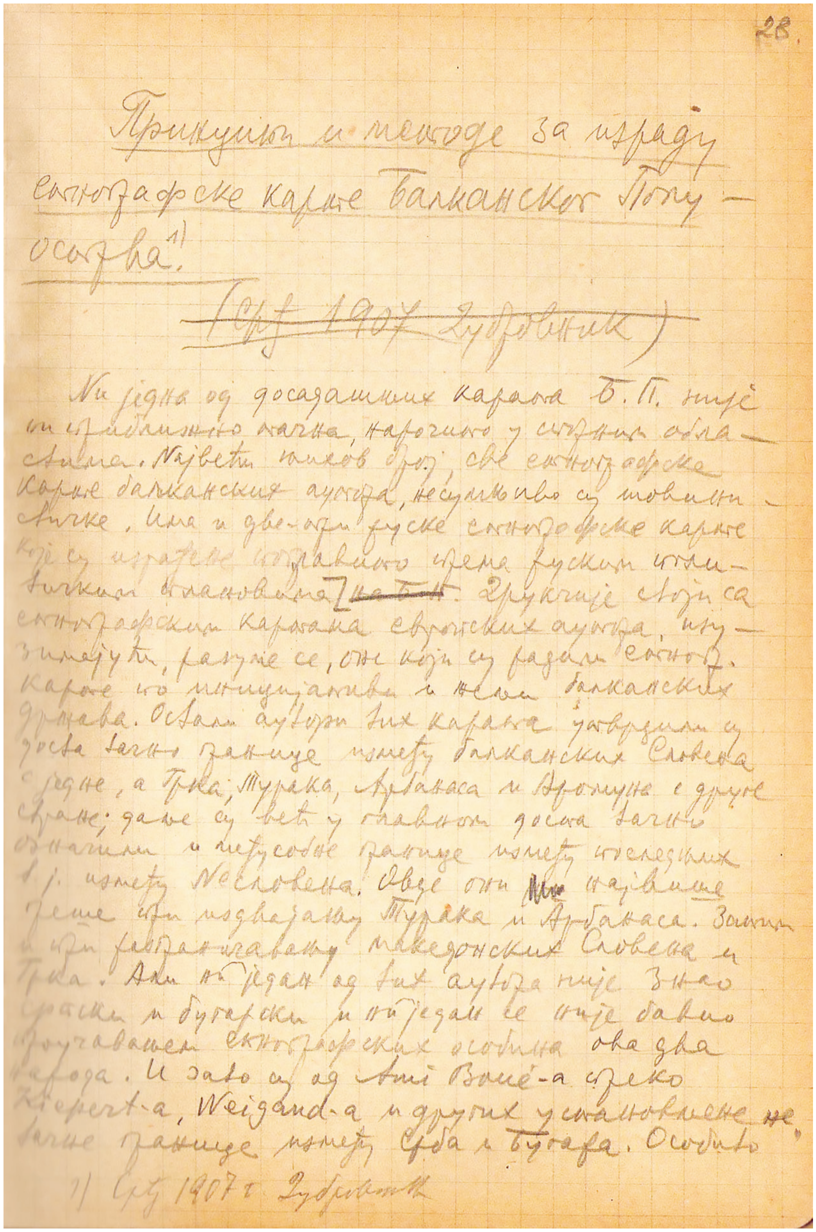
During the scientific excursion through Bosnia, Herzegovina and Montenegro in the summer of 1897, when this manuscript was probably compiled and noted down by one of Cvijić's associates, the Drina River made a more lasting impression on him than any built structures in the area of Southeastern Bosnia, which is evident from his almost poetical description: *"Downstream from Šćepan Polje, the Drina loses features characteristic of its tributaries, the Piva and Tara: there are no canyons nor gorges, its valley turns green due to vast forests surrounding it, and the water itself loses that delightful bluish-green colour. Its basin is much more shallow and wider; from Foča downwards the water takes on a clear green; rapids are rather rare, and when any such occur, they are caused by schist plates from the Paleozoic Era."* Jovan Cvijić used and published those parts from the notebook referring to the Drina River and its natural environment.

Writing about the Stari Vlah [Old Valachian] regions of Bosnia, in his monograph *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), Cvijić included the sections from the field notebook, referring to descriptions of the Drina River, its valleys and river terraces of Čelikovo Polje and Brodsko Polje above Foča, as well as Veliko Polje near Goražde. It was followed by descriptions of the surrounding landscapes, relief, soil structure and composition. He likewise included the notebook description of the vegetation and cultivated crop plants – fruits, tobacco and corn, especially grown in the more northern areas. Cvijić wrote that "bašče [gardens] and duvaništa [tobacco fields] are characteristic of the physiognomy of the lands inhabited within the Upper Drina area", adding the economic benefits of the tobacco cultivation for this region and its inhabitants "whose houses are adorned with bundles of tobacco in the late summer" (Cvijić, 1922a, p. 81).

In the notebook, Cvijić observed that populated and cultivated land areas covered the Drina Plain. He also pointed out that "either villages or dispersed dwellings" were placed "along the sides, very often up to 400–500 m above the Drina" (Cvijić, 1922a, p. 81). These villages were raised in cultivated fields, deforested terrains, and meadows, while Cvijić classified them as villages of the dispersed type of the Gornje Podrinje (area along the upper Drina course in Serbia and Bosnia and Herzegovina) region. Cvijić noted that villages built on wider plains around the Drina, such as Brod, Ustikolina, parts of Osanica and Mravinjak, are characterised by different morphology and a compact type of settlement.

For J. Cvijić, primary research objective during the 1897 two-month-long excursion was to examine "the morphological features of the Dinaric system, especially old glaciers" (Cvijić, 1914b, p. 192). Apart from achieving the basic purpose of this trip, scientific curiosity and versatility of both Cvijić and his associates led them to further observations, meticulous recording and connecting of various natural, social or anthropological phenomena, and likewise gave them insight into the concrete conditions of people's lives in the regions and areas they passed through.

Zlata Vuksanović-Macura



28.

Принципи и методе за израду етнографске карте Балканског Полуострва.[1]

~~(Септ. 1907 Дубровник)~~

Ни једна од досадашњих карата Б. П. није ни приближно тачна, нарочито у спорним областима. Највећи њихов број, све етнографске карте балканских аутора, несумњиво су шовинистичке. Има и две-три руске етнографске карте које су израђене поглавито према руским статистичким плановима ~~[illegible]~~. Друкчије стоји са етнографским картама европских аутора, изузимајући, разуме се, оне који су радили етногр. карте по иницијативи и жељи балканских држава. Остали аутори тих карата утврдили су доста тачно границе између балканских Словена с једне, а Грка, Турака, Арбанаса и Аромуна с друге стране; даље су већ у главном доста тачно обележили и међусобне границе између последњих т. ј. између Несловена. Овде они највише греше при одвајању Турака и Арбанаса. Затим и при разграничавању македонских Словена и Грка. Али ни један од тих аутора није знао српски и бугарски и ни један се није бавио проучавањем етнографских особина ова два народа. И зато су од Ami Boué-a преко Kiepert-a, Weigand-a и других установљене нетачне границе између Срба и Бугара. Особито

1) Септ. 1907 г. Дубровник

JC_265_17

This 13-page manuscript entitled *"Principles and Methods for Assembling the Etnographic Map of the Balkan Peninsula"* was compiled in Srđ near Dubrovnik in 1907 and presented by Jovan Cvijić at the Sixth Congress of Italian Geographers in Venice. The paper was published in Italian in 1908 in the Proceedings of the Congress, printed under the title *Circa il principio scientifico ed il metodo per la construzione di una carta etnografica della Penisola balcanica*, and in Serbian edition in 1923 under the same title, in the publication entitled *Speeches and Articles* (1923b).

As an aficionado of the then current ethnographic situation in the Balkan Peninsula, including the political and historical developments that have shaped a characteristic (complex) ethnic mosaic of the region, Cvijić stressed the necessity of assembling an ethnographic map of the Balkan Peninsula. For this reason, he noted in the manuscript that this "*map should be made on a purely ethnographic basis.*" He considered that the ethnographic maps of the Balkan, Russian and other foreign authors reflected the political aspirations of the countries from which the cartographers came, rather than actual ethnographic composition of the peoples of the Balkan Peninsula. For this reason, in the abovementioned paper, Cvijić mentioned that the Italian Geographical Congress should be consulted for assistance in forming a committee consisting of the most eminent experts, for whom knowledge and objectivity go beyond the urge to conceal political pretensions behind a camouflage of cartographic methods and cartographic symbols.

Suzana Lović Obradović, Dragoljub Štrbac

42.

~~и~~ Херцеговине не знају турског језика, говоре само српски; осим тога се код њих у најновије време јавља свест о народној заједници са Србима и Хрватима, иако још спорадично. Међутим исламизовани Словени осталих ~~источних~~ области (Помаци, Торбеши и Гиланци) говоре поред српског или бугарског језика и турски; један део њихов зна само турски. ~~Исламизовање је тако важан фактор, да се они национално осећају као Турци.~~ Те ~~могућне исламизовања, затим~~ разлике између исламизованих Словена, морају се представити на етнографској карти.

У неколико је друкчије са јелинизованим Тоскама јужне Арбаније, који истина говоре и грчки и арбанаски али су православне вере, примили су грчку културу и већином се осећају као Грци. Ипак се и они на правој етнографској карти морају означити као јелинизоване Тоске.

При изради етнографске карте мора се дирнути питање о Србима и Хрватима. Нико ~~данас~~ не сумња да су они етнографски ~~данас~~ један народ, који има у главноме не само један говорни језик, исте психичке особине и готово исте обичаје, већ и потпуно исти књижевни језик. ~~и заједничку литературу~~. Процес асимилације ове две историјски и политички још

JC_265_24

For purposes of determining the principles for assembling the ethnographic map of the Balkan Peninsula, Jovan Cvijić studied the origins of the population. He tried to understand the current state as a result of the stream of various influences throughout history. As the basic national groups of the Balkan Peninsula, he distinguishes: "*Serbs (with Croats), Bulgarians, Arbanasi* [*Albanians*], *Turks or Ottoman Turks, Vlakhs* [*Vlachs*] *or Arumani and, ultimately, the Italians in Istria and Trieste*." He also drew attention to mixed areas, with different dominant influences on ethnicity (like religion), and accordingly suggested the necessity of carefully choosing the principles of classification. For purposes of assembling the ethnographic map, in this manuscript Cvijić accurately examined the ethnographic image of Macedonia, the relationship between the Serbs, Arnautaši and Arbanasi in Stara Srbija [Old Serbia], Islamised Serbs in Bosnia and Herzegovina, hellenised Toskë [Tosks] of Southern Albania, and even today current issue of Serbs and Croats. Knowing all ethnic groups to the smallest details proved to be necessary for the choice of signatures for their representation on the map and preservation of their identity.

As he mentioned in this manuscript, Macedonia has become the most suitable ground for displaying chauvinistic tendencies due to its ethnographic specificity. This is especially the case with the Macedonian Slavs, who, as Cvijić puts it, are *"a nation in the process of creation*." Will they line up with the Serbs or the Bulgarians, to whose parallel influences they have been subjected – Cvijić further emphasised – *"depends upon the upcoming political and cultural impacts*." The Turks, Greeks in the south, Vlachs or Arumani would also find their place on the ethnographic map, whilst the Slavs at different stages of hellenisation are labelled by special indications.

Apart from Serbs and Arbanasi [Albanians], Cvijić also distinguished Arnautaši or albanised Serbs of Old Serbia. He claimed that they *"speak both Serbian and Albanian, belong to the Mohammedan faith, and wear the Albanian folk costumes*", but nevertheless, *"they all know they have a Serbian origin*." He stated that all Serbs from the area between Đakovica and Skadar [Shkodër, eng. Shkodra] were albanised, just like those living in the Prizren region. In Bosnia and Herzegovina, Serbs underwent a process of islamisation, after which they were labelled as "Turks", although none of them spoke Turkish, but instead spoke Serbian. Cvijić further added: *"More recently they have expressed sense of ethnic affiliation with the Serbs and Croats*." Unlike them, the hellenised Tosks fully identified themselves as Greeks, hence they spoke Greek, apart from Albanian, and likewise accepted Greek culture. Writing about the relations between Serbs and Croats, there was, for Cvijić, no dilemma, that ethnographically, *"they are the same people who share not only the same spoken language, the same psychological traits and almost identical customs, but also the same literary language*" and he even observes that *"the process of assimilation of the two historically and politically still separate parts of the same people is progressing each and every year*." For all of the similarities already noted, but also because of differences in terms of confession, alphabet, different historical past, Cvijić decided to mark the Serbs and Croats by the same colour on the map, but on the other hand, he used a separate indication for the Croats.

Suzana Lović Obradović, Dragoljub Štrbac

метода тачно би фиксирала данашње стање балканских народа, њихове пределне појасеве и различне ступње асимилације. Тиме се не би на силу и шовинистички решавала етнографска питања оних области где су етнографска обележја и национално осећање народних маса флуктуантни и у стварању. На против били би фиксирани такви народни делови који нијесу формирани, сада се формирају или ће се тек у будућности формирати. Осим научних услуга, таква би карта послужила као стварна основа и за процену националних аспирација балканских народа.

За [illegible] да [illegible] [illegible] и да [illegible] [illegible] ~~[illegible]~~ [illegible] ће су [illegible] [illegible] [illegible] [illegible] [illegible]

Увод

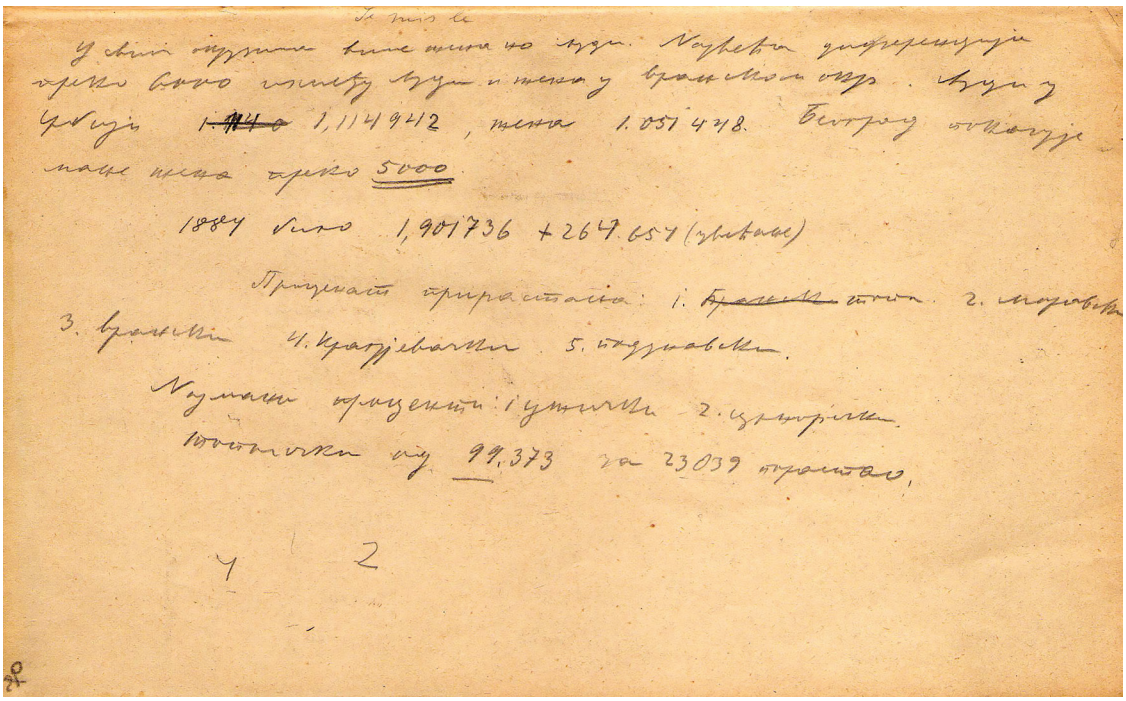
JC_265_29

Following the adopted principles of ethnographic classification of the peoples of the Balkan Peninsula, Jovan Cvijić defined the contents of the ethnographic map. He decided to present seven basic national groups, denoting them with special marks, and besides that, he independently marked Macedonian Slavs, Arnautaši or Arbanasi of Serbian origin and hellenised Tosks, and possibly even stronger hellenised Macedonian Slavs. Jovan Cvijić pointed out that the ethnographic situation could be appropriately represented at the scale of 1:200,000, which would require more thorough research due to lack of data, and further suggests a method of coloured zones of different width or the dot method, noting that assembling of this map the creation of this card *"would be very costly."*

He concluded this notebook manuscript with an emphasis on the importance of assembling the ethnographic map of the Balkan Peninsula: *"An ethnographic map made on the basis of principles and methods outlined above would precisely consolidate the present state of the Balkan peoples, their transition zones and different degrees of assimilation. By means of such map, ethnographic issues in areas where ethnographic features and national sentiments are wavering and in the making would not be forcefully and chauvinistically dealt with. On the contrary, such national entities that were not formed, are forming or will be formed in times to come."*

Following the publication of this manuscript, in 1907, the ethnographic map of the Balkan Peninsula, containing the principles defined in the manuscript, was released in two editions. The first one, entitled *Ethnographische Karte der-Balkanhalbinsel*, was printed in German and published in Gotha in 1913 (Cvijić, 1913). The map was created at the scale of 1:5,000,000, and Justus Perthes was named as the publisher. Five years later, in 1918, a map titled *Ethnographic map of the Balkan Peninsula* was printed in English, at a larger scale of 1:3,000,000 (Cvijić, 1918a). It was assembled at the request of the American Geographical Society and published in the journal *Geographical Review*. The map was used at the Paris Peace Conference of 1919 as the basis for determining the state borders on the Balkan Peninsula after the First World War.

Suzana Lović Obradović, Dragoljub Štrbac

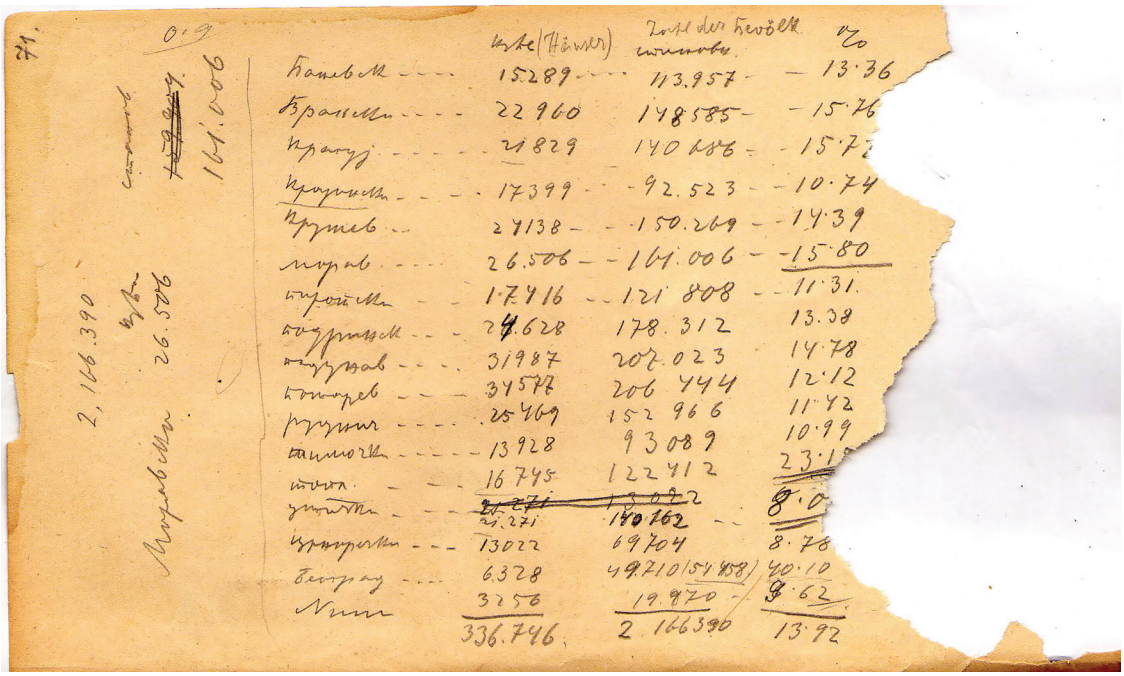


JC_250_59

As part of his research, Jovan Cvijić dealt with the gender structure of the population of Serbia at that time. In the manuscripts that are supposed to have been written between 1888 and 1893, he emphasised a noticeably larger male population than the female population, stating that: *"there were 1,114,942 males and 1,051,448 females in Serbia."* His estimates do not deviate significantly from the results of the 1890 census, according to which there were 1,109,885 males and 1,052,076 females living in Serbia (Statistics of the Kingdom of Serbia, vol. 1, 1893). Within the framework of examining gender structure of the population, in his manuscripts, Cvijić also wrote about regional differences in the relations between the sexes. He singled out counties with a significantly larger male population than female population, above all *"the greatest differentiation … between men and women in the Vranje County."* Furthermore, according to the subsequent population census data, four counties had 4,000 or more males than females: counties of Podunavlje (area along the Danube course in Serbia), Požarevac, Toplica and Vranje, with 76,910 of male gender and 72,372 of female gender. He separately examined Belgrade and Niš, the cities with special status, noting that: *"the number of females in Belgrade falls behind more than 5,000."* The 1890 population census data confirmed this claim, showing that there were 31,738 males and 22,511 females living in Belgrade.

The population growth, one of the phenomena typical for the territory of Serbia at that time, was also observed in notebooks of J. Cvijić. The previous population census of 1884 was set as the basis for calculating increase in the number of inhabitants. Thus, he wrote that in *"1884, the population was 1,901,736 + 264,654 (increase)."* The results of the 1890 census showed somewhat different situation. In this inter-census period, the population of Serbia increased by 260,225, from 1,901,736 to 2,161,964. In addition, Cvijić observed regional differences in population growth between the two censuses. He identified the counties "*1. Toplički Okrug* (Toplica)*, 2. Moravski Okrug* (Morava)*, 3. Vranjski Okrug* (Vranje), *4. Kragujevački Okrug* (Kragujevac) *and 5. Podunavlje* (county along the Danube course)" as the regions with the highest population growth rate, and the counties of "1. *Užički Okrug* (Užice) *and 2. Crnorečki Okrug* (Crna Reka)" as having "*the lowest level of population growth*." He also showed an absolute increase in population size in the observed period, singling out the "*Toplica County, where the population grew from 99,373 to additional 23,039*." The results of the 1890 census showed slightly different figures. In this inter-census period the population of the Toplica County increased at the rate of 22.3%, that is by 21,836 in absolute terms. The Morava County saw increase in population by 13.4%, i.e. from 141,200 to 160,191 inhabitants, which is less in percentage terms than the counties of Vranje, Kruševac, Kragujevac and Podunavlje, and in absolute increase less than the counties of Podunavlje, Vranje, Požarevac and Kruševac.

Marko Filipović



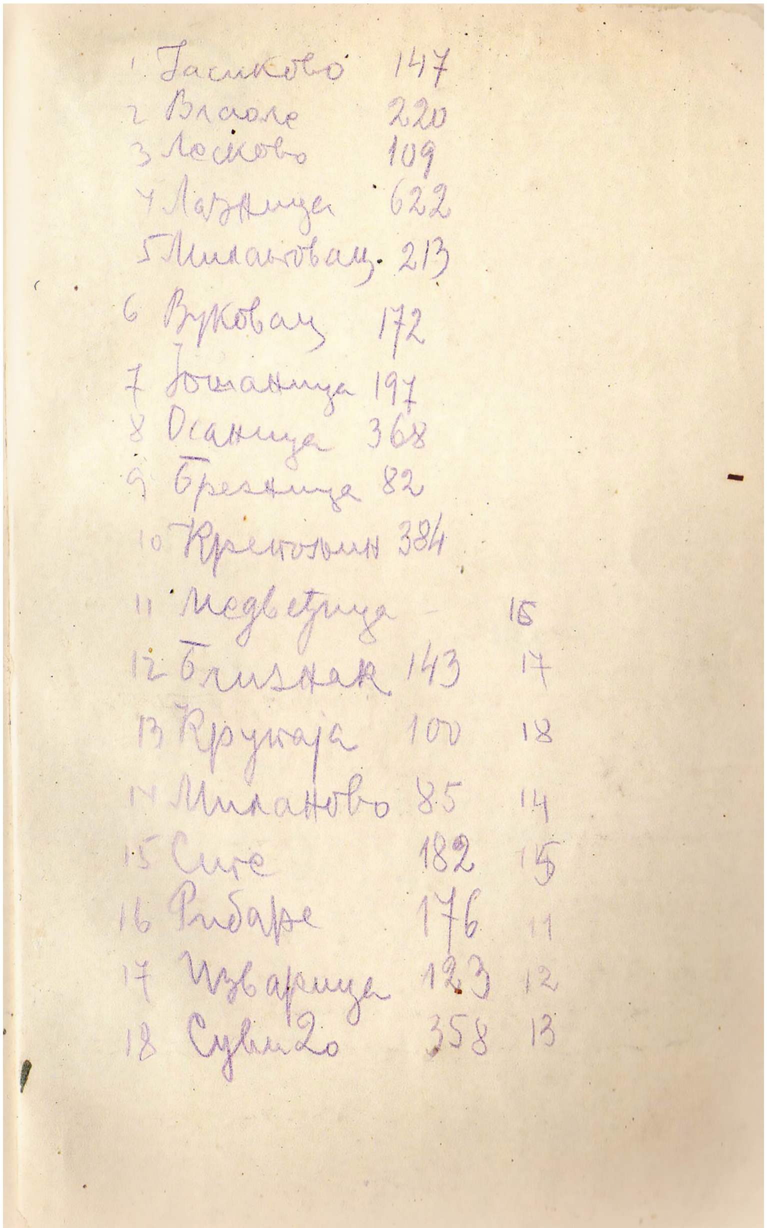
JC_250_60

	County	Census Statistics				Houses	Cvijić's Notebook		
		Population		Population growth			Houses	Population	%
		1884	1890	Total	%				
1.	Valjevo	100,606	114,517	13,911	13.83	15,265	15,289	113,957	13.36
2.	Vranje	128,103	149,282	21,179	16.53	23,066	22,960	148,585	15.76
3.	Kragujevac	122,144	140,661	18,517	15.16	21,909	21,829	140,686	15.72
4.	Krajina	83,549	91,572	8,023	9.6	17,324	17,399	92,523	10.74
5.	Kruševac	129,081	149,554	20,473	15.86	24,092	24,138	150,269	14.39
6.	Morava	141,200	160,191	18,991	13.45	26,499	26,506	161,006	15.8
7.	Pirot	109,413	120,585	11,172	10.21	17,343	17,416	121,808	11.31
8.	Podrinje	157,425	176,533	19,108	12.14	24,460	24,628	178,312	11.38
9.	Podunavlje	180,371	206,966	26,595	14.74	31,804	31,987	202,023	14.78
10.	Požarevac	184,122	205,029	20,907	11.35	34,360	34,577	206,444	12.12
11.	Rudnik	138,039	151,695	13,656	9.89	25,465	25,469	152,966	11.42
12.	Timok	83,870	92,762	8,892	10.6	13,969	13,928	93,089	10.99
13.	Toplica	99,546	121,382	21,836	22.3	16,538	16,743	122,412	23.17
14.	Užice	128,526	137,542	9,016	7.01	21,253	21,271	140,162	8.01
15.	Crna Reka	64,080	69,564	5,484	8.56	13,064	13,022	69,704	8.78
16.	Belgrade	35,483	54,249	18,766	52.89	6,093	6,328	49,710	40.1
17.	Niš	16,178	19,877	3,699	22.86	3,256	3,256	19,970	9.62
	Serbia	1,901,736	2,161,961	260,225	13.68	335,760	336,746	2,166,390	13.92

In one of Jovan Cvijić's notebooks there is a table containing the number of houses, as well as the number and increase of the population of Serbia, which is supposed to have originated between 1888 and 1893, when the results of the 1890 population census were published (Statistics of the Kingdom of Serbia, 1893). The data presented are shown for counties and presented at the overall level. In collecting and tabulating data, Cvijić followed the administrative-territorial division of the Kingdom of Serbia. Although Serbia was declared kingdom in 1882, the administrative division from the time of the Principality of Serbia was still in force until 1890, when the Law on the Administrative Division of the country was introduced. Under this Act, the Kingdom of Serbia was divided into 15 counties (Valjevo, Vranje, Kragujevac, Krajina, Kruševac, Morava, Pirot, Podrinje, Podunavlje, Požarevac, Rudnik, Timok, Toplica, Užice and Crna Reka), whereas the cities of Belgrade and Niš were granted special administrative status. In the table presented within this notebook, Cvijić displayed the data in the same sequence as in the tables with the results of the 1890 population census, wherein the *srezovi* [districts] were sorted in alphabetical order, preceding the cities of Belgrade and Niš.

Apart from presenting the overall number of houses and inhabitants, J. Cvijić also presented figures for percentage population increase at a given moment, with respect to the previous census conducted in 1884 (table). The table shows the highest percentage increase, recorded in the Toplica County, and the lowest one, recorded in the Užice County. For Belgrade, he gave two values: 49,710 as the basic one, and 54,458 inhabitants as a potential value, given in the brackets. While the manuscript figures for the total number of houses per district correspond to the official figures, this is not the case with the figures for the total population number. The sum of individual population values per counties from Cvijić's table is 2,163,626, whereas the total population of Serbia was estimated at 2,166,390. It is assumed that Cvijić separately made his population estimate per county, at a given time and on the overall level, and it is evident that two estimates were made for Belgrade. Compared to the results of the 1890 population census, there are a few discrepancies. For most of the counties, Cvijić gave a rather high population figures, and a somewhat smaller values for the counties of Valjevo and Vranje. There is a significantly larger difference in values for the counties of Podunavlje and Belgrade, where the 1890 census showed increase of almost 10,000 inhabitants in comparison with the table shown. On the overall level, the difference in the estimates was significantly lower. Regardless of the discrepancies with official statistics, the contribution and significance of this Cvijić's manuscript is undeniable. In times when the size of the territory of Serbia was synchronously increasing with the size of its population, field studies became even more important in observing demographic phenomena and processes.

Marko Filipović



1	Јасиково	147	
2	Влаоле	220	
3	Лесково	109	
4	Лазница	622	
5	Милатовац	213	
6	Вуковац	172	
7	Јошаница	197	
8	Осаница	368	
9	Брезница	82	
10	Крепољин	384	
11	Медведица	–	16
12	Близнак	143	17
13	Крупаја	100	18
14	Миланово	85	14
15	Сиге	182	15
16	Рибаре	176	11
17	Изварица	123	12
18	Суви До	358	13

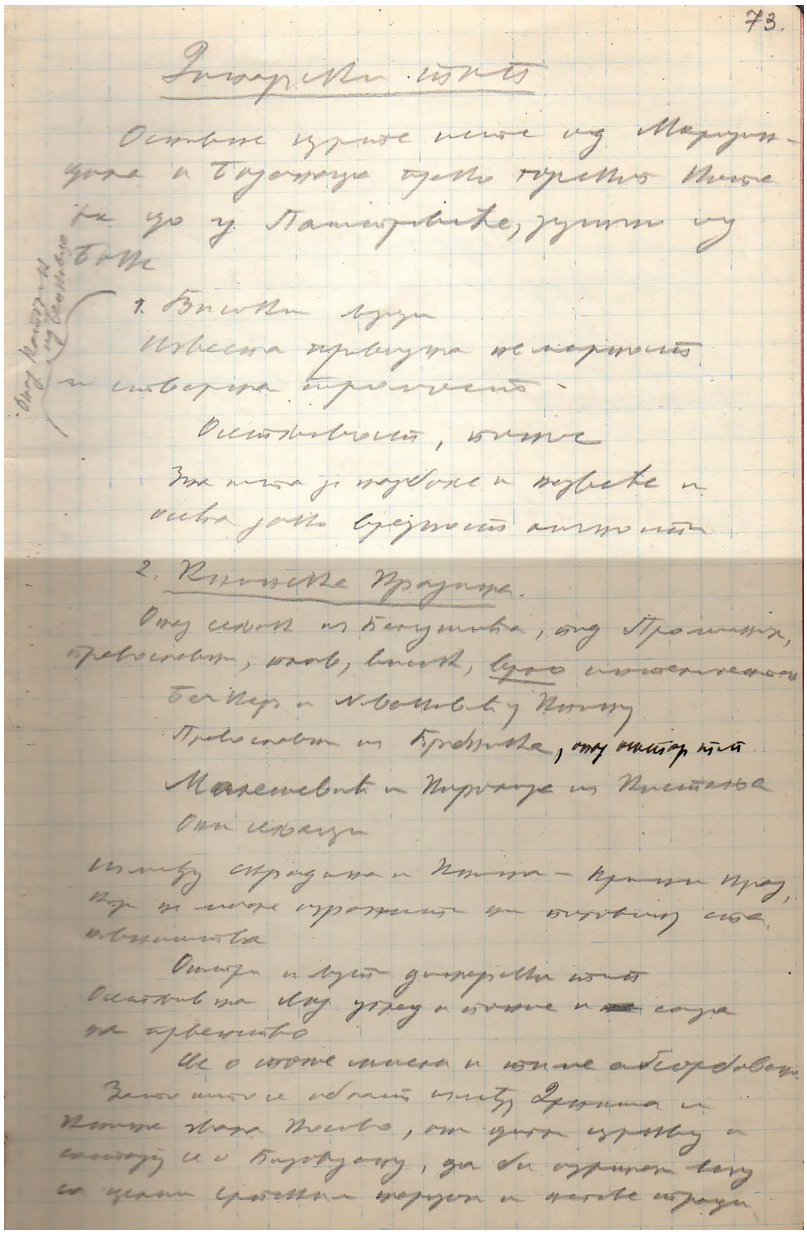
JC_267_4

One of Jovan Cvijić's notebooks, which is assumed to have originated in the second decade of the 20th century, contains a table with data on the population of settlements in the region of Homolje, noted down by one of his associates. It shows the number of inhabitants in 18 settlements of the Homolje region and Žagubička Kotlina basin. Particularly interesting is that among the listed settlements we find no mention of Žagubica, the largest settlement, as well as the administrative centre of this area. Among these settlements, 15 belonged to the present-day municipality of Žagubica in the Braničevo region: Bliznak, Breznica, Vukovac, Izvarica, Jošanica, Krepoljin, Krupaja, Laznica, Medveđica, Milanovo, Milatovac, Osanica, Ribare, Sige and Suvi Do, whereas three settlements, Vlaole, Jasikovo and Leskovo, were listed within the municipal boundaries of Majdanpek in the region of Bor. Population numbers are given for 17 settlements, except for Medveđica, which is even now the least populated settlement of this area. It was established only in the 19th century, as a hamlet of the settlement of Bliznak, and not until the censuses following the Second World War was Madveđica classified as a separate census unit. According to the latest 2011 census figures (Statistical Office of the Republic of Serbia, 2014), there were 11,310 residents living in the area under consideration, whilst at the time when the table was assembled, the population was 3,591. The settlement with the largest population, both then and now, has been Laznica with 622 inhabitants. Nowadays, this territory is markedly affected by depopulation, wherein the number of residents in the period between the censuses from 1953 to 2011 decreased by almost 50%.

In his *Anthropogeographical Writings*, Cvijić listed 8 inhabited settlements of the former Homolje District within the Požarevački Okrug [Požarevac County]: Vlaole, Jasikovo, Leskovo, Vukovac, Jošanica, Milatovac, Žagubica and Suvodol (Lutovac, Maletić, & Ranković, 1987). We notice that there is not much difference between the names of settlements listed in the table and the present-day names. The only place which has changed its name is Milanovo (also called Magudica), the present-day Milanovac. Numerous changes in the village names were officially carried out in accordance with the will of the inhabitants. "Turkish place-names and those that give rise to ridicule were subjected to the wholesale name changes. The new village names were usually given after members of a ruling dynasty or emperor, king, despot; others were given old historical names, or those suggested by the villagers themselves… such as Milanovac, instead of the previous name of Magudica, in Homolje District, Požarevac County" (Lutovac et al., 1987, pp. 100–101).

On several occasions, Cvijić emphasised societal characteristics of phenomena and processes related to the population of Homolje. In his opinion, dissimilarity and unique features of this area were the result of a distinct ethnic group, which was formed based on mutual interactions between regional diversities, but which, as a whole, much differed compared to the population south of this area (Cvijić, 1922a; Miljković & Stojanjelović, 2002). He also highlighted the work of his student Mihailo J. Miladinović (1928), who dealt with the population, origin and directions of immigration in Eastern Serbia, including the Homolje region.

Marko Filipović

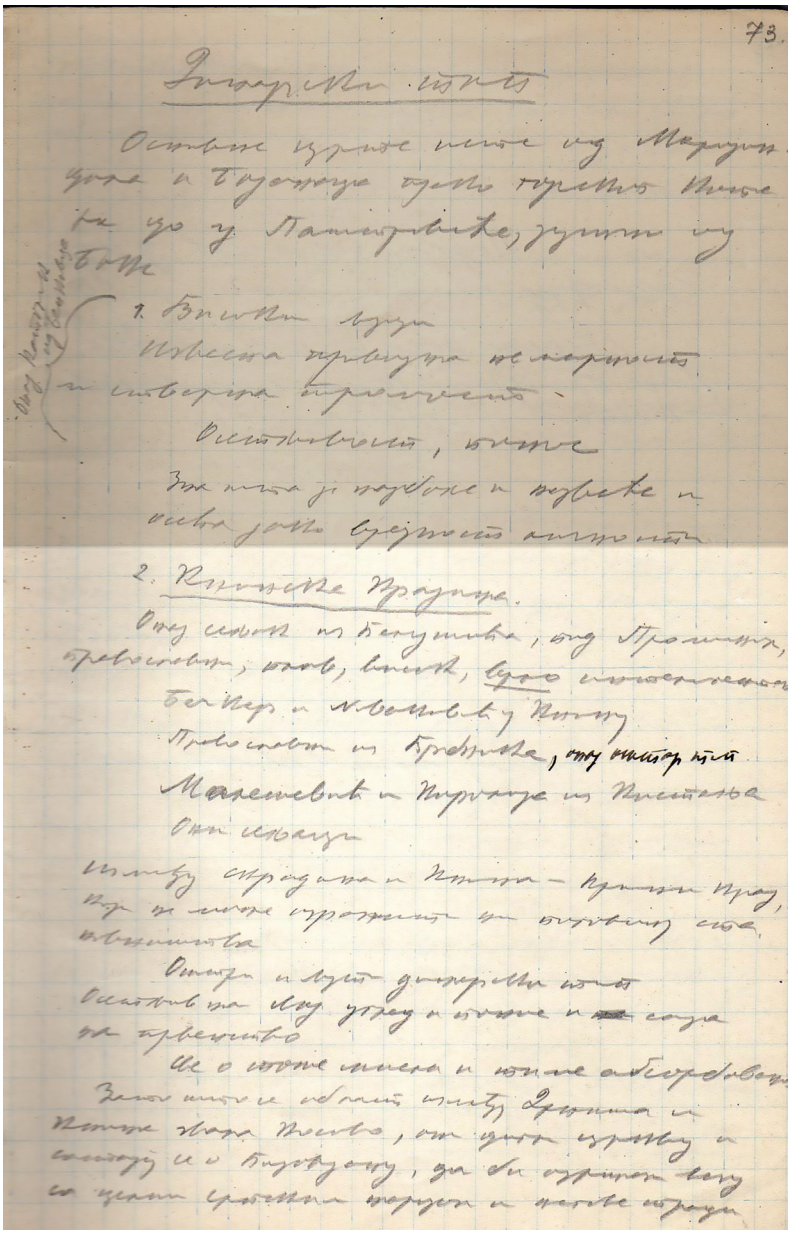


JC_256_42

One of the manuscripts from Jovan Cvijić's field notebooks bears the title *"The Dinaric Type"*, and in it he described the psychological traits and physical characteristics of the Dinaric people, inhabiting the area from *"Marijindol and Bojanci, through Gorski Kotari to Paštrovići, south of Boka."* The area under consideration, from Marindol ("*Marijindol*", as Cvijić mentions) and Bojanci, the inhabited places in the region of Bela Krajina in the Republic of Slovenia, to Paštrovići, south of the Boka Kotorska Bay, runs in the direction of the Dinarides, stretching about 700 km in length. He described the population inhabiting this area as *"slender"*, but likewise distinguished by *"the seeming immorality and a rather sluggish temper."* The footnote on the left side of the text, which reads *"the Catholic man near Benkovac"*, may indicate that this description was based on an encounter with a certain individual, who, as the inscription further reads, *"knows what is best and the greatest and feels a strong sense of the worth of character."*

This manuscript is but one out of the many texts comprised in the notebooks of Jovan Cvijić, in which he described the Dinaric type of personality. The sum of all knowledge on the Dinaric type of population, which he gathered by means of numerous field studies, was published in the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a). Therein, on 58 pages, he gave a comprehensive overview of the geographical distribution, psychological traits and varieties of the Dinaric population.

Suzana Lović Obradović



73.

Дневничке белешке

Остављам чудне мисли од Марцуре
горе и Трговишту одмах чудне мисли
ја ће у Панчеревцу, једини ће
бити

1. Вечити живи
Извесна привидна немогућност
и свесна стварност.

Остављам, онако

Ја мисли ја пођоше и пођоше и
свима једно једноставно мислити

2. Кишовска Трговина.

Ову сцену из Бакунинова, ону Прокопија,
Трговчевића, онако, онако, једно изнесено
Бакуру и извештају Кошту

Трговчевић из Трговишта, ону Мајстор Јаша

Максимовић и Трговина из Пиштања

Они сведоци

између страдања и Христа — крупни план,
који не може пропасти за вечиту сва
извештаја

Остаје и једно дневничке мисли
Остављам ја ћу једну и онако и [redacted] сада
ће трговишту

Ће о свима мислима и једноставно

Зато мисли се одлази између Христа и
Кишове једна Земља, он једна страшну и
свакоју ће и будућу, да би страшно Богу
са једним једноставно једноставно

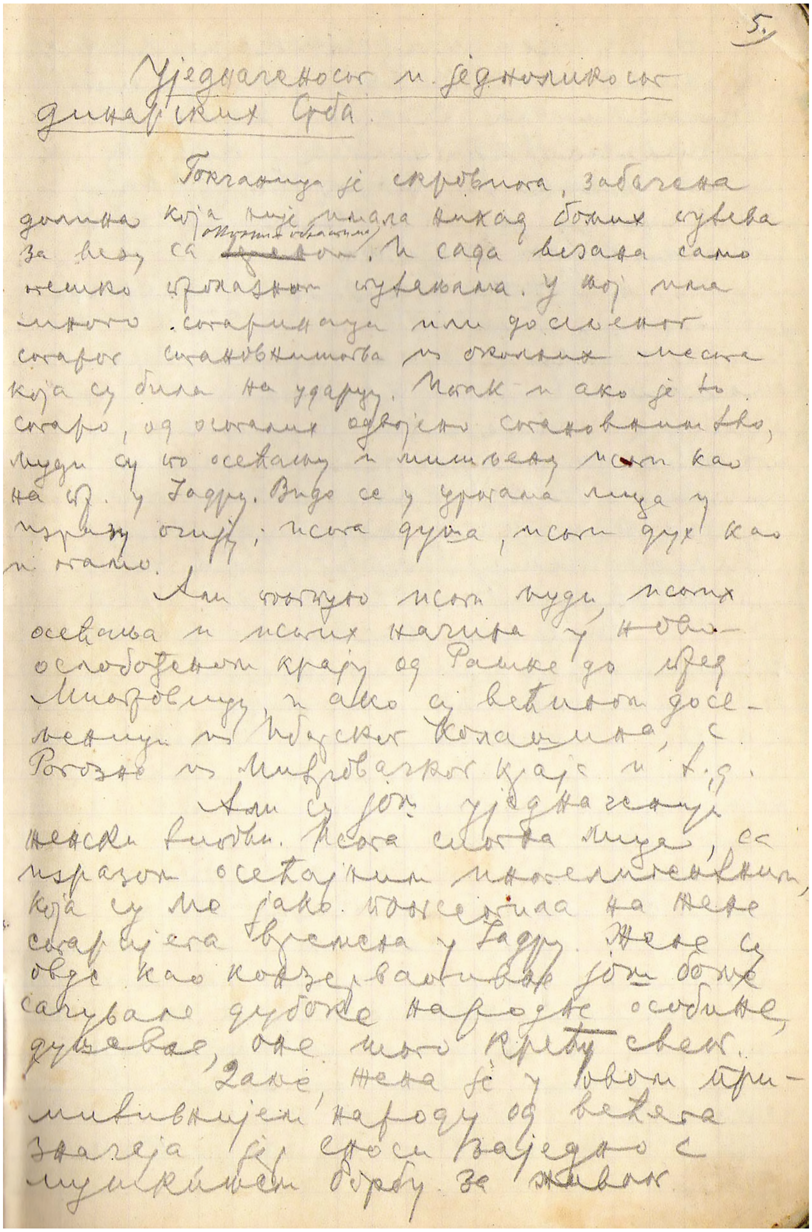
JC_256_42

In the first part of the chapter entitled *"Kninska Krajina"* within the manuscript "*The Dinaric Type*", Jovan Cvijić gave a brief overview of the psychological traits and physical characteristics of the area's population. He took as an example *"the peasant from Velušić, under Mount Promina"*, whom he described as *"blond, tall, very intelligent"*, stressing the word "very". He described the Dinaric type of population inhabiting the area between Skradin and Knin as *"sharp and short-tempered"*, explaining these traits by, inter alia, *"wild karst that cannot even feed half of the population"*, thus confirming the theory of geographical determinism, which Cvijić himself advocated.

In the last passage of the manuscript, Cvijić wrote about the church, built by the people of Kninska Krajina in Kosovo, in the area between Drniš and Knin, and on the importance this church holds for them. The church was the pivot of the people's unity on the feast of Vidovdan [Saint Vitus's Day], *"maintaining a connection with the whole Serbdom and its traditions."* Cvijić was actually referring to the Lazarica Monastery, dedicated to Prince Lazar, located in the present-day village of Zvjerinac in the Municipality of Knin. It was primarily constructed as a church in 1889, and only in 1940 it became a monastery. Throughout its history, it has been ravaged and rebuilt several times, but it has still retained its original role as the centre of gathering of Orthodox Christian believers, primarily from Kninska Krajina.

A detailed overview, not only of the geographical features of this area, but also of its history and population, was given under the title "Kninska Krajina" by a close Cvijić's associate, the priest Savo Nakićenović. During the writing of this book, as well as the previous two, he conducted a correspondence with Cvijić, who provided him with support; it could be said that Cvijić was his mentor. The manuscript, completed by 1926, when the author died of serious illness, is kept at the Serbian Academy of Sciences and Arts. In the chapter "Psychological Characteristics of the People" he put a special emphasis on their affability and hospitality, fearlessness, grammatically correct language, stressing that this is "the purest Serbian population, they speak, think and feel in Serbian way" (Nakićenović, 1926). He also mentioned the Lazarica Church from Cvijić's manuscript, stating that it was built by Serbian residents originating from Kosovo Polje [Kosovo Field].

Suzana Lović Obradović


5.

Уједначеност и једноликост динарских Срба.

Гокчаница је скровита, забачена долина која није имала никад бољих путева за везу са (окружним седиштем). И сада везана само нешто уређеним путањама. У њој има много старинаца или досељеног старог становништва из околних места која су била на удару. Ипак и ако је то старо, од осталих одвојено становништво, људи су по осећању и мишљењу исти као на пр. у Гадру. Види се у цртама лица у изразу очију; иста душа, исти дух као и тамо.

Али потпуно исти људи, истих осећања и истих начина у новоослобођеном крају од Рашке до преко Мојковца, и ако су већином досељеници из Ибарског Колашина, с Рогозне из Митровачког краја и т.д.

Али су још уједначенији женски типови. Иста слика лица, са изразом осећајним интелигентним, која су ме јако поизненадила на жене старијега времена у Гадру. Жене су овде као конзервативније још боље сачувале дубоке народне особине, душевне, оне што краду свет.

Даље, жена је у овом примитивнијем народу од векова значаја је, сноси заједно с мушкарцем борбу за живот

JC_267_8

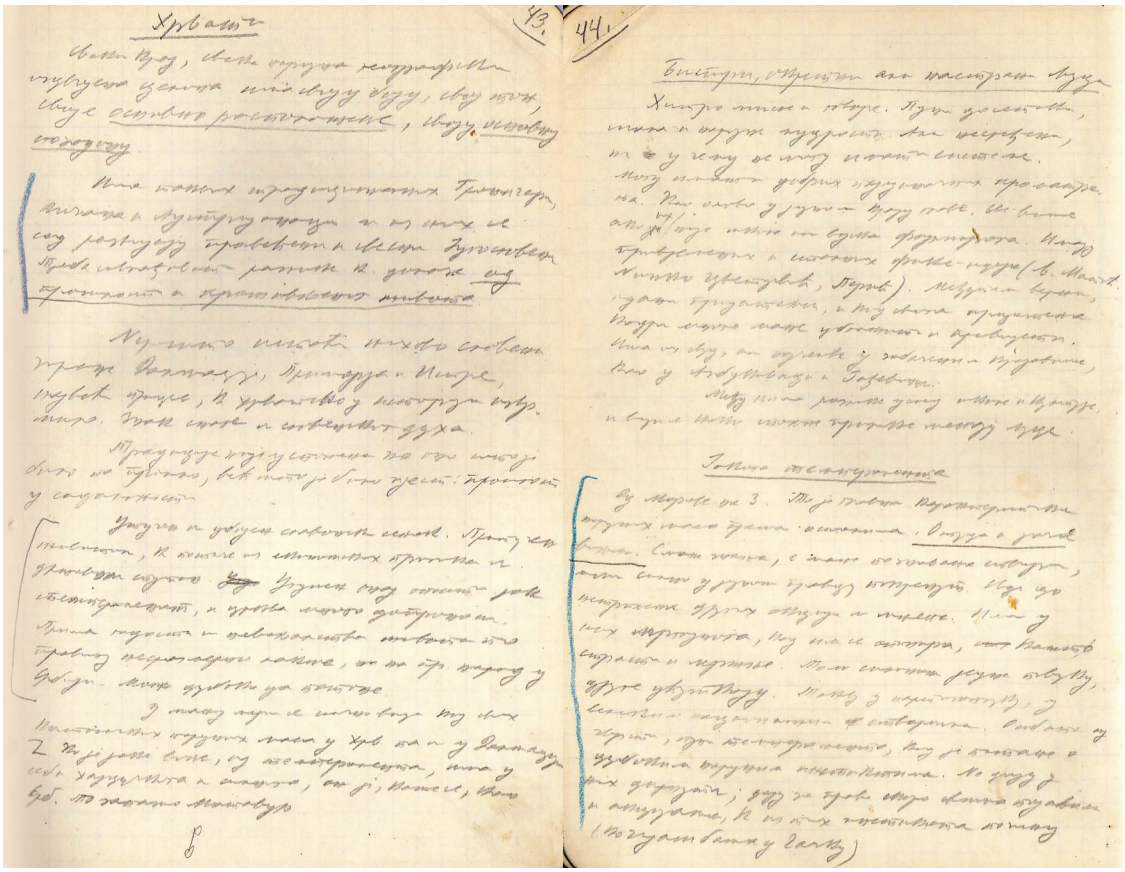
In the notebooks of Jovan Cvijić, we find the manuscript entitled "*Homogeneity and Uniformity of the Dinaric Serbs*". It was recorded by one of his travel companions. In it, he paid particular attention to the characteristics of the Dinaric Serbs, their strengths and development in different historical circumstances. In the introductory part, Cvijić gave an illustrative example of Gokčanica, describing it as *"a hidden, remote valley that never had better conditions for connection with the surrounding areas."* Its position between the Ibar River and the mountains of Željin, Goč, Ravna Planina, Studena Planina, Žaračka Planina and Planjansko Brdo influenced Cvijić to mark it as *"a region bound only by difficult passageways."*

Cvijić also dedicated attention to the origins of the population and noted: *"There are many old people or old immigrants from the surrounding places that were invaded."* This is one of the reasons why Cvijić claimed that this *"separate population* is *completely the same people, with the same feelings and thoughts"* as everyone else in the new, liberated area *"from Raška to Mitrovica."* Interestingly, he compared them with the population of Jadar, stating that their similarities are to be found in the facial features, eye expressions, the heart and the spirit. He gave a prominent role to women. Cvijić described them as possessing *"small faces, with sensible and intelligent expression"* who, owing to their conservative nature, have even better preserved those *"profound, traditional qualities, full of soul, the ones that move the world."* According to Cvijić, rural women *"as part of this more rudimentary people, are of greater importance, because, alongside men, they carry a struggle for life."*

In his capital book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), in the chapter *Ethnic Unity and Psychological Types*, Cvijić particulary distinguished the role of the Dinaric type with its varieties. He emphasised that, due to various events and experiences, the development of this population has become especially evident: *"They are now able to evaluate and weigh complex issues"*, therefore it is *"difficult to mislead them with phrases and spark uproar or dispute among them, as it was previously possible."* As he stated on several occasions, the Dinaric Serbs have a clear national consciousness and soul and deep-rooted national moral and thought, and the Balkan Wars and the Great War (First World War) are just one out of many proofs.

More details on this area and its population can be learned from later research by Radoslav Pavlović. In his book "Podibar and Gokčanica" (1948), he wrote that Gokčanica represents well-closed *župa* [parish] on the northern, western and northwestern branches of Mount Željin, the Gokčanica Creek and the Ibar River, consisting of four villages: Gokčanica, Cerje, Rudnjak and Predole. In this area the name Gokčanica is also used for the villages (hamlets) of Borovo, Duboko, Crvanj, Dobra Bukva and Ravni. In the aforementioned work, the author stated that apart from native families, there were also a large number of immigrants belonging to the Dinaric, Kosovo-Metohija, Vardar-Morava, Timok-Braničevo and Šop drifts. According to Pavlović, the migrations of the population from Vasojevići, Donji Kolašin on the Lim River, Ibarski Kolašin, then "from Pazar", "from Deževa", Ibar and Stari Vlah had a crucial impact on the ethnic composition of this region.

Stefan Denda, Jasna Micić



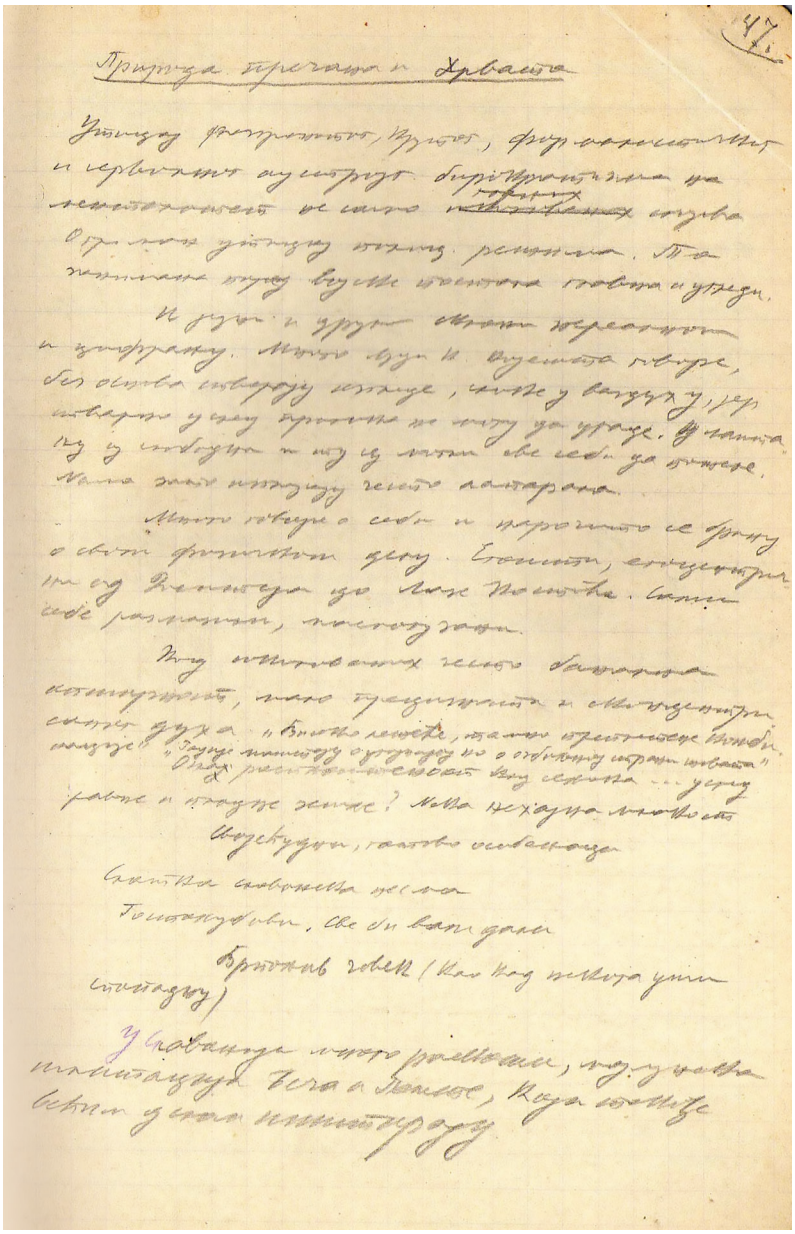
JC_267_26 JC_267_27

Studying anthropogeography, Jovan Cvijić analysed the types of personality of the Balkan Peninsula. He described many nations and individuals, Croats among others. In the manuscript entitled *"Croats"* he described them in the following way: *"They think and speak quickly. They are full of witty remarks, jokes and folk wisdom. However, when they cannot achieve systematism, they feel disordered. Many of them make good individual observations."* In Cvijić's opinion, some of their main characteristics are strong temper and will. *"Many of them become grim when confronted, taking a passionate stand, with a bit of hatred."* There was no antagonism between the Croats and the Serbs, quite the opposite, but certain Austrian political circles were aiming at creating poor relations between the two. *"This rivalry must have developed under the Austrian rule."* This only applied to one portion of the people, *"consisting of hardly anyone insightful and discerning, of those who shall, at the earliest opportunity, realise how distressing such attitude was to both the spirit and heart."*

While studying the people, Cvijić gathered data on customs as well as the opinions of respectable persons. He quoted the opinion of Simo Matavulj*: "To a lesser degree, out of all the Catholics in Croatia, even in Dalmatia, the one distinguished by strong will, temper, boldness and vigour, is like Serb; They possess a tendency of showing temporary and permanent inclinations (see Matić, Ninko Cvetulović, Perić)."* As stated by Cvijić: *"Tradition is not a memory of bygone, but of all that was and still is: time past in time present."*

In the publications *Speeches and Articles* (1921b; 1921c), Jovan Cvijić gathered and presented many of his works and speeches, some of which had not been printed in Serbian before. In publication *Speeches and Articles* (Cvijić, 1921b, p. 85), he stated that "the Roman culture left traces in the local population, consisting of the Illyrian and Thracian tribes that had already been half latinised. This ancient population served as an intermediary between the Romans and Serbo-Croats with whom they merged." The article *Unity and Psychological Types among the Dinaric South Slavs* (Cvijić, 1921c, p.73) describes the connection among the Yugoslav peoples: "It is interesting to examine the causes due to which the ethnic unity of the Yugoslav peoples has maintained and kept on progressing, one language, the same archaic traditional worldview, almost identical basic physical and especially psychological traits, some of which are particularly pronounced among the Serbs" (Cvijić, 1921c, p.109). The article also mentions that "Croats of the Trieste-Kvarner Bay have a lot of sense of sobriety and reality." In the article *The Annexation of Bosnia and Herzegovina, and the Serbian Issue* (Cvijić, 1921b, p. 232), Cvijić said that Austro-Hungarian policy used every means to break the Serbo-Croatian coalition and that it "alienates two parts of the same people." On the 25th of October 1911 in Belgrade, Cvijić, wrote the article *On National Unity* in which he says that the Serbo-Croatians are gifted people and that they should work more on their cultural rapprochement, inspite of "both the current and former influences that alienate us from each other."

Stefana Matović



JC_267_28

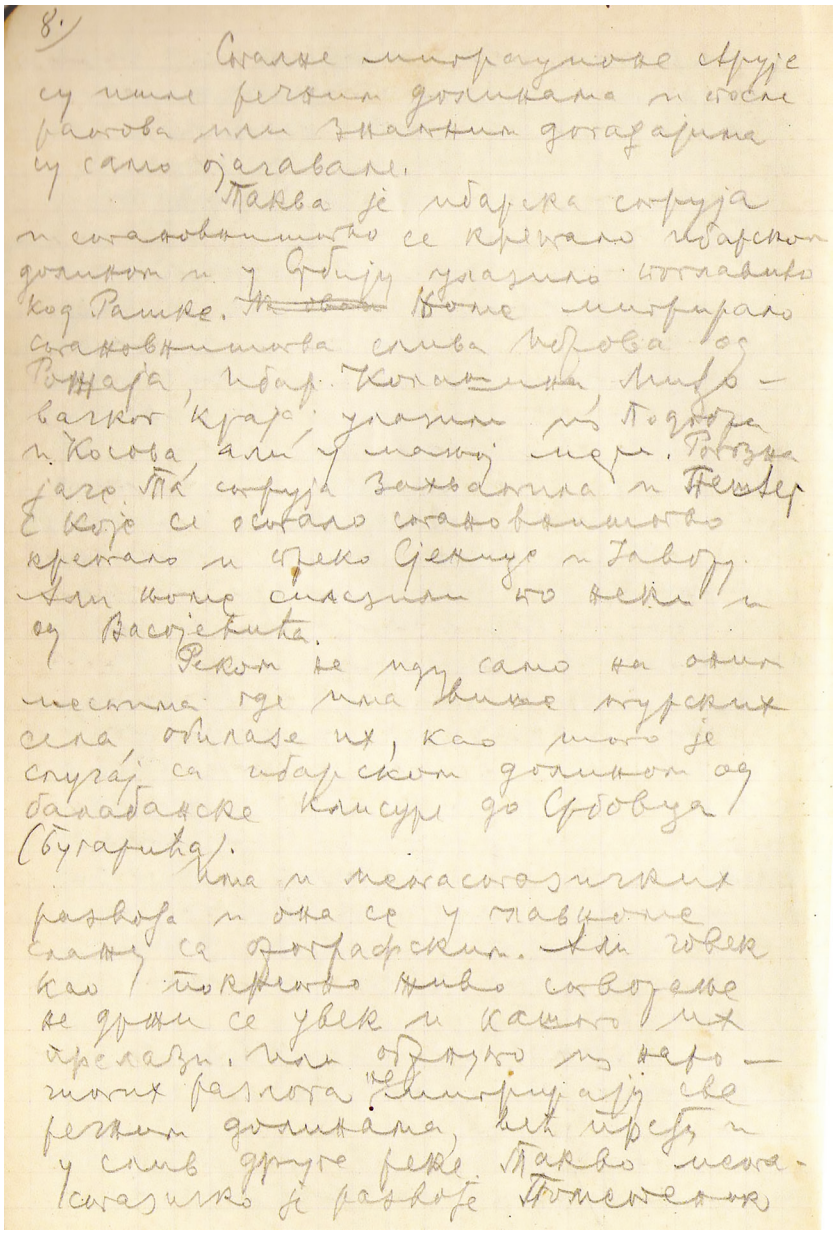
In the manuscript entitled *"The Character of Prečani and Croats",* Jovan Cvijić analysed the psychological and social characteristics of the population inhabited in Slavonia. The text refers to both the Croatian population and the so-called Prečani Serbs (Serbs living beyond the northern and western borders of 19th-century Serbia – T/N). First of all, Cvijić pointed out the strong influence of the rigid, widespread and formalistic Austro-Hungarian bureaucracy on the mentality of this population. As the main and very prominent occupations he emphasised those related to the army and police. In Cvijić's words, both Prečani and Croats tend to be unrealistic and prone to embellishment, as well as to exaggeration in speeking, due to considerable freedom of imagination.

Cvijić was keen to know if the peasants' *"negligent sluggishness"* was due to the presence of a flat and fertile land? He emphasised the absence of *"precision and focused spirit"* among the educated population, as well as their superficial and quick reasoning. He claimed the inhabitants of this area to be *"obstinates and mavericks"* who prefer to daydream about *"more pleasant serious side of life."* He wrote about the widely present pageantry in Slavonia, modelled after prosperous cities – Pest and Vienna.

Apart from partial frivolity and superficiality of the Slavonian life, Cvijić emphasised the great hospitality and sentimentality of Slavonians. He wrote the following: *"Like us, the Slavonians are known for their sentimentality, compassion and empathy. Their heart is easily softened and they are easily brought to tears."* He also mentioned *"the sweet Slavonian song"*, as a special feature of this population.

Cvijić's observations on the characteristics of the Slavonic population were thoroughly elaborated and broadened in his capital book *La Péninsule Balkanique* (1918b), in the chapter *Psychological Characteristics of the South Slavs*, originally written in French, and then translated and published in Serbian in 1922. In this study, Cvijić defined a special Pannonian psychological type of Southern Slavs and, within it, the Slavonian variety, distinguished by the specific characteristics described in the manuscript. Cvijić further discussed the Pannonian psychological type in *Speeches and Articles* (1921c), in the chapter *Uniformity and Psychological Types of Dinaric Southern Slavs*, but without elaborating it in more detail. In his work *Metanastasic Movements and Their Causes and Effects* (1922b), in the chapter *Effects of Migrations*, he singled out Slavonia as a region of strong colonisation in which the processes of population mixing and adjusting were particularly pronounced, causing the formation of new ethnic groups, types and varieties. The Serbian population in Slavonia was studied in detail by Cvijić's contemporary, Aleksa Ivić (Ivić, 1923; 1926), whose analysis relied on Cvijić's research on metanastasic movements, explaining them from the historical point of view, using extensive archival material. In the later period, the issue of Slavonian Serbs was interpreted in the historical and geographical context in the works of Jovan Ilić and his associates (Ilić et al., 1993; Ilić, 1995).

Jovana Brankov



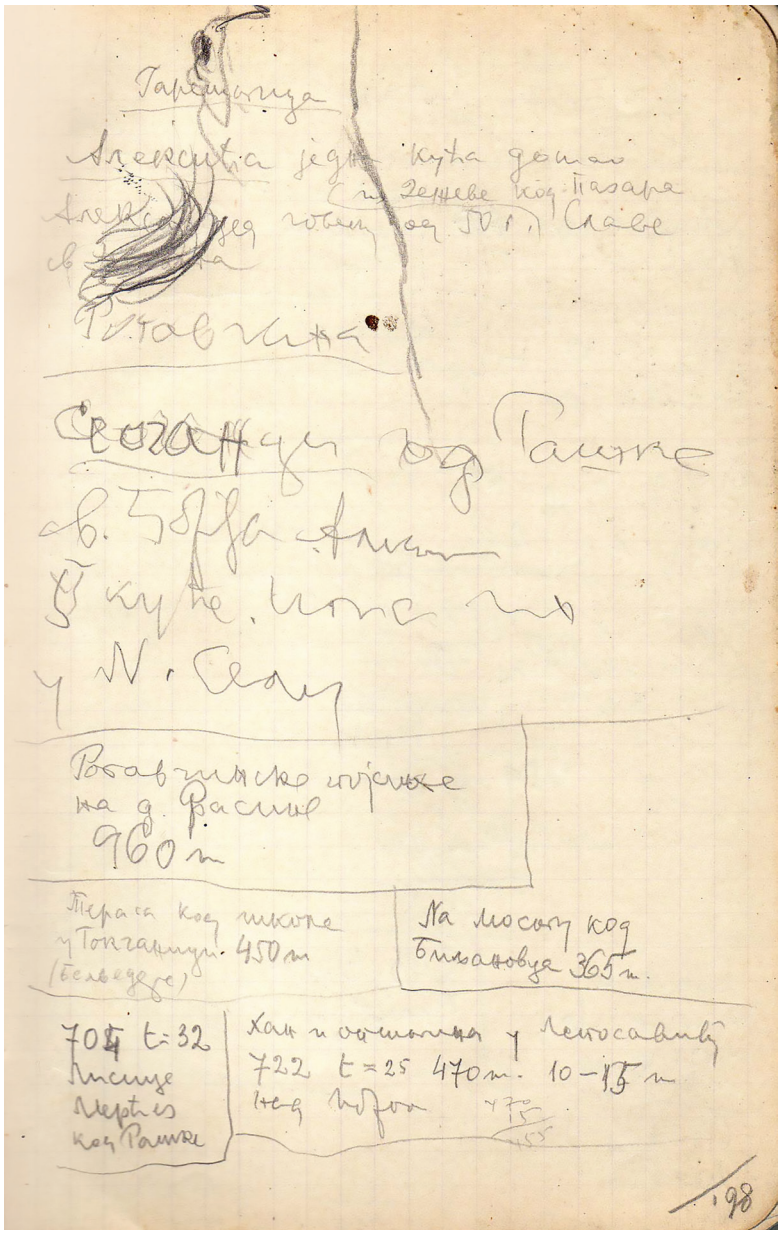
JC_267_9

Within the field notebooks compiled during Cvijić's trips throughout the Balkan Peninsula, we found two manuscripts, *"Metanastasic Drifts and Metanastasic Divides"* and *"Metanastasic Folds and Passes"*, that were noted by one of his fellow companions. In these manuscripts Cvijić elaborated the movements of population and its migration to Serbia. He introduced the notion of *metanastasic drifts* defining them as "the abstraction of the centenary course of migration" (Cvijić, 1922b, p. 4). In the original manuscripts we read that *"permanent migration drifts went along the river valleys and were strengthened by wars or significant events"*, and that the causes of migration can be natural, socio-economic or historical. In the book *Metanastasic Movements and Their Causes and Effects* (1922b), he distinguished four major groups of migration directions: the Dinaric, Kosovo-Metohija, Vardar-Morava (southern drift) and the drifts that crossed the Sava and Danube Rivers. However, in the aforementioned manuscripts, he refered to the branches of basic migration drifts that went towards Serbia (the Ibar, Sjenica, Lim, and Kosovo drifts). The population came to Serbia through the Ibar valley, especially near Raška. This drift was formed of people inhabiting the Ibar basin, stretching from Rožaje, Ibar Kolašin, the area of Mitrovica, Pešter, but *"it also included some immigrants from the area of the Vasojević tribe."* The movements did not follow the river only in the areas consisting of predominantly Turkish villages (for example, in the valley of Ibar from the Balabanska Klisura Gorge to Srbovac (Bugarić) in the Ibarski Kolašin).

Apart from metanastasic drifts, Cvijić introduced the following terms: *metanastasic divides* and *metanastasic gates* and *passes*. Metanastasic divides generally coincide with the orographic ones, except that *"these are not fixed, owing to the fact that man is a moving living creature."* Notable metanastasic divides include Pometenik, between the Ibar and Sjenica drifts; Pešter Plateau whence the drifts moved towards Ibar and Sjenica; followed by Zlatar and Jadovnik between the Sjenica and Lim drifts. Cvijić pointed out that there was no real orographic divide between the Kosovo and Ibar drifts and that the population from Kosovo moved through the Ibar valley, but that *"their movements were taking place mainly through Mount Kopaonik, since Lab area was inhabited by the Arbanasi (Albanians-A/N)."* Thus, the mass settling of the Toplica region was carried out totally "unnoticed". Cvijić defined *metanastasic gates and passes* as *"passes and particular valley sections through which metanastasic drifts moved towards Serbia."* These include, among others, settlements of Mokra Gora and Kokin Brod, Javor Mountain and the Ibar valley near Raška.

Cvijić published the results of his research in several publications, such as *The Anthropogeographical Problems of the Balkan Peninsula* (1902a) and *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a). In the later period, the main advocates of Cvijić's anthropogeographical school were academicians Atanasije Urošević (1935; 1950; 1965; 1987), Milisav Lutovac (1954; 1960; 1967; 1980) and Vojislav Radovanović (1924; 1959), whereas its modern followers include Milovan Radovanović (1961; 2004; 2008), Mirko Grčić (1999; 2002; 2004a; 2004b) and others.

Jasna Micić, Stefan Denda



JC_267_50

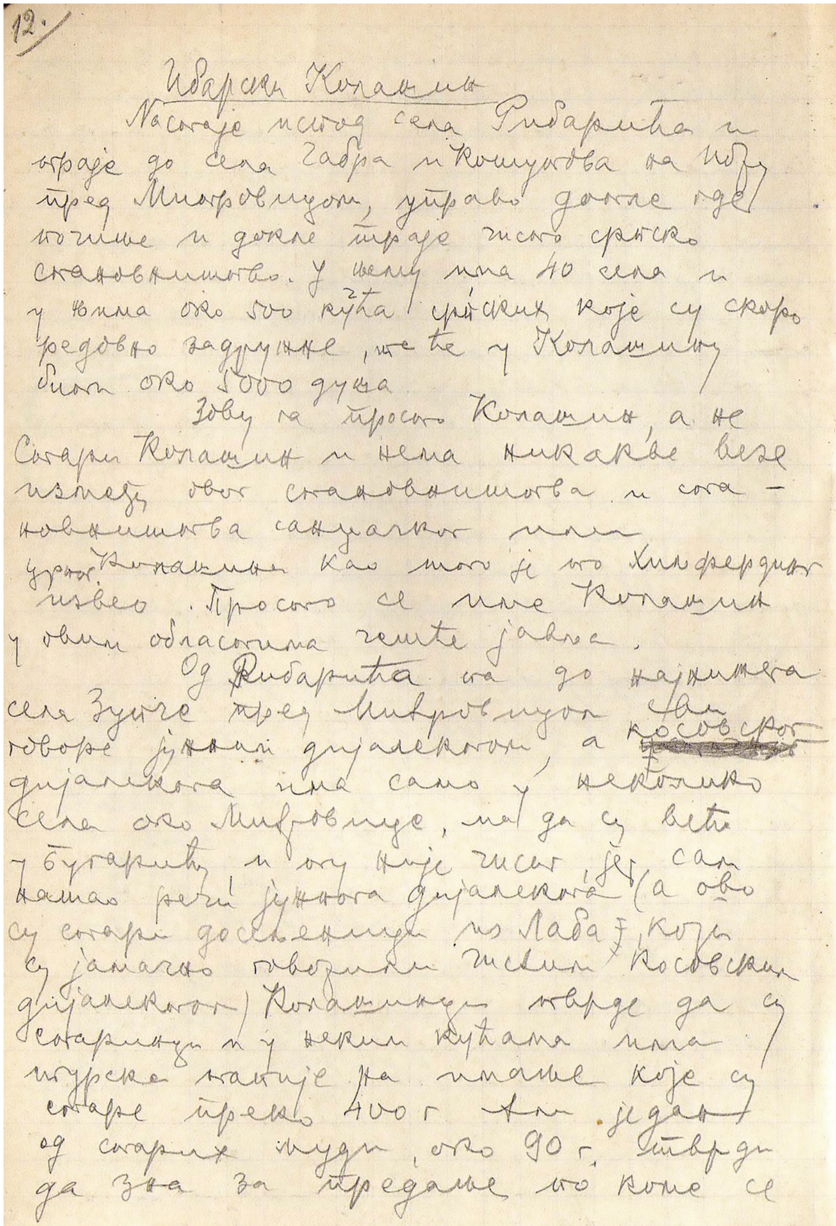
Jovan Cvijić dedicated a considerable part of his scientific work to researching anthropogeographical phenomena and processes in the Balkan Peninsula. He investigated and gathered empirical materials on natural conditions of the geographical environment, migrations and origin of population, settlements, material culture, psychological traits, tribes and families. The methodological plan of his field research was provided in the form of *Guidelines for the Study of Villages in Serbia and other Serbian Areas* (1896). While studying "the physical and geographical characteristics of the Balkan Peninsula, he noticed that it is populated by ethnically heterogeneous ethnic communities" (Lutovac et al. 1987, p. 9). This kind of research, focusing on migrations and origins of population in the Balkan Peninsula, was particularly discussed in the study *Metanastatic Movements and their Causes and Effects* (1922b), which later became a chapter in the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a).

This manuscript refers to the research conducted in the area of Kosovo and Metohija and part of the Raška region, and, to a lesser extent, covers anthropogeographical data. We read that, while investigating abrasion levelled surfaces, Cvijić spent some time in a village on the outskirts of Kosovska Mitrovica, at the Petronijević family, as well as in the village of Kozare (Municipality of Zubin Potok), at the Ilić family. On that occasion, he studied the origins of population, including the position and type of villages through which he passed by. During his research, he would often use a personal oral form of examination: "Prudent by nature, these villagers are so well informed that they know not only the origins of their own families, but of other families in the village as well, even in the neighbouring village" (Cvijić, 1902a, p. 156).

As the manuscript further reveals, Cvijić stayed with the Aleksić family, the only household in the hamlet of Garešnica bearing that surname, who moved from the village of Deževa near Novi Pazar, and whose *krsna slava* [Patron Saint day] was Sveti Đorđe [Saint George]. J. Cvijić also stayed in the hamlet of Seoganci (Novo Selo, the present-day Municipality of Raška), recording that this hamlet had five houses and that all families had St George as patron saint.

Apart from personal names, surnames and number of family members in a particular settlement, the basic characteristics that Cvijić and his associates recorded while studying the origin of the population, likewise included their origin or location whence they moved, as well as the date when they settled. They paid particular attention to family patron saints, serving as one of the basic parameters in determining the ethnicity of population. For Cvijić, the geographical distribution of "the most important Serbian custom – *krsna slava* [the Patron Saint day]" was precisely one of the main benchmarks for distinguishing similar national masses (Lutovac et al., 1987, p. 134). "In distinguishing the origin of the population of some of the northwestern regions of our people, *slava* is almost completely reliable indicator" (Cvijić, 1902a, p. 161).

Željko Bjeljac



12./

Ибарски Колашин

Настаје испод села Рибарића и траје до села Габра и Кошутова на Ибру пред Митровицом, управо докле где почиње и докле траје чисто српско становништво. У њему има 40 села и у њима око 500 кућа српских које су скоро редовно задружне, те ће у Колашину бити око 5000 душа.

Зову га просто Колашин, а не Стари Колашин и нема никакве везе између овог становништва и становништва санџачког или црног. Колашина као што је то Хилфердинг извео. Просто се име Колашина у овим областима чешће јавља.

Од Рибарића па до најнижега села Зупче пред Митровицом сви говоре јужним дијалектом, а ~~[illegible]~~ косовског дијалекта има само у неколико села око Митровице, мада су већ у Бугарићу и ову није чисто, јер сам нашао речи јужнога дијалекта (а ово су стари досељеници из Лаба ∓, који су јамачно говорили чисти косовски дијалекат) Колашинци тврде да су старинци и у неким кућама има турске тапије на имање које су старе преко 400 г. Али један од старих људи, око 90 г. тврди да зна за предање по коме се

JC_267_12

The manuscript on the Ibarski Kolašin is part of Jovan Cvijić's notebooks, compiled between 1898 and 1905, during his excursions to the areas of Kosovo and Metohija in Stara Srbija [Old Serbia]. Based on the manuscript we concluded that the data was recorded by one of his associates. The first part of the travelogue was officially published in 1911 within the third book of *Fundamentals of Geography and Geology of Macedonia and Old Serbia, Including Surveys in Southern Bulgaria, Thrace, the Neighbouring Parts of Asia Minor, Thessaly, Epirus and Northern Albania* (1911). The latter part was published in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography*, whose first Serbian edition was published in 1922 (Cvijić, 1922a).

According to Cvijić, the region of Ibarski Kolašin *"starts just below the village of Ribarić and stretches to the villages of Čabra and Košutovo on the Ibar River near Mitrovica, just to the point where the pure Serbian settlements begin and extend."* It covered 40 villages, with 572 houses, of which 501 Serbian, 61 Albanian, nine houses of Muhajirs from Bosnia and Old Kolašin and one Turkish house (Cvijić, 1911). He stated that Serbian houses were almost always organised as *zadruga* [family cooperative].

The origin of the population of the Ibarski Kolašin dates back to distant times. During his journey, J. Cvijić noted down a story of a 90-year-old man who repeated what he himself had been told by his forbears, that they moved here from Zahumlje. Then the Klicanovićs migrated from Drobnjaci (Old Herzegovina) and *"almost all of the present-day villagers in Kolašin descended from them."* This supports the claim that the inhabitants of Kolašin are mainly immigrants, some of whom moved here before or after the 1690 Great Emigration of the Serbs. Some families moved from Stari Kolašin [Old Kolašin] and others from the Montenegrin region of Brda [Highlands]. In Milisav Lutovac's opinion (Lutovac, 1954), the present-day population mostly settled in the 18th and early 19th century. Cvijić stated that the Ibarski Kolašin in mentioned boundaries was never settled by Turks and Arbanasi (Albanians) and that it represented a restored oasis of Orthodox Christian Serbs. However, the Arnauts (albanised Serbs) settled in the villages around Čabar and Košutovo, thus suppressing the Serbs. And so, *"this purely Serbian area has become separated from the Serbian region of Mitrovica by a strip of Albanian villages; however, going towards Rožaje, one encounters villages populated by Serbian-speaking Mohammedans."*

There are different interpretations of the name of Ibarski Kolašin. In his travelogues from 1859, the famous Slavist, Alexander Hilferding (1972) called this area Kolašin. On the other hand, Cvijić in his notebooks denoted this area as "Crni" [Black Kolašin], "Stari" [Old Kolašin] or "Ibarski Kolašin", in order to distinguish it from the Montenegrin or Sandžački Kolašin. Later research conducted by Milisav Lutovac, published under the title "Anthropogeographical Investigations of the Ibar Kolašin" (1954), cast doubt on Cvijić's assertions. In his opinion, "Novi Kolašin" [New Kolašin], or just "Kolašin", seems a more appropriate name for this area, because "the population which considers Stari Kolašin to be the region whence they came could not have attached the epithet of Stari [Old] to its name Kolašin" (Lutovac, 1954, p. 65).

Stefan Denda, Jasna Micić

15.

које се зове Радигоње и овде
се у једној њиви изоравају старе
цигле. У горњем крају Колашина
до Рибарића има мак. Црна Река
у петини налик на мак. Остатак и
у њему је по веровању ћивот св. Петра
Коришког. Кад су настала црна
времена око Призрена онда су га
Колашинци који су тамо били косачи
пренели са једним калуђером у ова-
боме заштићеном крају и склонили у
цркву која је већ постојала. Овде су
велики сабори који се држе о више
празника, нарочито о Петровдане,
у њему се скупљају Срби не само
из Колашина већ из Рогозне, из Штавске
Жупе и из рашког Поља. На последку
је овде историјско село Брњаци, на
великој висини од 900-1100 м., расуто
на појединне куће, обичније сламом
покривене, као и у целоме крају,
правог алпијског положаја, у коме
искључиво ливаде и паше и ретке
мале њивице од овса и ељде, ређе
јечма, за које се везују историјске
успомене о Краљици Јелени. Иначе
од историјских успомена имају косовске
и интересантно о Карађорђевом
устанку. Знају да су Шијаци под
Карађорђем кренули Рогозном, до
села Бубе на левој страни Поља.
Шијацима су звали све становнике
ниже Србије испод старовлашких крајева.

JC_267_14

In the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), Cvijić stressed two dialects of the Serbo-Croatian language in the Ibarski Kolašin, since this area represents a transitory area from the Kosovo variety to the Dinaric type. In his manuscripts, he stated that *"from Ribariće to the lowest village of Zupče near Mitrovica everyone speaks one dialect, whilst the Kosovo dialect is spoken only in several villages around Mitrovica, but already in Bugarić it is not pure because I found certain words of the southern dialect."* He pointed out that the boundary between the Dinaric type and the Kosovo-Metohija variety is the Lab River.

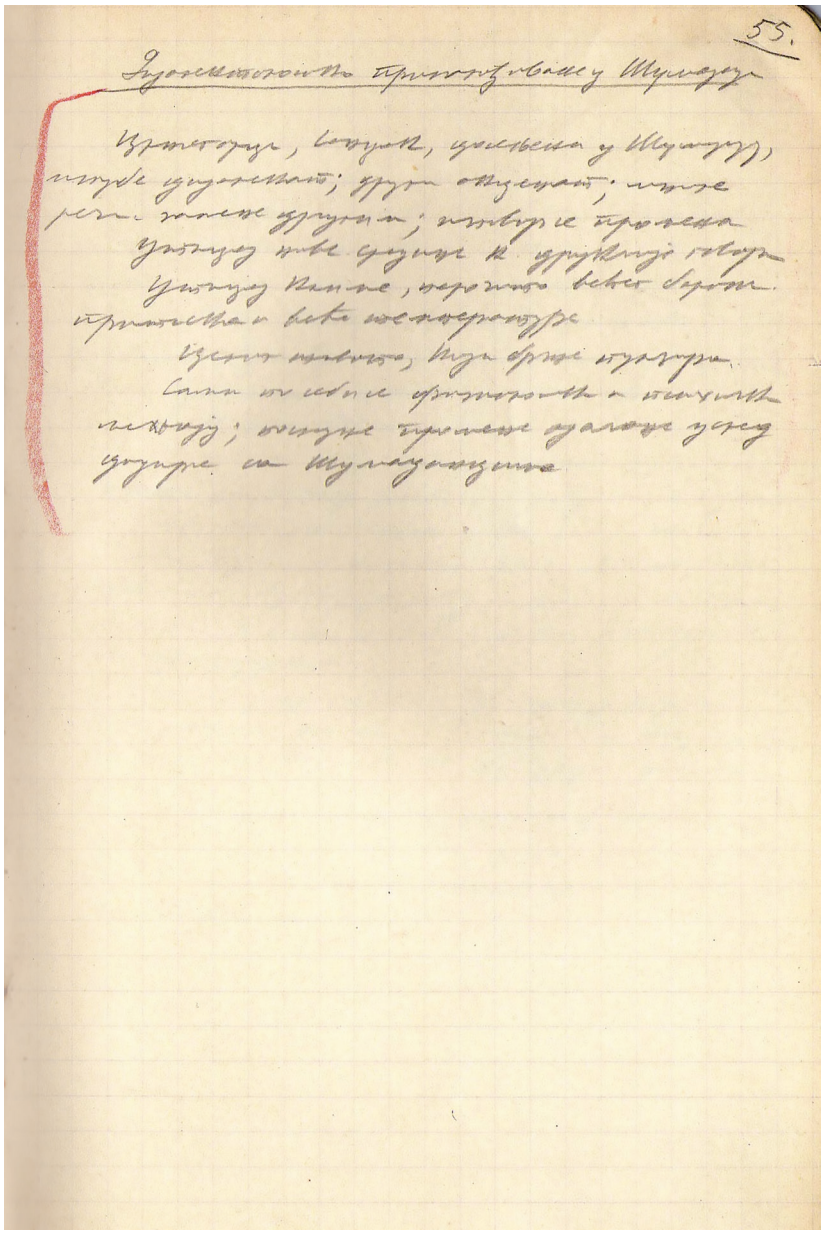
Due to its characteristic position and ethnic compactness, this secluded area had a significant transit role for Serbian emigrants from Metohija, representing a part of the Kosovo-Metohija drift. *"Therefore, as a Serbian oasis, Kolašin has played the role of a retreat"*, Cvijić wrote. During the migrations, Serbs from Metohija crossed Mount Rogozna and descended to the Ibar valley near Sočanica, in order to bypass the Turkish oasis in the Ibar Župa. They settled in Serbia, first in Župa and Rasina, and then in Toplica.

There are not many preserved material or other traces of old life in Kolašin. Cvijić stated that *"the remains of the old town of Klopotnik can be found on a head-shaped hill on the left bank of the Ibar River."* There are also several forts, presumed to have been medieval castles. Across Pridvorica locality *"old ruins are being studied"* in the vast field of Radič. According to Milisav Lutovac (1954), these are the remains of a former royal court. The most important cultural property is the Crna Reka Monastery, located in a cave, just like the Ostrog Monastery, containing the reliquary of Sveti Petar Koriški [Saint Peter of Koriša]. According to a popular belief, *"when hard times* (Ottoman invasion – T/N) *befell the city of Prizren, the reapers of Kolašin, who were working therein, transferred, together with a monk, the relics of St Peter of Koriša to this secluded area, and sheltered them in a church that already existed."* Cvijić paid special attention to the historical site of Brnjak (Brnjaci), associated with the historical memory of Jelena Anžujska [Queen Helen of Anjou]. Namely, Lutovac stated that this is the location where the town of Jeleč once stood, with the court of Queen Helen, the consort of King Stefan Uroš I, who died there in 1314.

As noted above, after J. Cvijić, this area became the focus of attention of other researchers who studied it from a geographical, historical and ethnographic perspective. These include the authors such as Milisav Lutovac (1954; 1978) and Miloš Macura (2005), but also Gligorije Elezović (1931; 1998), Grigorije Božović (1998), Slobodan Jakšić (1996), Biljana Sikimić (2009; 2010), Milan Luković (2009), Milan Ivanović (2005), Borislava Ilić (2005) and others.

Today, the area of the Ibarski Kolašin administratively corresponds to the territory of the municipality of Zubin Potok, which comprises 64 settlements. Among others, it is bordered by the municipalities of Istok and Srbica, which are now fully inhabited by the Albanian population. Therefore, the Ibarski Kolašin continues to be an Orthodox oasis of *"people with the character of the Dinaric Serbs, with strong traditions and traits centering on Kosovo"*, which is of particular importance in light of the current socio-political situation in our Southern province.

Jasna Micić, Stefan Denda



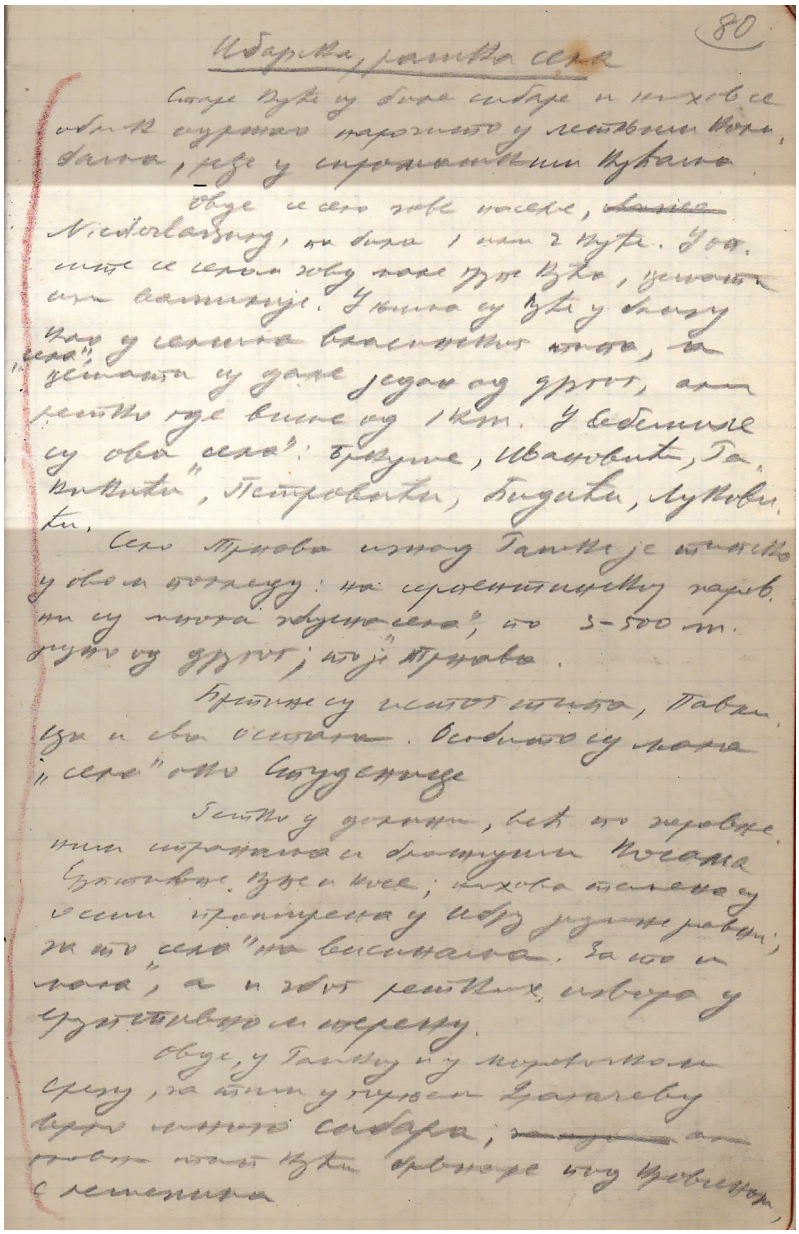
JC_267_32

In the manuscript entitled *"Dialectological Adaptation in Šumadija",* Jovan Cvijić discussed the changes in the dialect of the Montenegrin and Sandžak population that settled in Šumadija. He stressed that this population was gradually losing its original dialect, certain words were replaced by others, new accent adopted, and the pronunciation changed. All of these changes took place under the influence of a *"living environment that speaks differently."* Cvijić additionally elaborated on the influence of natural conditions on the immigrant population – climate, atmospheric (air) pressure and higher temperature. He likewise underlined that, owing to contacts with natives from Šumadija, this population fell under the influence of certain physiological and psychological changes.

This manuscript was first published by Cvijić in *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), in the chapter *Migrations and the Origin of Population*, in which he discussed the enormous impact of natural conditions and new ethnographic environment on the settled population. Speaking about different migratory drifts, Cvijić pointed out that the majority of the population in Šumadija was consisted of settlers from the area of Stara Raška [Old Raška] and the Montenegrin region of Brda [Highlands], which moved within the western migratory drifts. In his publication *Metanastasic Movements and Their Causes and Effects* (1922b), Cvijić gave the most detailed overview concerning the adaptation of Montenegrin and other settlers to the Šumadija region. In the chapter *Effects of Migrations*, he wrote about the adaptation of the cattlemen of Montenegrin region of Brda [Highlands] and the plateaus of Pešter and Sjenica to the lowlands of Šumadija, characterised by different atmospheric pressure and climatic conditions. In the same chapter, he discussed the social and ethnic adjustments of immigrants, with particular reference to dialect shift and changing customs.

The origin of the population of Šumadija was studied by students of Cvijić's anthropogeographical school, as part of the studies based on Cvijić's *Guidelines for the Study of Villages in Serbia*, published in *The Anthropogeographical Problems of the Balkan Peninsula* (1902a). The study encompassed smaller geographical areas in Šumadija, with a special emphasis on surveying the origin of the immigrant population with respect to migratory drifts or major emigration regions (Rakić, 1905; Radivojević, 1911; Drobnjaković, 1923; Mijatović, 1948; Petrović, 1949). Milisav Lutovac (1958; 1968) studied the migration of the population of mountainous areas of Montenegro and other parts of the former SFRY, including the problems of adaptation of the immigrant population to the new living conditions. He devoted special attention to the study of ethnic changes in Stara Raška [Old Raška] (Lutovac, 1978), which served as an intermediary region for migratory drifts and a significant emigration area of the population settled in Šumadija.

Jovana Brankov



JC_274_85

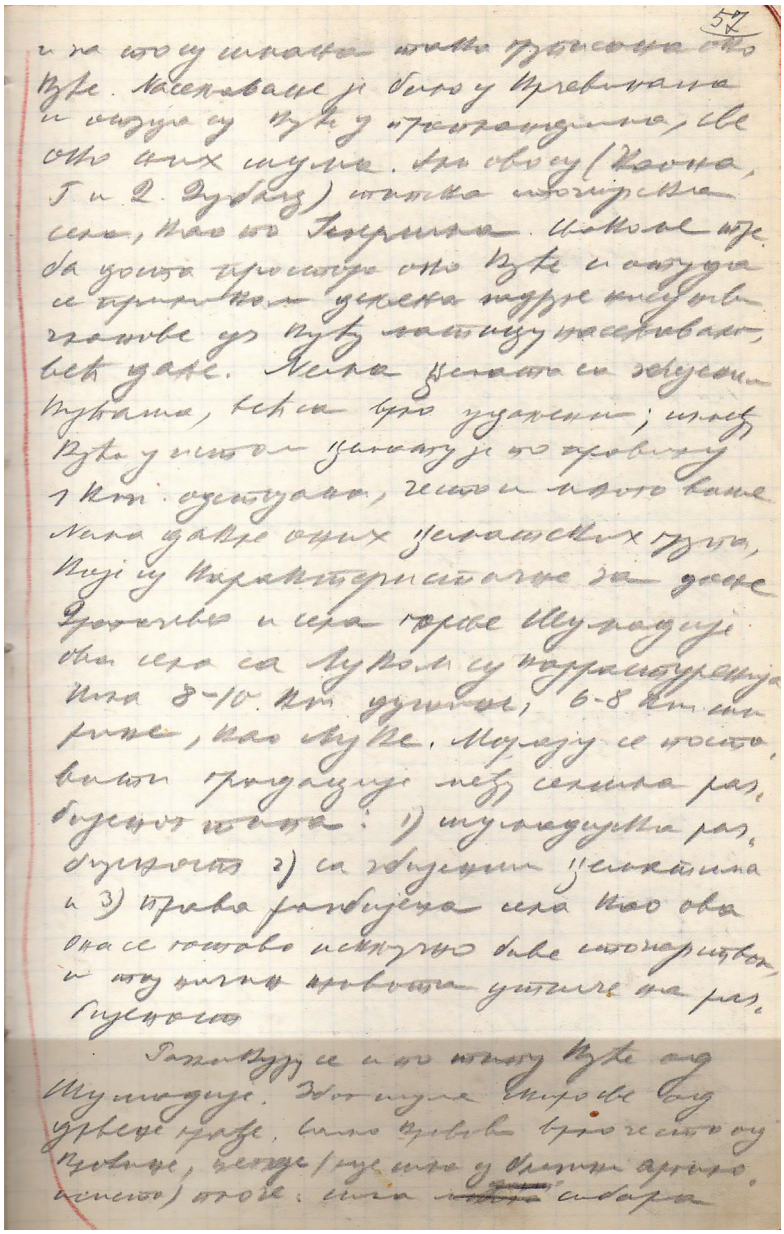
In the manuscript here presented, Jovan Cvijić elaborated on the interpretation and coverage of the concept of village in the Ibar-Raška region. In a dispersed form, villages of the mentioned areas represent the place where someone settled, usually the smallest settlement unit (Cvijić, 1922a): *"Here the village is called settlement, Niederlassung* (German term for a small village – A/N), *consisting either of 1 or 2 homes. In general, villages are contained of small groups of houses, džemati* [jamaats] *or 'vazelinilije'. The homes are built close to each other, as in the villages of the Vlasina type, whilst the jamaat type of 'villages' are distributed at a greater distance from each other, but rarely more than 1 km."*

The concept of village, or settlement was treated differently in the areas that Cvijić studied. In the Balkan Peninsula, the term was interpreted and accepted in a multitude of ways, from only a few houses, sometimes even one, from small economic units and several *zadrugas* [family cooperatives] to compact *čifluci* [chifliks] and large villages (Cvijić, 1922a). For Cvijić, this issue was more of a philological nature, hence he did not deal specifically with it, just indirectly, in the form of terminological explanations that we often encounter in his works. One such discussion was outlined in *The Anthropogeographical Problems of the Balkan Peninsula* (1902a).

The manuscript extracted from Cvijić's notebook emphasises the difference in interpretation of this term, comparing it with the Vlasina type. In this area, villages were represented by one or two houses, but often in the form of *zadruga*, divided into jamaats, quarters or hamlets (Cvijić, 1922a). A spatial unit, known within the current administrative frameworks, is formed by their expansion and merging.

By gathering sporadic knowledge of these concepts, Cvijić came to assume the development of their meaning. Their precursor was the original concept of village, the so-called *zaselije*– "small groups of houses of which they are composed" (Cvijić, 1902a, p. 55), found within the western, mountainous parts of the Balkan Peninsula, where the term village was equated with *zadruga*, more precisely, with houses of which a *zadruga* was comprised. These are the so-called small villages that he identified with the German term *Niederlassung*. As these villages expanded and merged, they have become blended into hamlets, independent units consisted of several *zadrugas* and located in a favourable position within the village areas (Erdeljanović, 1902). This term has often been used interchangeably with the terms quarter and *mahala*, denoting certain parts of a village or different topographical units, and likewise with the term *džemati* [jamaats], referring to parts of a village wherein *zadruga* was located. "Their autonomy was becoming stronger, owing to distance from the mother-village, and as the settlements grew in size and population, so did the hamlets, gradually, especially after the liberation (from the Turks – T/N), expanding and strengthening, and turning into independent spatial units, known as the present-day administrative units" (Cvijić, 1902a, p. 56).

Marija Drobnjaković



JC_274_60

The manuscript here presented is extracted from the notebook of Jovan Cvijić, and in it we read that the villages of scattered type should be differenciated according to the degree of dispersal and density of the permanent settlements. Studying the settlements in the areas of Stari Vlah and Ivanjica, with respect to the degree of dispersal of individual and group houses, Cvijić sorted three types of settlements.

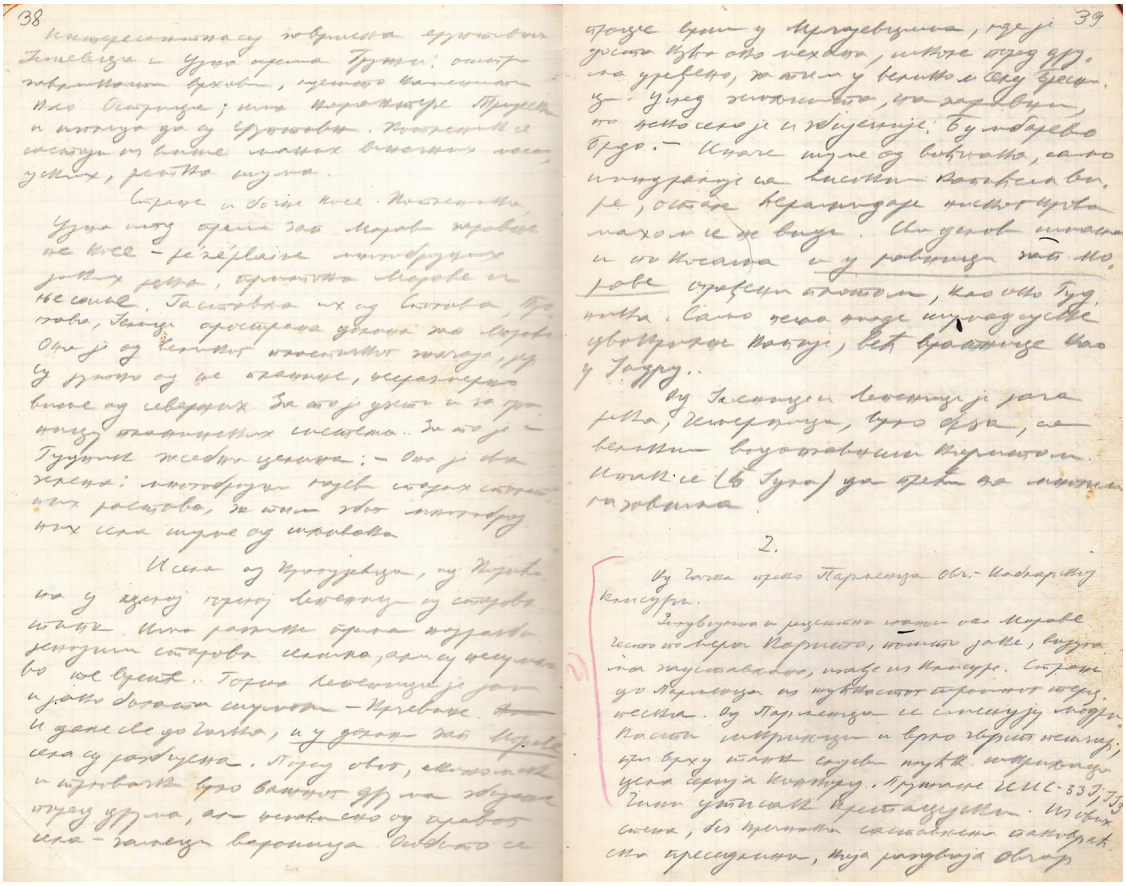
"Some degree of gradation must be set among the villages of the dispersed type: 1) the Šumadija type of dispersed villages 2) with tight jamaats and 3) the real type of dispersed villages such as this one. The inhabitants of these villages are almost exclusively engaged in animal husbandry, and this kind of life affects the level of dispersal."

Subsequently, in his books *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a) and *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), Cvijić discussed in detail the basic varieties of the dispersed type of settlements. As a measure of dispersal of the settlements he studied, he usually took the distance between the various groups of houses, as well as the spatial coverage of the entire settlement, often expressed through time units (Cvijić, 1896).

Thus, at settlements of the real dispersed type, Cvijić singled out the Stari Vlah type of villages, named by areas in which they represent a typical type of village. He pointed out that this type of dispersed village is not simple to grasp. It implies many varieties, that are quite different among themselves, but they can nevertheless be reduced to one group, differentiated into several subtypes representing different stages in the development of this basic type (Cvijić, 1902a). Such villages extend over a wide area, especially at higher altitudes. Their spreading zone generally coincides with a group of villages formed at heights, mountain areas, on the valley sides, hilly terrains and surfaces up to 1600 m a.s.l. (Cvijić, 1922a). These villages were usually formed on the *krčevine* [cleared land]: *"The settlement began on the cleared land, therefore the houses are on plains, surrounded by forests."* They cover several areas, that is, hamlets or jamaats, comprised of ten related family houses, 1–2 km, sometimes even 4 km away from each other. Such settlements are also to be found in the area around Ivanjica, of which we find mention in Cvijić's manuscripts: *"There are no džemati* [jamaats] *with dense concentration of housing, but a very dispersed one; houses of a single jamaat are usually distributed at a distance of 1 km from each other, often even much more."* The fragments of these notes were published in the book *The Anthropogeographical Problems of the Balkan Peninsula* (1902a).

In these manuscripts, Cvijić indirectly pointed to factors that influence the formation of a settlement and the creation of a particular type. When it comes to the Stari Vlah type of settlements, he stressed the occupation and the way of living of the population as the main features of these mountain regions. However, these are not the only factors, but a side note that was also elaborated later in his works. He especially highlighted topographic conditions, primarily relief, and then forests, whereby the boundary between wooded land and bare areas represents at the same time a barrier between two different types of settlements, and, to a significant extent, between cultural belts (Cvijić, 1922a) that also imply specific way of life and occupation.

Marija Drobnjaković



JC_274_41 JC_274_42

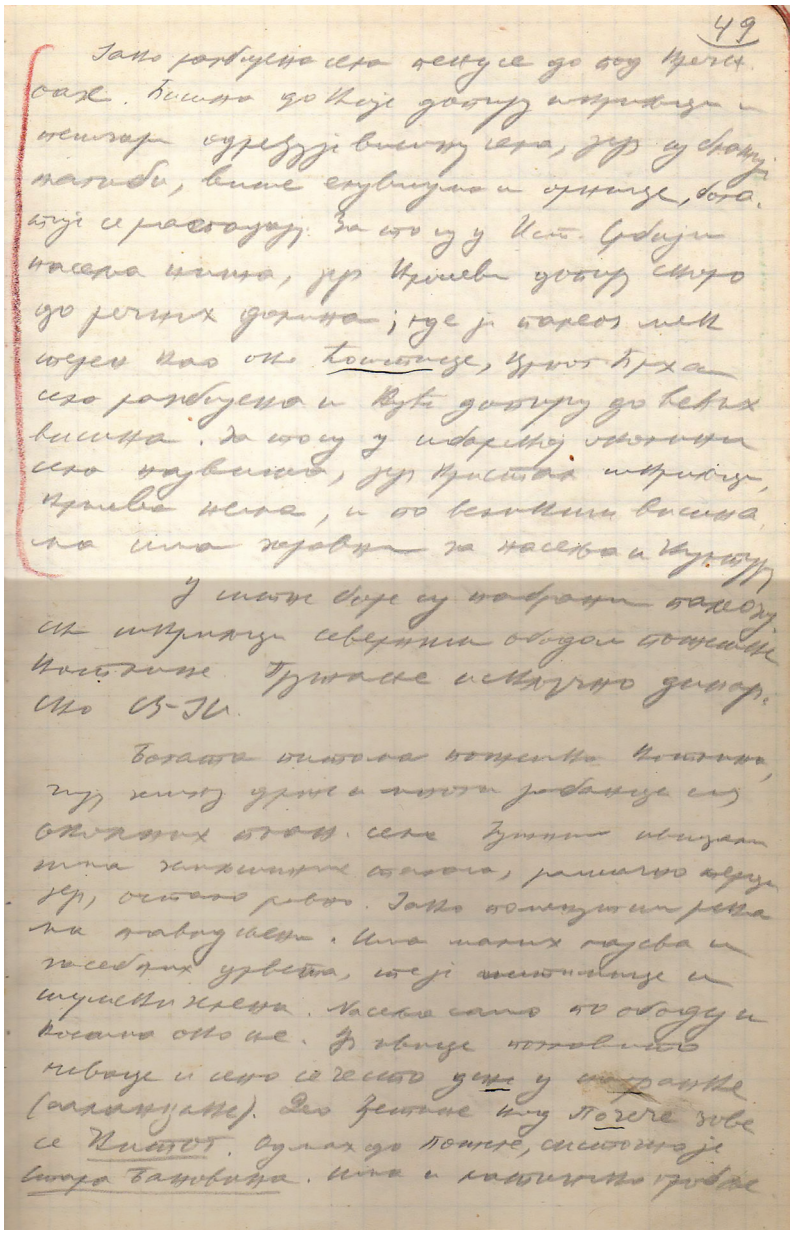
In Cvijić's notebooks we found records concerning the descending of villages along the roads, as evidenced by the manuscript relating to this phenomenon in the area between Čačak and Kragujevac:

"All the way up to Čačak, and in the valley of the Zapadna Morava River, the villages are of dispersed character. Near this economically very important trade route, one encounters the hamlets of the varošica [small town], densely concentrated right alongside the road, and yet independent of the mother-village. The process takes place in Mrčajevci, where there are many houses around the 'mehane' [meyhane; inn]*, which are situated next to the road, and then in the village of Bresnica."*

This subtype of settlements is a variety of the dispersed settlements of the Šumadija type. Due to the division of *zadrugas* [family cooperatives], the houses of these settlements became crammed, hence the separate quarters and hamlets merged into a whole or developed into separate units. The houses of this type of village are grouped along the road, thus forming the so-called "road villages" or "road systems". These are known as semi-dispersed settlements, typical for the central part of Serbia. They are most commonly distributed throughout Šumadija, Kolubara, Tamnava, Gruža, in the vicinity of Belgrade and the Zapadna Morava River valley (Kojić & Simonović, 1975), which encompasses the above-named settlements of Mrčajevci and Bresnica. The economic prosperity and trade development associated with the main roads led to the formation of this new type of village (Cvijić, 1922a).

These road settlements still retain a linear form, with functions and facilities of the service sector and public-social infrastructure concentrated along the road. In terms of urban-morphological structure, some authors, dealing with the typology of settlements, distinguished them as a special variety (Kojić & Simonović, 1975; Stamenković & Bačević, 1992).

Marija Drobnjaković



JC_274_52

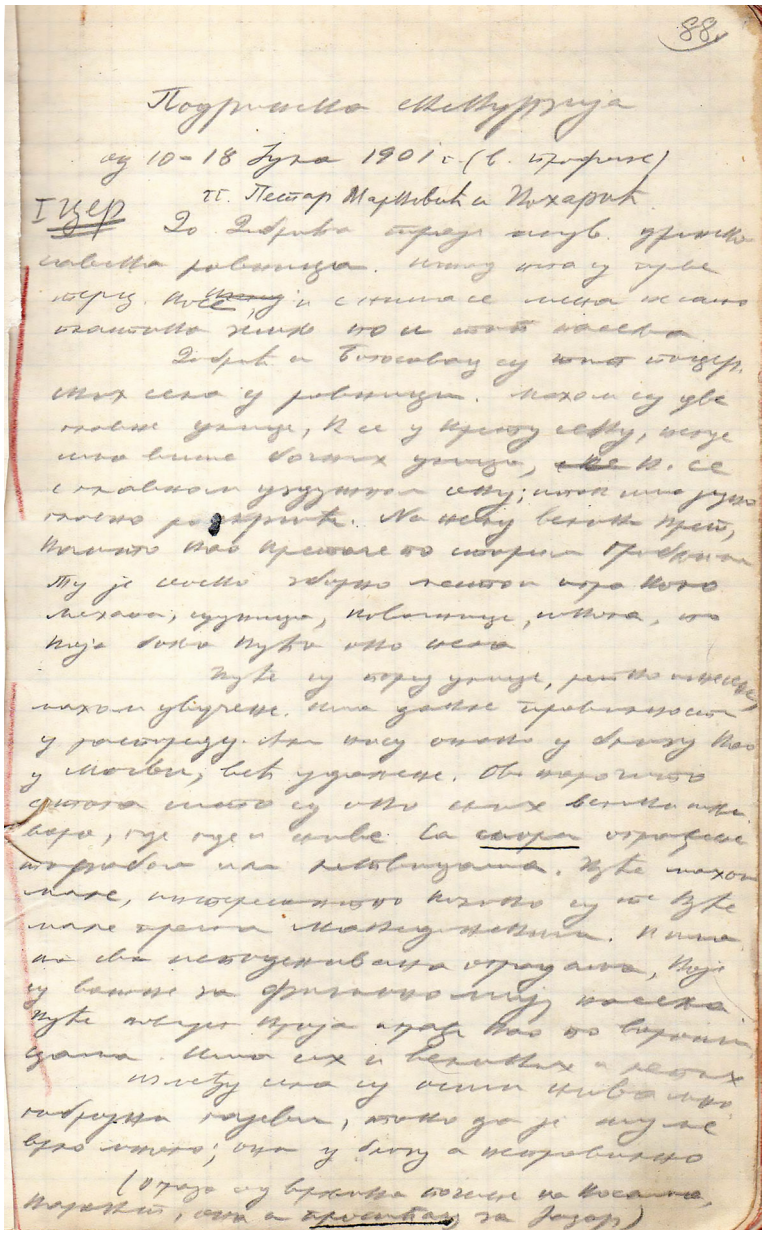
In the manuscript here presented we find Jovan Cvijić's direct field observations on local factors affecting the formation of rural settlement types. In particular, he emphasised the importance of the geological composition of the terrain, which, to a certain extent, determines the altitude distribution of villages.

"Particularly dispersed villages ascend to the altitude of limestone areas. The height of schists and sandstones determines the height of the village, because of milder slopes, greater presence of the eluvium and arable land, rock decomposition is pronounced. That is why the settlements in Eastern Serbia are lower, because the karsts reach almost to the river valleys formed of soft paleo-terrain, as in arreas near Ćosatica and Crni Vrh where villages are scattered and houses situated at higher elevations. For this reason, the villages of the Ibar basin are highest, due to crystalline schists, lack of karst and flat areas at higher elevations, suitable for settlements and crops."

J. Cvijić explained all the anthropogeographical phenomena by social, cultural, ethnographical, and natural causes, pointing out in the first place on the morphology and properties of the land (Cvijić, 1902a), especially when studying smaller settlements and villages, that indicate the basic reasons for connecting settlements for a certain area. By listing fertile plots in limestone areas, fertile valleys and hillsides as convenient places for cultivation and housing purposes, he stressed the importance of the geological composition of the terrain for the settlement of individual areas and the formation of dwellings. Thus, he explained that "wherever schists and limestones are encountered, settlements likewise occur, especially in kast terrains" (Cvijić, 1902a, p. 43). On this basis, he argued that the altitude zone to which schists and sandstones extend likewise represents the belt to which village settlements expand.

According to Cvijić's findings, "the highest villages in Serbia are of the dispersed type, formed on the cleared (deforested) land, in the area of the Upper Ibar River, wherein many reach the altitude of 1100 m, then in the area around Murtenica Mountain (the highest village is Jasenova at 1200 m a.s.l.) and on Zlatibor Mountain, located at up to around 1120 m a.s.l., and likewise reflecting the physiognomy of Šumadija, Stari Vlah and Rudnik" (Cvijić, 1902a, p. 42). So, the geological composition and relief, as well as the vegetation cover, have determined the development of villages at high altitudes. The broad-shouldered hills, with flattened tops suitable for settlement and cultivating, containing no limestone, just crystalline schists, such as the ones in the Ibar basin, were suitable for the spatial development of rural settlements at the highest altitudes in Serbia, unlike the eastern regions wherein the highest point of the territory of Serbia at the time of Cvijić's research was located. The reason lies in the fact that the villages of this area belong to a completely different group of settlements, formed in the valleys and classified as the nucleated type of settlements (Cvijić, 1922a).

Marija Drobnjaković

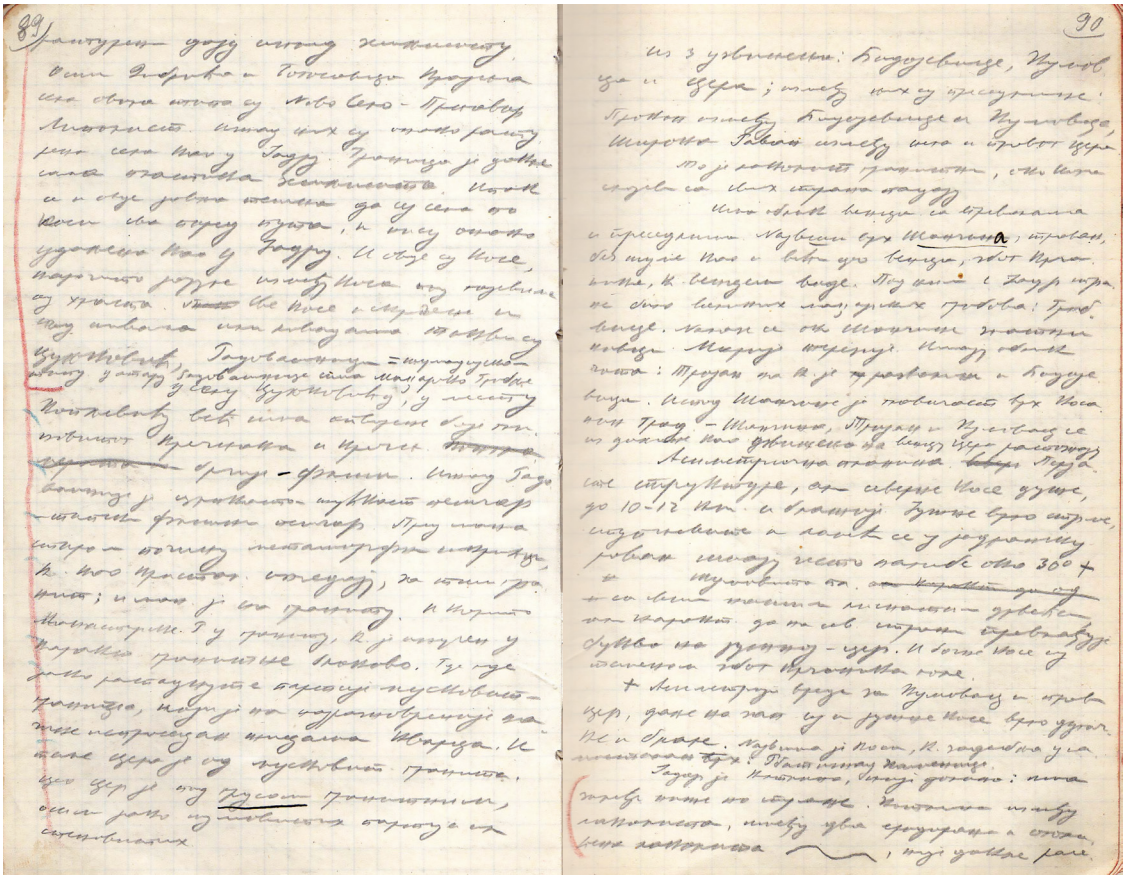


JC_274_93

The pages here presented are extracted from Jovan Cvijić's field notebooks, written during his excursion to the region of Podrinje (area along Drina course in Serbia and Bosnia and Herzegovina), from 10th to 18th of July 1901. Manuscripts refer to the location, morphology and physiognomy of rural settlements on the Cer Mountain and in the Pocerina (area around Cer Mountain in Serbia). The village settlements in the Pocerina belong to the Mačva and Jasenica type. According to Cvijić, "*until the first half of the 19th century, the villages of Mačva, Kolubara, Smederevska Jasenica, Lower Morava and around the Sava and Danube Rivers belonged mainly to the Stari Vlah* [Old Valachian] *and Šumadija types, gradually becoming permeated with alleys. Houses are similar to those in Syrmia and Banat or in the varošice* [small towns] *of Serbia, being properly distributed on both sides of the road or some important village road. In terms of the layout of houses, these are road villages, wherein houses are almost never concentrated in alleys, but placed away, among plum trees. They are similar to the Šumadija type of village, the only difference is that houses are closer to each other.*"

Jovan Cvijić noticed significant differences in the morphology of the villages in Mačva and Jasenica. As far as the region of the Pocerina is concerned, Cvijić identified the Mačva type of rural settlements. In describing the morphology of the settlements, he underlined that "*the two principal streets are disposed in the form of a cross, perpendicular to each other. In general, the village is of cross-shaped pattern; sometimes there are more side streets that are parallel to the main one. However, two principal streets are always apparent, as well and the main crossroad with vast empty space around. Theren rises a large wooden cross or famous roadside crucifixes, like in the old cemeteries; that is the gathering place of the villagers, the kolo* [circle dance – T/N] *is performed therein, there is a school, a courtroom, a meyhane, magazas* [warehouse, shop – T/N], *a blacksmith shop and few higher-class houses.*" These villages differ from those of the nucleated type in having regular and long streets, and houses that, although situated close to one another, are still dispersed. In the Pocerina near Šabac, rural houses are as dispersed as in the villages of Šumadija of the dispersed type (Vlahović, 2000).

Aleksandra Spalević



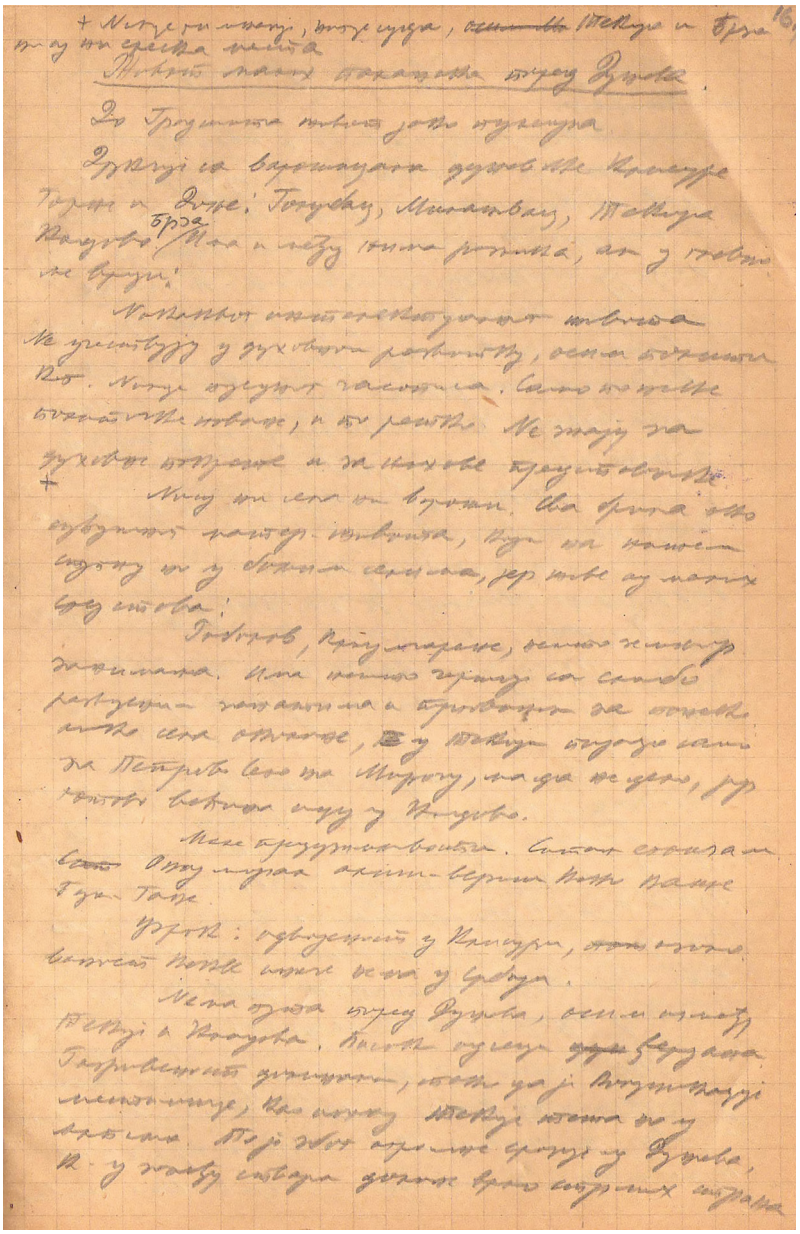
JC_274_94 JC_274_95

In the pages of Cvijić's notebooks we found descriptions of the lowland villages of Pocerina – Dobrić and Bogosavac, that belong to the Mačva village type, but with some differences. The morphology and physiognomy of the settlement are based on the existence of two principal streets intersecting each other at the centre, wherein, along with side streets, one main crossroads is distinguished. As Cvijić stated: *"The houses are situated near the road, but rarely next to the street, usually placed back, they are not as compact as in Mačva, but rather remote from one another."* He also noted that the houses are fenced and usually of smaller size. The settlements of Prnjavor and Lipolist belong to the same type.

In his manuscripts, Cvijić also distinguished settlements Culjković and Radovašnica stressing that they belong to the Šumadija type of settlement. He noted that these settlements *"lie 'on slopes', along the road, not as remote as villages in Jadar."* The physiognomy of the Milina settlement is described as follows: *"Based on the dispersion/distribution of the houses surrounded by forests, especially in Gornja Mala, it is clear that the vilagers settled more tightly on slopes, forming groups of several houses, whilst other were 2–3 km away – divided into zadrugas. A wealthier population lives in the houses known as chardaks."* He wrote that the people who lived there were called *"Arnauts and that they came all the way down to the valley around Lešnica to rent the villages."* For the village of Bela Reka, Cvijić stated that it belongs to a group of dispersed villages *"without hamlets."*

The manuscripts on the name and location of settlements, their population and morphological and physiological characteristics of rural settlements of Serbia are based on the *Guidelines for the Study of Villages in Serbia and Other Serbian Areas* (1896), the first publication in which Cvijić presented reflections on the methodology of the study of settlements. The results of his survey, conducted in 1901 in the region of Podrinje, were published in publications such as *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), *Cultural Belts of the Balkan Peninsula* (1902b) and *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a). Right after Cvijić's excursions and records, anthropogeographical research in the area of Jadar was continued by Borivoje Ž. Milojevic (1913).

Aleksandra Spalević



JC_265_83

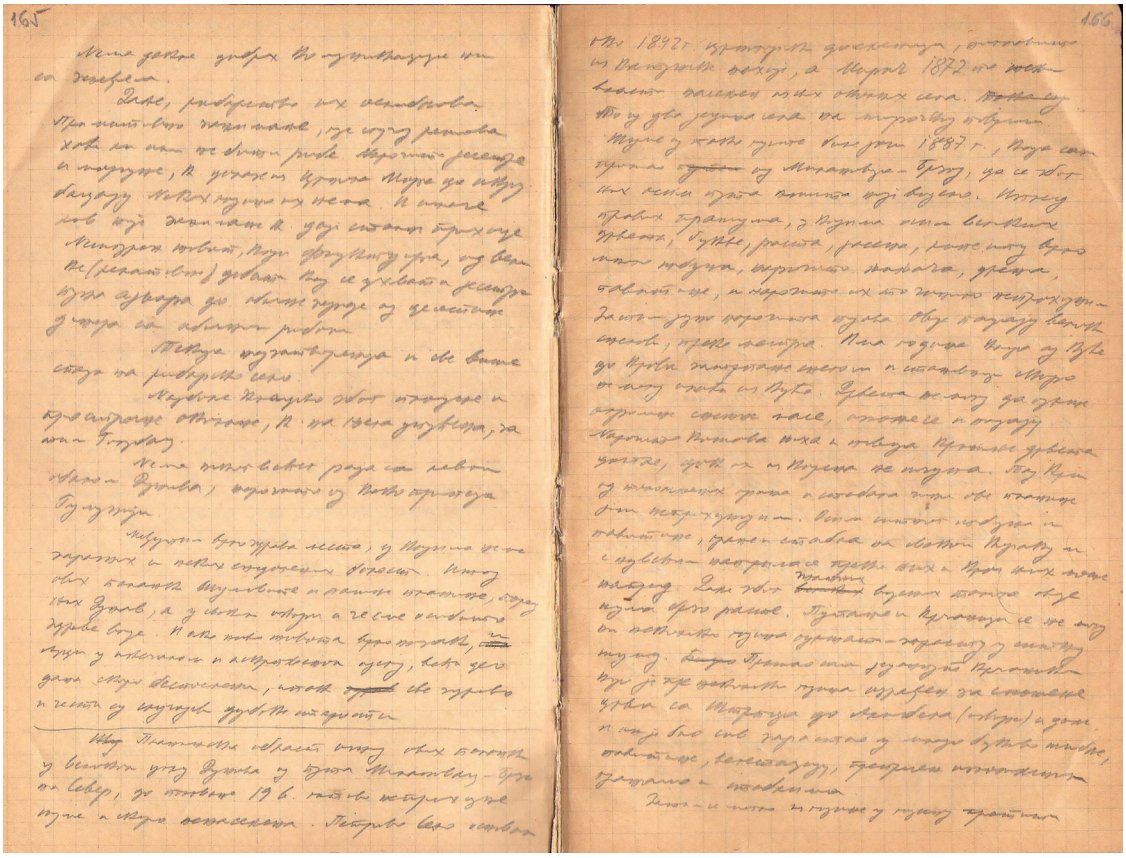
In the first part of the manuscript entitled *"Life in Small Palankas Adjacent to the Danube"*, Jovan Cvijić analysed the way of living in *varošice* [*palankas*, small towns] in the Danube Gorge [Đerdap Gorge, Iron Gate], as well as the physical features of the environment influencing the ways people live. Cvijić mentioned that all the way up to Veliko Gradište, *"life is pulsating with activity"*, compared to the spiritless *varošice* of the Danube Gorge. He wrote: *"There is not a single mazagine to be found. Only a handful of certain political newspapers, seldom seen. They have never heard of the revival movements and their representatives. There is not a single gymnasium, or a court of law, and Tekija and Brza are not even second-level administrative units."* Cvijić argued that these settlements *"are neither villages nor towns."* He further added that fishing is the principal occupation, whereas crafts and trade are underdeveloped. He emphasised that the general life is at a low level of development and wrote about the small entrepreneurship and petty egotism of the population, caused by *"reclusiveness of the Gorge, the isolation which is seen nowhere else in Serbia."* He described such isolation with the following words: *"No roads to be seen along the Danube, except between Tekija and Kladovo. High sections of the Đerdap Gorge. Because of the riven valleys, the communication in certain localities, above Tekija for example, is even more difficult than in the Alps. This is due to the massive erosion triggered by the Danube, which forms pretty steep-sided valleys in the hinterland."*

Below he discussed fishing as a primitive occupation, which does not give a steady income. Cvijić highlighted the importance of the presence of the Black Sea sturgeon and beluga, providing (relatively) high profits, unlike ordinary fish catch. He considered Kladovo to be the most developed settlement, and described Tekija as the most cloistered *varošica,* turning into a fishing village. The listed settlements were characterised as *"healthy places"*, free from any infectious disease and with numerous instances of longevity.

The contents of these manuscripts were first published in *The Anthropogeographical Problems of the Balkan Peninsula* (1902a). In the chapter on the position of settlements, Cvijić identified the Sava–Danube zone of *varošice* and singles out the *varošice* of Đerdap, formed in places that were difficult to get to. The most detailed manuscripts on the Đerdap settlements were published in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), in the chapter *The Location and Types of Settlement*. In the same book, Cvijić gave a list of Serbian villages proclaimed as *varošice*, which includes those in the Đerdap area. He argued that the lower level of life is conditioned by great isolation, which is the crucial limiting factor for the development of these settlements.

After Cvijić, Milisav Lutovac carried out an economic-geographical survey of the area of Negotinska Krajina and Ključ (Lutovac, 1959), with reference to significant economic and demographic centres. Ethnological studies of the Đerdap settlements, undertaken for the purpose of relocating them due to the construction of the Đerdap Hydropower Plant, included the survey of the geographical features of Đerdap (Lutovac, 1973; Radovanović, 1978). Olga Savić studied the anthropogeographical and economic-geographical features of the Đerdap settlements (1977; 1989), and geographical research has also been conducted at the level of municipalities (Veliko Gradište) (Radovanović, 1989).

Jovana Brankov



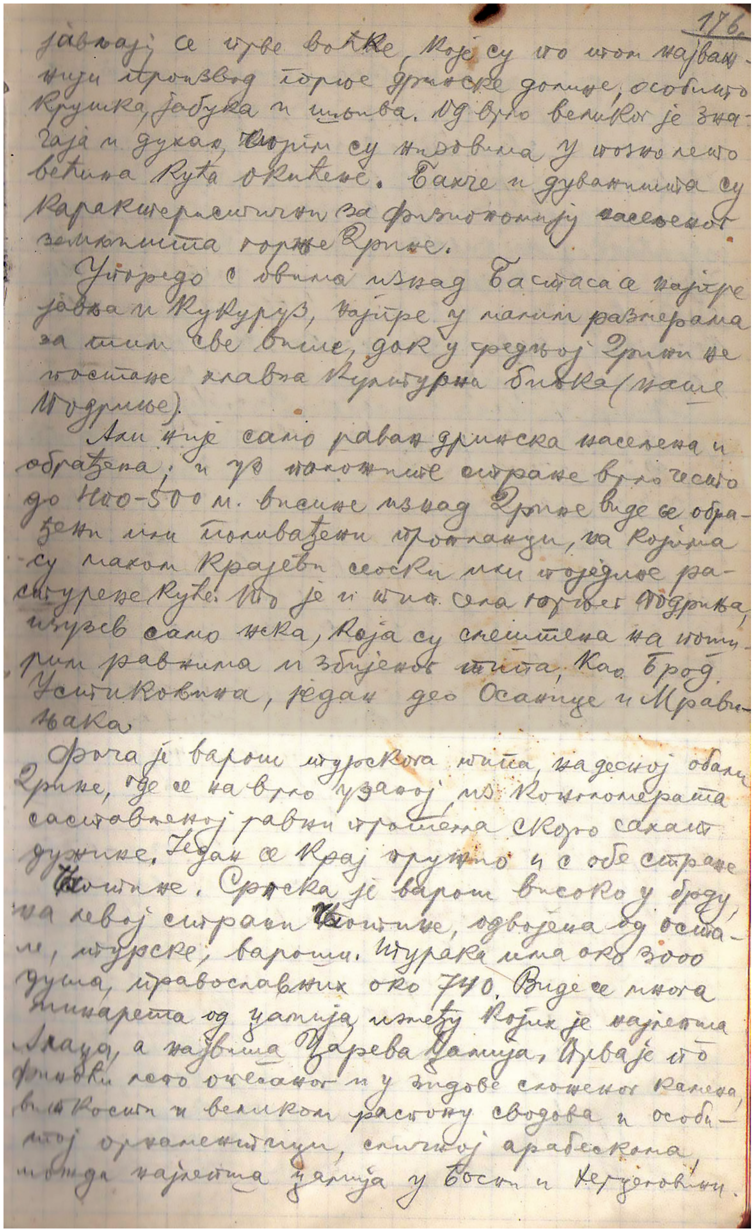
In the latter part of the manuscript *"Life in Small Palankas Adjacent to the Danube"*, Jovan Cvijić analysed the mountainous hinterland of Đerdap. He pointed out that the area north of the road Donji Milanovac–Brza Palanka, characterised by almost impenetrable forests, was practically uninhabited until the mid-nineteenth century. Below he elaborated on the only two villages on the Miroč levelled surface – Petrovo Selo, founded around 1842 by the Montenegrin settlers from the Katunska Nahija [Katun District], and Miroč, established in 1872 and populated by inhabitants from the surrounding villages, in accordance with the will of the state authorities. While passing through the mountainous hinterland, he recorded the following impressions: *"The forests are as dense as in 1887, when I was heading from Milanovac to Brza Palanka and couldn't see anything except the road. These forests take on the appearance of real rainforests, comprising, apart from hardwood trees, such as beech, oak, ash, linden and alike, many shrubs, predominantly lilies, cornel and traveller's joy, that particulary made the forest to look impassable."* Passing through this area, Cvijić likewise witnessed and described in his notebooks an interesting phenomenon – the occurrence of heavy snowfall, which makes life difficult for the local population and additionally increases impassability.

The last paragraph of the manuscript refers to landscape change in the area around Petrovo Selo due to adjustment of the settled Montenegrin population and deforestation. Cvijić noted: *"The last time I was there, in 1921, that is, 35 years ago, a large portion of the forested land had been cleared, and certain parts of Miroč looked like Šumadija half a century ago. There were large fields, meadows, especially around 'salaši'* [salash, farm] *and complexes of cultivated forests between. On each broad-shouldered slope dwellings and buildings of the Montenegrin settlers were to be found, often large beautiful houses with big estates, much resembling the aristocratic mansions. No one is more hardworking than the immigrants from Katunska Nahija, who have transformed and cultivated these lands."*

Cvijić's observations on the mountainous hinterland of *varošice* adjacent to the Danube were elaborated in detail in the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), in the chapter *Natural Areas (Moravian Region or Šumadija)*. In *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), Cvijić elaborated on an interesting settlement of Montenegrin immigrants from Katunska Nahija to Miroč in Eastern Serbia, as an example of exotic oasis of population, settling far from their homeland, in a significantly different environment. The founding of Petrovo Selo on Miroč was explained in detail by Cvijić in *Metanastasic Movements and Their Causes and Effects* (1922b). After elaborating initial difficulties concerning the adjustment of the Montenegrin settlers, he pointed to their gradual adaptation and changes in geographical environment due to the acceptance of a new way of life.

After Cvijić, the migrations of the Montenegrin population and its adjustment to the new geographical environment was studied by Milisav Lutovac (1958; 1968). The same author conducted economic-geographical studies in the area of the Negotinska Krajina and Ključ (Lutovac, 1959), giving an overview of the demographic and economic-geographical characteristics of Petrovo Selo, as well as the process of deforestation in the hinterland of Đerdap.

Jovana Brankov



176.

јављају се прве воћке, које су по том најваж-
нији производ горње дринске долине, особито
крушка, јабука и шљива. Од врло великог је зна-
чаја и дукат, којим су ниховина у позно лето
већина кућа окићене. Бахче и дуваништа су
карактеристични за физиономију насељеног
земљишта горње Дрине.

Упоредо с овима изнад Бастаса се најпре
јавља и кукуруз, најпре у малим размерама
за тим све више, док у средњој Дрини не
постане главна културна биљка (наше
Подриње).

Али није само раван дринска насељена и
обрађена; и уз положите стране врло често
до 400-500 м. висине изнад Дрине виде се обра-
ђени или толиважени пропланци, на којима
су махом крајеви сеоски или поједине ра-
штркане куће. То је и тип села горњег Подриња,
изузев само нека, која су сместена на пото-
чним равнима и збијеног типа, као Брод
Устиковина, један део Осанице и Мравиња-
ка.

Фоча је варош турскога типа, на десној обали
Дрине, где се на врло узаној из конгломерата
састављеној равни протегла скоро сахат
дужине. Један се крај пружио и с обе стране
Ћехотине. Српска је варош високо у брду
на левој страни Ћехотине, одвојена од оста-
ле, турске, вароши. Турака има око 3000
душа, православних око 740. Виде се многа
минарета од џамија између којих је најлепша
Алаџа, а највиша Царева џамија. Прва је по
финоћи лепо окресаног и у зидове сложеног камена,
висини и великом распону сводова и особи-
тој орнаментици, сличној арабескама,
можда најлепша џамија у Босни и Херцеговини.

JC_273_183

The manuscript on Foča and Goražde was most probably written in 1897, when Jovan Cvijić was travelling to Bosnia, Herzegovina and Montenegro accompanied by his student, the later famous ethnologist Jovan Erdeljanović (Cvijić, 1914b). Located on the Drina River, Foča and Goražde, like other *varoši* [towns] and *varošice* in Western Bosnia and throughout Herzegovina, stretched along the river valleys (Cvijić, 1902a). In Cvijić's notebook we found the following mention of these two settlements: *"Foča is a varoš* [town] *of Turkish type, located on the right bank of the Drina* […] *A typical Turkish çarşi* [bazaar] *has been preserved in its entirety, with its kepenks* [wooden window shutters]*, in front of which craftsmen work with their legs crossed, with benches all around barber shops and taverns.* […] *The varošica of Goražde is much smaller and, in every sense, less significant, situated on the left bank of the Drina, together with the entire çarşi. Dačšare* [the log houses] *are prevalent: built of wooden frames; large two-storey houses of the Turkish type covered with ćeramida* [clay roof tile] *are rarely seen* […]*."*

With respect to Cvijić's classification of type of settlements, Foča and Goražde can be classified into the Bosnian-Herzegovinian group, within the northwestern type of *varoši*, formed "under the influence of our Mohammedans" (Cvijić, 1902a). By pattern, they are similar to the Byzantine-Turkish type, which is evident in dense array of shops organised in the *čaršija* [tur. çarşi], network with curving and blind streets, grouping of households into mahallas, construction of houses in bondruk and çatma techniques, distinct architectural elements (kepenks, windows, *londže* [loggia], *ćoške*) and drinking fountains in yard. Although major social and political developments paved the way for certain architectural and urban innovations, amongst the most significant structures Cvijić mentioned the Aladža mosque, bridges and a new road between these two towns. Cvijić's manuscript on Foča and Goražde does not abound with detail, but it contains key data on the location of settlements and inhabitants, vividly depicting their appearance and atmosphere at the end of the 19th century, after Ottoman rule was replaced by the Austro-Hungarian government which led to a gradual shift in cultural and social patterns. Nevertheless, Cvijić did not cite these two places as examples when he developed the types of *varoši* and *varošice*, nor when he elaborated on settlements in the Balkans and in Bosnia and Herzegovina.

While Cvijić's typologies of villages and rural houses were widely accepted by architects and urban planners, his study of urban settlements caused an ambivalent understanding. Thus, the urban planner Branko Maksimović (1962) unfoundedly asserted that Cvijić gave more importance to anthropogeographical than to the urban development of *varoš.* Conversely, the architect and urban planner Branislav Kojić (1958a) emphasised the necessity of relying on the anthropogeographical method of observing specific territory. In subsequent works on the development of urban settlements and urban planning in Serbia, Cvijić's findings have been accepted as very significant (Macura, 1989).

Zlata Vuksanović-Macura

54

Дубровник

Као целина је нешто врло ретко. Има у осталој Далмацији лепших и других градова, али, али нема такве целине, као што је град Дубровник: од једног слоја, једног стила и дух целог града, од Страдуна до краја свих уличица што се пењу уз Монте Срђ. Град је дело Бога и људи и историје, са [illegible] уметницима, ~~[illegible]~~, сликовита, једна јединствена целина.

Дужином главне улице Страдуна

Између [illegible] Двор, Дована и манастир Мале Браће

Све [illegible]. Тихо као [illegible] [illegible]

~~[illegible] [illegible] [illegible], [illegible] у овај [illegible] [illegible], [illegible] [illegible] [illegible]~~

Поглед на [illegible], [illegible] граду Дубровнику од Лапада до Плоче [illegible] [illegible].

Море у [illegible] и [illegible] ~~[illegible]~~ [illegible] на [illegible] утврђене [illegible] и [illegible] Монте [illegible] на [illegible] [illegible] [illegible] града. [illegible] и на [illegible] Страдуна и [illegible] део ~~[illegible]~~ града.

Најотворенији град на јужноме приморју [illegible] на слободном мору. Изнад свих утицаја медитеранских [illegible], и свих [illegible] [illegible].

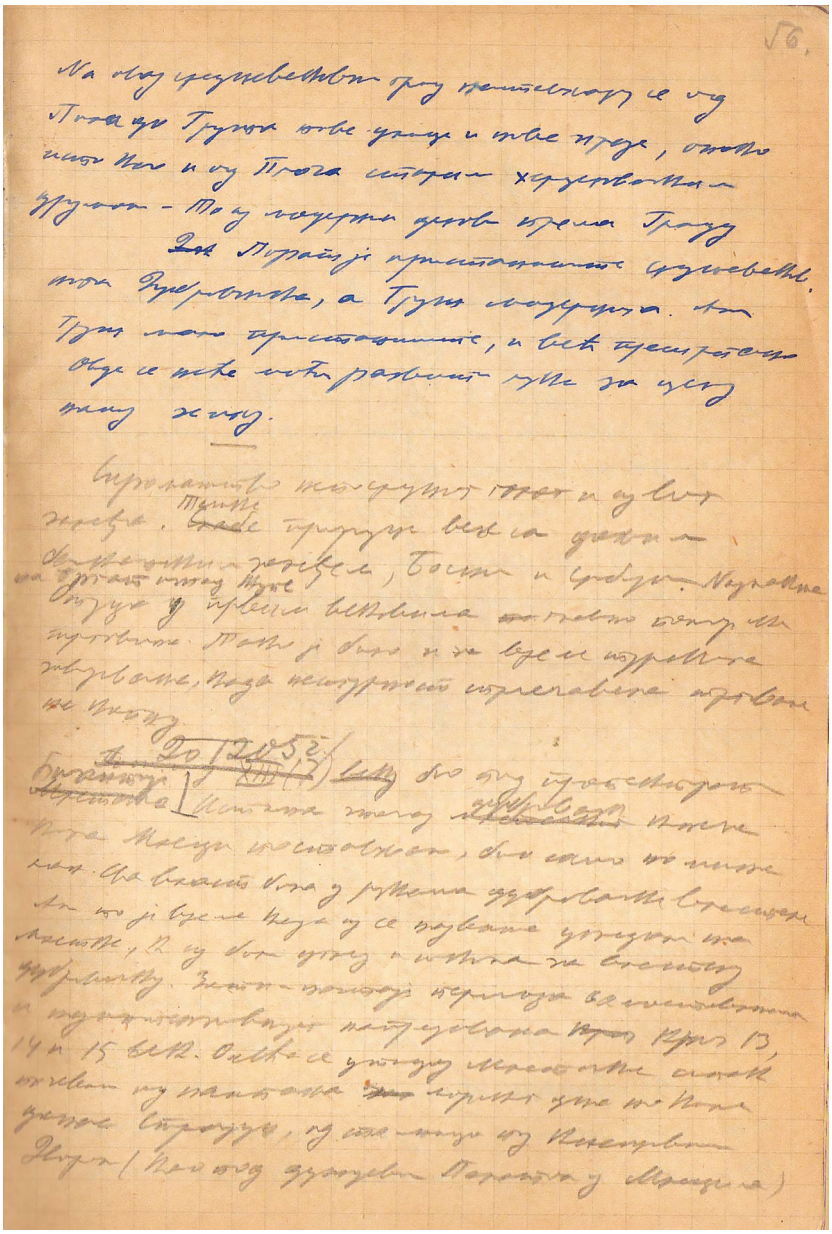
JC_265_30

The manuscript is part of the field notebook and was written by Jovan Cvijić during the exploration of Dalmatia and the littoral. Observations on Dubrovnik occupy some 15 pages of this notebook, whilst this publication presents the first two pages. The first passage, which reads: *"As a whole, this town is a rather unique entity. More beautiful individual buildings can be found in the rest of Dalmatia, but there is no such compact entity, as the town of Dubrovnik: the unique basin, purpose and spirit of the entire town, from Stradun all the way up to those streets stretching up into the hills. Therefore, the town, with its history, continuity and plan is designed as one simple entity"*, and the sentence below the crossed out textual segment, which further continues: *"The view of the sea from the town of Dubrovnik remains undisturbed from Pile to Ploče"*, were almost literally published in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), in Chapter Eighteen: *Social and Psychological Changes, The Location and Importance of Dubrovnik* (p. 402). In this manuscript, Cvijić also observed the following: *"The uniform stone-built houses of Stradun. The Rector's Palace, Divona and the Franciscan Monastery of the Friars Minor. All paved in stone. Everything is spick-and-span like in a neat house."* In the last paragraph, he noticed that *Dubrovnik "is the best preserved town on the Adriatic coast… exposed to all the influences of the Mediterranean climate, and all its winds."*

From this example we can derive insights on Cvijić's way of observing the town as an entity, along with the observation of its physical structure and arrangement of public spaces. Observations about Dubrovnik were mainly published in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a) and were likewise cited as examples in other synthetic overviews of various anthropogeographical, ethno-cultural, economic-geographical and political-geographical processes. In his book *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), while determining the types of *varoši* and *varošice* and associating them with the four cultural belts of the Balkan Peninsula, Cvijić singled out the Mediterranean group of *varoši*, within which Dubrovnik was classified as belonging to the Dalmatian-Venetian type. His assertions on the importance of Dubrovnik were given in the publication from 1922, wherein Cvijić wrote that "the material and spiritual development of Dubrovnik was of the highest importance for the Adriatic coast" (1922a). In the same book, Cvijić elaborated on the entire geography of Dubrovnik, from the viewpoint of the genetic method that he considered as the only accurate – from physical geography to culture and civilizational traits of this harmonious material and spiritual entity.

Historian Ilija Sindik soon expanded on these Cvijić's observations in his text "Dubrovnik and its vicinity", published in 1926 in the edition "Settlements and Origin of the Population." It is interesting to note that Sindik's name is written on the first page of Cvijić's notebook, indicating that they were probably engaged in mutual cooperation and joint research. In his text, Sindik provided more detailed explanations on urban morphology and gave a more detailed historical and geographical interpretation of the development of the town and its surroundings.

Jovana Todorić



JC_265_31

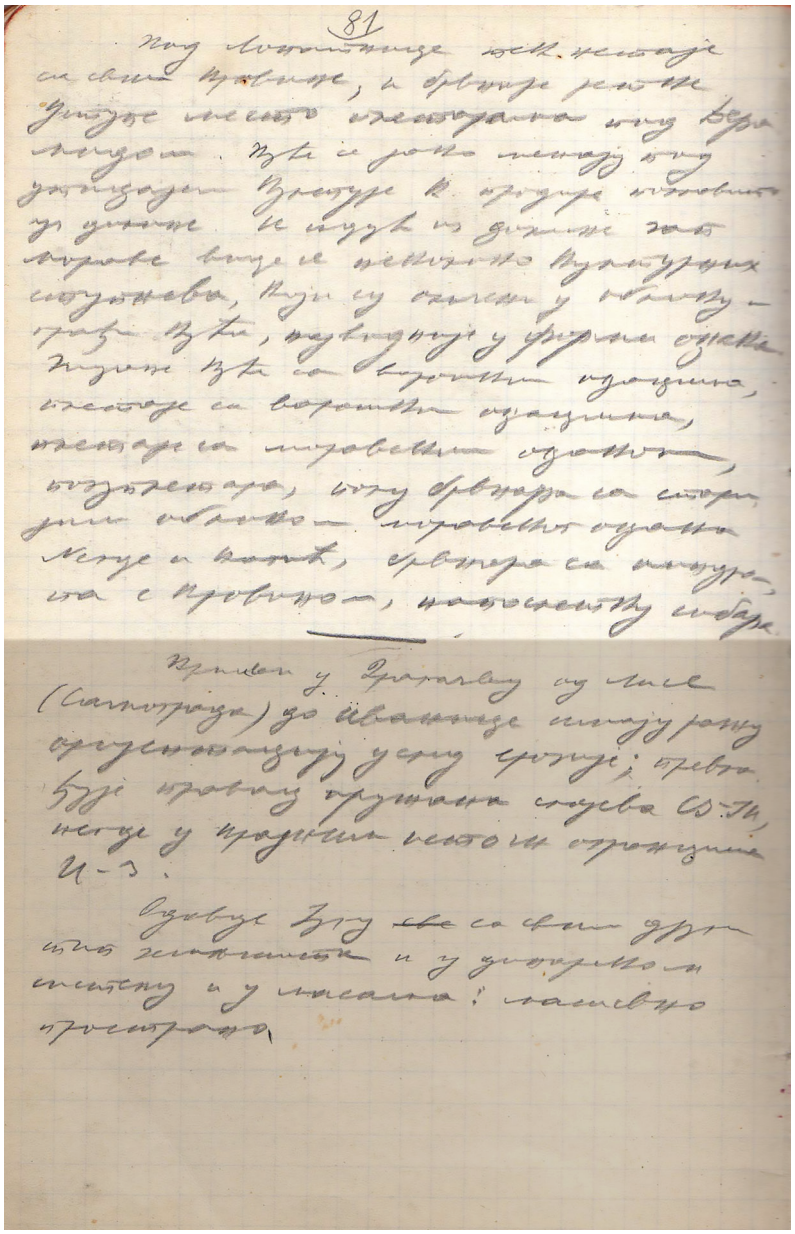
Jovan Cvijić further claimed: *"This medieval town expands with formation of new streets and buildings from Pile to Gruž, lining up in the same pattern as in Ploče, via old Herzegovinian route – These are modern parts towards the town."* Below he elaborated on two harbours: *"Porat is the docking port of medieval Dubrovnik, whilst Gruž is of modern origin. However, Gruž is small docking port and it is already crowded. It is highly unlikely for these ports to develop to the level to serve our entire country here."*

In a slightly altered form, this manuscript can be read in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), in the text continuing from the previous page. In the first passage of the manuscript, Cvijić commented on the expansion of the newly-built parts of Dubrovnik in the hinterland of the medieval town, and in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a, p. 311), he pointed out that "the present-day varoši of the Mediterranean-Dalmatian variety cannot maintain their type. In order for them to improve and prosper it is necessary to adjust to new circumstances. This adjustment has partially begun, and that is why narrow streets are disappearing bit by bit, giving way to new suburbs (Split, Dubrovnik, Gruž)." In the text about Dubrovnik, he concluded that "these modern parts of Dubrovnik, along with the city's newer population and new spirit, prevailed in Stradun and Kaštel." (Cvijić, 1922a, p. 402).

Although in this manuscript he expressed skepticism towards the greater use of the port of Gruž, he did not take the same stand in his papers *Unity and Psychological Types of the Dinaric South Slavs* (1914a), *Borders and Complexity of our Country* (1920) and the book *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a). In the last-mentioned book, this assertion is supported by the line continuing to the abovecited passage: "Besides this (urban expansion – A/N), at the site of Porta, the old harbour of Dubrovnik, a new, much more significant port of Gruž has been developed." (Cvijić, 1922a, p. 402). In the two abovementioned papers, Cvijić emphasised the economic significance of the railway lines, running transversally with respect to the Dinaric direction, which would connect the Dinaric zones to the Adriatic Sea ports, and would likewise, along with the longitudinal lines, facilitate internal traffic in this area. The most important transversal railways would be the ones connecting the Pannonian Plain, Belgrade and Western Serbia with Boka, Gruž, Metković and Split. These ideas were further discussed by Cvijić in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a), where he emphasised the importance of the connections between the port and the hinterland, as well as the significance and achievements of Dubrovnik's seamanship and trade, both maritime and land based, in the Balkan Peninsula, especially with the Serbian lands (primarily Raška and Bosnia), which he stressed as an advantage of its geographical position. For Cvijić, Dalmatia is "actually just a coastal part of the Dinaric hinterland. It cannot be fully developed, if it does not comprise one state with this hinterland" (Cvijić, 1922a, p. 102), citing the example of Dubrovnik to support this claim.

In his work "Dubrovnik and its Vicinity" (1926), Ilija Sindik relied on Cvijić's observations, giving an even more detailed analysis of the position, topographical development, physiognomy, commercial and cultural function of the town, including the significance of its ports. What is evident from this Sindik's work is the immediate influence of Jovan Cvijić on the manner of scientific observation and work of his associates, as well as his support for them to study the areas whence they originated.

Jovana Todorić



JC_274_86

In the manuscript here presented, we can notice Jovan Cvijić's tendency to systematise houses of certain regions into types, specifically those of the Ibar-Raška region, as well as his understanding of the changes affecting the rural architecture of our regions, regarding in particular the house as a residential unit, bearer and expression of all changing factors (Kojić, 1958b).

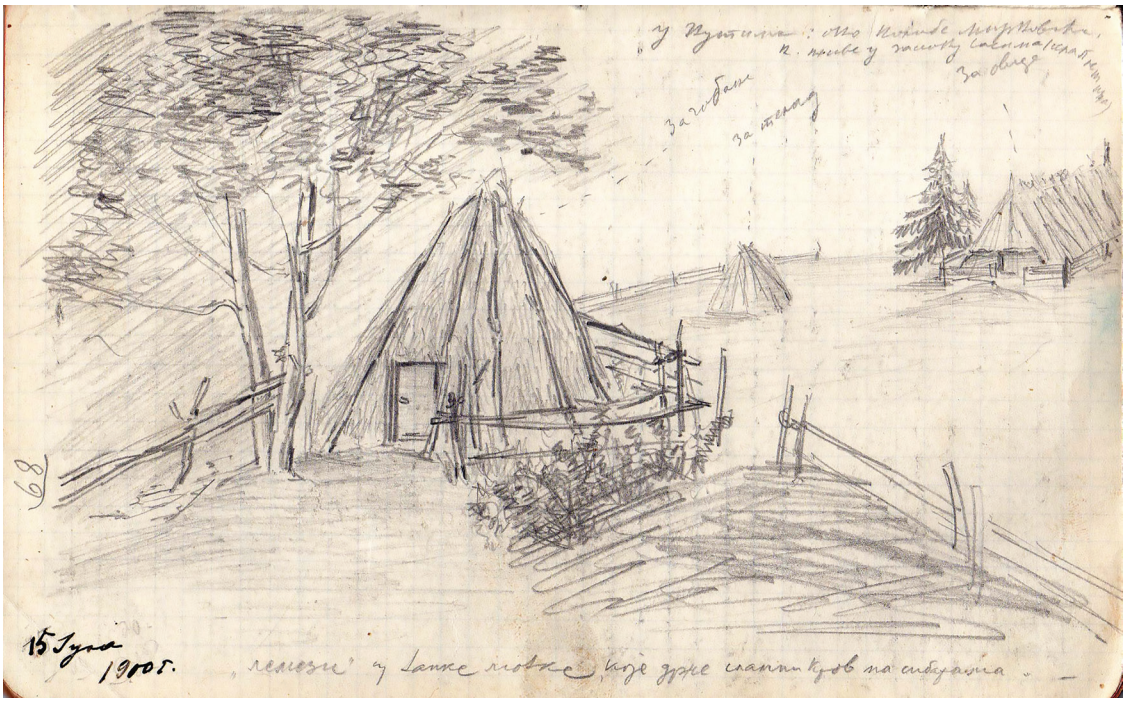
"Houses are changing very much under the influence of the penetrating culture, especially along the valleys, and going from the valley of Zapadna Morava, several cultural layers are to be identified, marked by the house pattern, most visibly in the shape of chimneys: group houses with the varoš-style chimneys, pletare [wicker houses] *with the varoš-style chimneys, wicker houses with the Moravian chimneys, wettle houses – shacks with the older form of the Moravian chimney or wooden chimney kapić, and chalets covered with schindel or straw, and finally houses in the shape of sibara."*

Fragments of a separate record can be found in a discussion elaborated in *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a) and *The Anthropogeographic Problems of the Balkan Peninsula* (1902a). In these works, Cvijić dealt with key moments and factors that determine the evolution of house types in the areas he studied. He studied the development and differentiation of houses with respect to the type of dwellings, materials, ethnic and cultural factors, climate, economic development, social conditions and occupations of the inhabitants (Cvijić, 1902a). He pointed out that the house stands in "harmony with the composition, appearance and vegetation cover of the area in which it was built, but that also represents a cultural object exposed to evolution, the same one that transforms man" (Vlahović, 2000, p. 257). On these grounds, Cvijić argued in his manuscripts that the basic house type of the Ibar-Raška region evolved from the primitive form of house – *sibara*, referring to the dwellings of cattlemen and rural families (Drobnjaković, 1929), to log cabin, characteristic of woodland areas, which was transformed under the influence of the penetration of cultural, economic and town-related conditions along the valley of the Zapadna Morava River. This kind of evolution in rural architecture and the intermingling of different styles can be illustrated by following the transformation of chimneys, as noticed by Cvijić.

A similar evolution of rural houses and gradation of stages of development in the Ibar-Raška region was identified by Cvijić along the valleys of Western Serbia. He found that the log cabin as a basic type was gradually or even entirely disappearing in certain areas. "Brick-built houses, covered with tiles, prevail; then they give place to pletare [wicker houses], and wettle houses – shacks, whereas chalets covered with wood-shingles are predominantly seen in the mountain areas" (Vlahović, 2000, p. 263). Changes in the rural architecture were taking place simultaneously in all parts of Serbia, but with a pronounced delay in magnitude (Kojić, 1950).

The course and phases of the development of rural architecture were the subject of interest by numerous scientists after Cvijić, primarily his followers Aleksandar Deroko (1968) and Jovan Erdeljanović (1902), and then the eminent architects Branislav Kojić (1950; 1958a; 1958b). The influence of Cvijić's approach and methodology is clearly felt in their works.

Marija Drobnjaković



JC_274_71

The sketch is an integral part of Cvijić's field notebook dealing with the study of the Zapadno Pomoravlje region (area along the Zapadna Morava River course in Serba). The sketch entitled *"The sibara of Kuti: around the hut of the Marinković family, living in the hamlet of Sasi, the village of Plešin (Raška)"*, created on the 15th of July 1900, provides a graphic representation of a facility for the accommodation of shepherds, in the form of the so-called *sibara* [primitive shelter] with a note "*for shepherds*", whilst the facilities for livestock are shown in the background, with the indications "*for calves*" and "*for sheep*". During his research, Cvijić devoted much attention to the location and appearance of settlements, as well as to the aspects of vernacular architecture existing in Serbia at that time. In particular, he analysed rural architecture, on the basis of which he studied the earliest historical development of human settlements in the area of the Balkan Peninsula.

During the field research of the area of the mountains surrounding Užice, Mount Mučanj and the regions around Raška and Ivanjica, Cvijić provided detailed descriptions of village settlements, with special emphasis on architectural details in the construction of traditional village houses. Cvijić was one of the first to consider the historical development of Serbian architecture, identifying *sibara* as the original primitive form of house: "The most primitive form of house that we can reliably determine is *sibara*. It has so far been preserved in the mountainous regions, serving mainly as pastoral houses or, in rare instances, as houses of poor people" (Cvijić, 1922a, p. 193). In addition, he stated that in different areas various names have been used for the same type of house: *sibara*, *busača*, *dubiroga* and *kulača*. Apart from the geographical distribution of villages wherein *sibara* is encountered as a type of house or economic premise, Cvijić provides a detailed description of the constructive elements and construction method. In the original manuscripts, we found several interesting descriptions: *"Sibara: their interior is formed of conically assembled logs or 'sibe', covered by krovina [simple roof], made of laths also known as 'lemezi' or 'pritisli', all baskets for livestock are comprised of this material. The lemezi are thin laths supporting a straw roof of the sibara."*

Manuscripts from Cvijić's notebooks served as basis for later detailed studies of the aspects of vernacular architecture within the framework of anthropogeography. Detailed descriptions of the *sibara* form of house were published by Cvijić in several of his works and in the monographs *The Antropogeographic Problems of the Balkan Peninsula* (1902a) and *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a). It is clear that this segment of Cvijić's work belongs to the fields of anthropogeography and ethnography, but likewise to architecture. This is indicated by the fact that Cvijić's observations on aspects of national construction have often been quoted by the leading Serbian architects Branislav Kojić (1958a; 1958b), Aleksandar Deroko (1964; 1968), Findrik Ranko (1982), Milorad Ribar (2001), and ethnographers Jovan Erdeljanović (1902; 1927), Ljubomir Pavlović (1925), Rabija Hasanbegović (1964; 1984) and others. In the afterword of his book, Deroko (1964, p. 87) wrote: "A comparative overview of architecture on the entire Balkan Peninsula was given way back in 1902 by Jovan Cvijić."

Aleksandra Terzić

JC_269_d

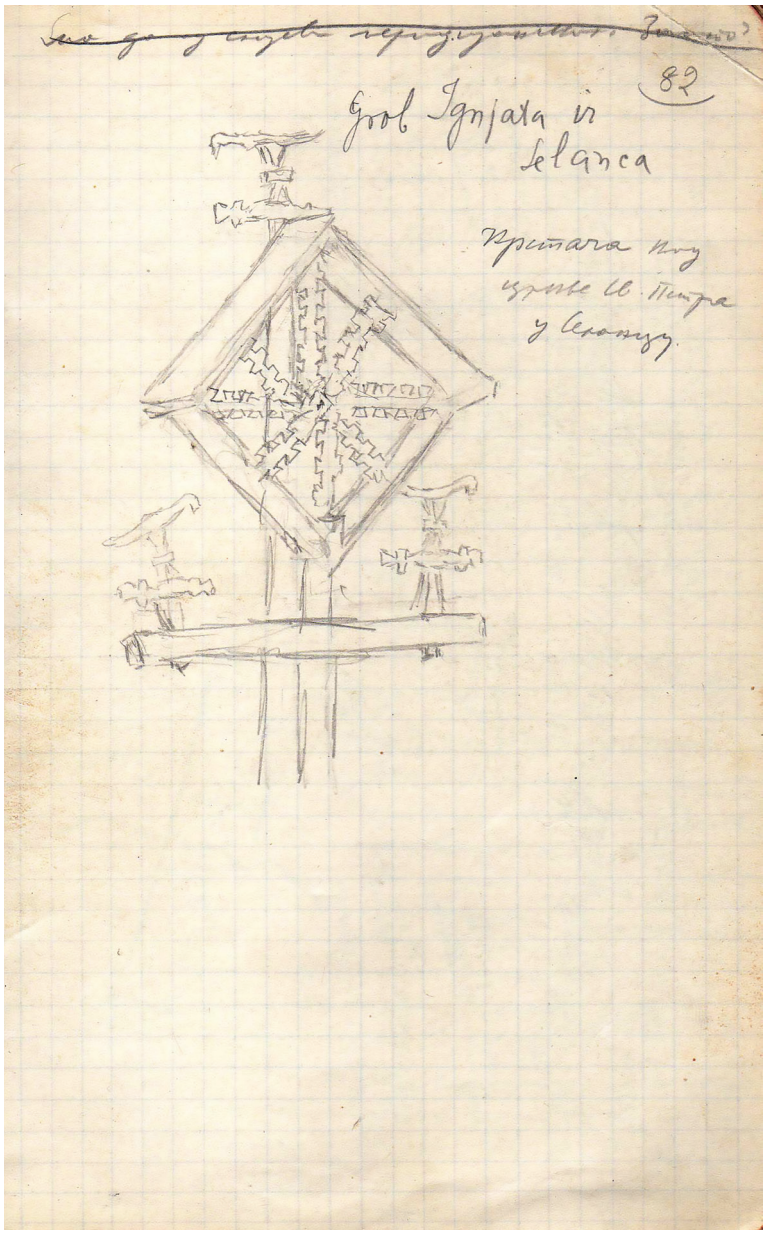
The sketch shows a group of houses of the Mijajlović *zadruga* [family cooperative] in the hamlet of Presjeka, located in the eastern part of Brnjak, one of the oldest villages in the region of the Ibarski Kolašin. The sketch is neither dated nor signed. We can assume that it was created around 1900, at the time when Jovan Cvijić explored the area of Macedonia and Stara Srbija [Old Serbia], while he was heading from Mitrovica (now Kosovska Mitrovica) to Peć (Stanković, 2015), and that it was drawn by Antonije Lazić, his longtime draftsman (Ćalić & Stošić, 2015). In Cvijić's notebook, it was mentioned that the same household was recorded in the photograph, but most probably neither the sketch, nor the photograph were published.

The displayed estate illustrates the spatial-functional arrangement of buildings and the construction technique characteristic of the villages belonging to the Ibar-Raška variety of the dispersed type (Cvijić, 1902a, Lutovac, 1954). We do not have data on the Mijajlović family. However, the limited materialisation, form and number of the buildings displayed indicate that this was a modest *zadruga*, rather than wealthy ones, that were usually mentioned by authors who wrote about the rural life in Serbia at the end of the 19th century (Milićević, 1876; Popović, 1950; Kanic, 1989). The Mijajlović *zadruga* consisted of the main house and secondary facilities – *klet* [cottage] and *košara* [stall]. The main house and *klet* were log buildings with horizontal planks with four-pole steep roofs, covered with *lemezi* [straw pressed by long and thin wooden shapes]. The *košare* were also log buildings covered with straw, except for one which was covered by krovina, just like *sibara*.

The estate was clearly bordered by a relatively high wicker fence, whereby the area of the yard was framed. The fencing of family estates in the countryside began at the end of the 18th century for security purposes (Findrik, 1984), which would later be interpreted as an indication of the creation *zadruga* and stronger emotional bonds between its members (Timotijević, 2006). The only tree shown on the sketch fits into Cvijić's description of the area of the village of Brnjak, characterised by "*pure meadows and pastures and rare small fields*."

Cvijić's studies and typology of rural houses were the starting point for other studies of villages and vernacular architecture. Those conducted by the architects Aleksandar Deroko (1968) and Branislav Kojić (1949; 1958a; 1958b) directly relied on Cvijić's work. Since the early 1980s, the preservation and protection of vernacular architecture as a cultural heritage has become an increasingly important topic throughout Europe as well as in our country (Pavlović, 1986). At the same time this period has seen the reactualisation of Cvijić's research, serving as a starting point for other studies by architects, conservators and ethnologists dealing with protection, reconstruction and revitalisation of vernacular architecture, such as Ranko Findrik (1982; 1984), Slobodan M. Nenadović (2002) or Nadežda Pešić-Maksimović (2014).

Zlata Vuksanović-Macura



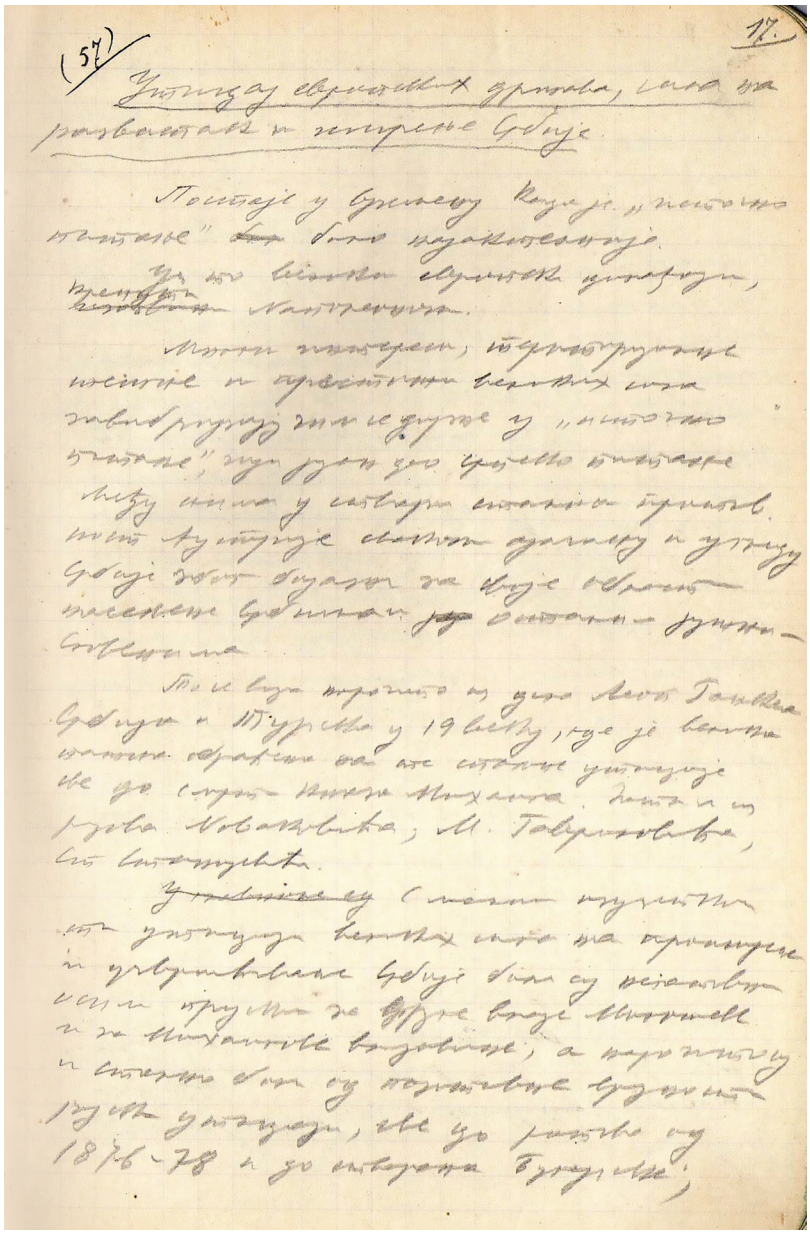
JC_274_87

The sketch entitled *"The Grave of Ignjat from Selanac"* shows an unusual ornamentation on a wooden cross over the grave of Ignjat, dating from the beginning of the 20th century. Given that Jovan Cvijić noted that the so-called "Serbian graveyard" was to be found in every village inhabited by the Orthodox population, hence in his sketches, we often encounter the location of certain churches and graveyards, on the basis of which he also defined the position of settlements. His students' works likewise contain detailed descriptions of rural and town graveyards. The tombstones and vernacular ornamentation, considered as a special part of vernacular architecture, pose no exception. This particular sketch shows a wooden cross (the so-called *perjanica* or *uzglavnica*), which was planted on the grave, that is, the one which was fixed into the mound, above the head of the deceased, being only a temporary mark before setting a tombstone (Blagojević, 1984).

After Cvijić, other researchers as well stressed to the importance of knowing this segment of vernacular culture, emphasising its artistic and symbolic character (Vlahović, Milosavljević, & Dabac, 1956; Deroko, 1962). The foundations of a former church or chapel are found in many "Serbian" graveyards, whereas in previous times graves were marked by a simple wooden cross, sometimes adorned with woodcarving (Barjaktarović, 1960). The most numerous are monuments in the form of stone crosses of stylised forms, rarely retaining a simple and clean silhouette of the proper cross (Deroko, 1962; Pantelić, 1986).

The area of the so-called Sokolska Nahija or Gornje Podrinje (area along the upper Drina course in Serbia and Bosnia and Herzegovina), within which the village of Selanac (Ljubovija municipality) is located, was investigated in detail by Ljubomir Pavlović (1930), with Cvijić's support. In the period when Cvijić was exploring the area of Ljubovija, it was common to raise wooden crosses over the graves of priests and village benefactors in the churchyard, which were later replaced by stone monuments. Today, after more than 100 years, the cross shown in this sketch no longer exists, nor the headstone of the abovementioned Ignjat. It may be assumed that, over the course of years, excavations and relocation of the graves were repeatedly performed in the churchyard, and that a similar fate befell the grave monument, whose stylisation sparked Cvijić's attention.

Aleksandra Terzić



JC_267_14

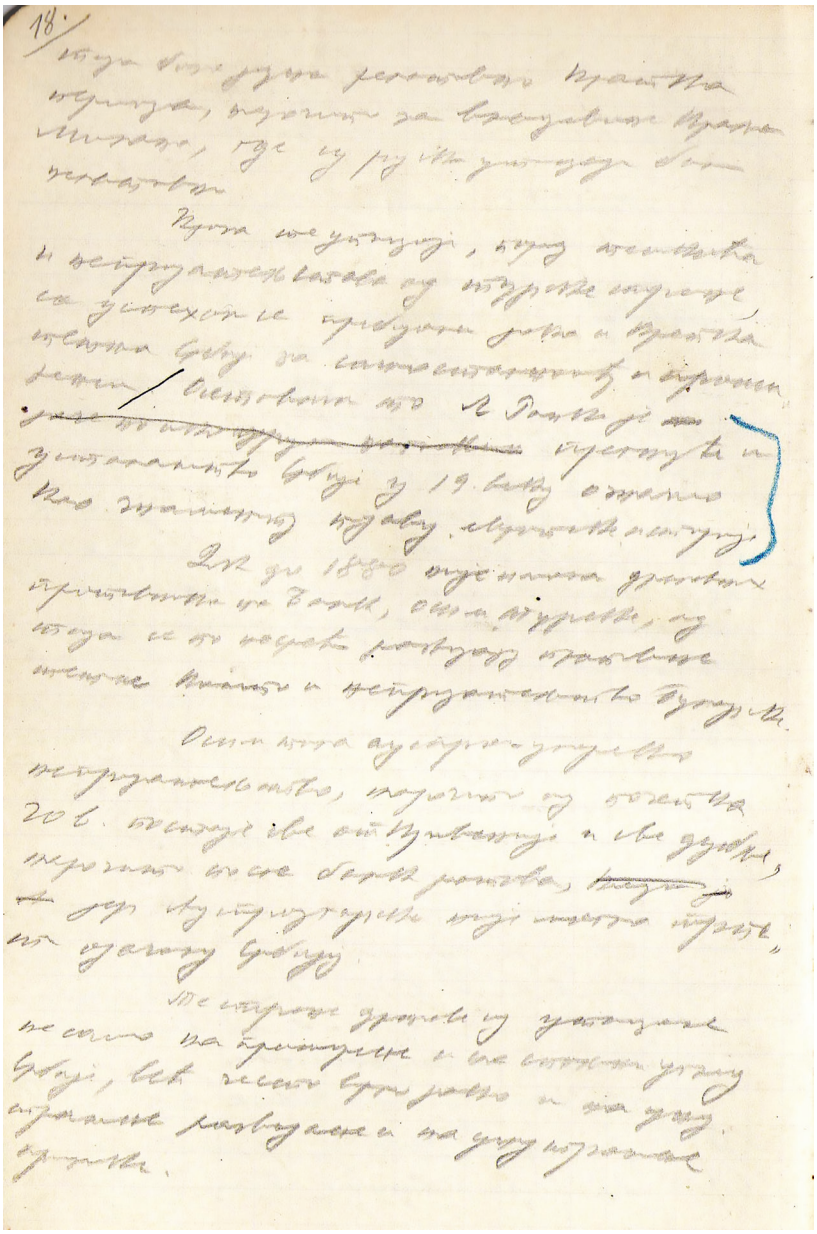
The manuscript here presented is the original text of Jovan Cvijić, presumed to have originated during the second decade of the 20th century. The author began his manuscript with a sentence: "*There was a time when the 'wrong question' was perceived as the most honourable one*", which illustratively depicts the political and social "climate" of Serbia at that time. In the introductory part of the text, the position of Serbia and the Serbian people is discussed with respect to the aspirations of large countries in the region, especially Austria and Turkey. In this light, the author noted: *"Many interests, territorial tendencies and claims of great powers coincide with the Eastern question, of which the Serbian question is part."* The vital political interests of the Austro-Hungarian Empire towards the Balkans are particularly emphasised, which Cvijić elaborated upon as follows: *"…the opposition of Austria to the strengthening and influence of Serbia, for fear of losing areas populated by Serbs and other South Slavs."* On this subject, the author published the results of research and observations in the books *The Anthropogeographical Problems of the Balkan Peninsula* (1902a), *The Balkan War and Serbia* (1912a; 1912b) and *The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography* (1922a).

On several occasions, Cvijić made reference to the writings of the German historian Leopold von Ranke, in particular to his publication "Serbien und die Türkei im neunzehnten Jahrhundert" (von Ranke, 1879). In Cvijić's opinion, in this book Ranke described very thoroughly the interstate relations and the stands taken by the authorities of both countries on the political and social relation towards the history of the time. The exceptional value of this work lies in the fact that it puts emphasis on the primary importance of studying original sources, psychological impacts and objective historical attitude, as well as understanding individual, national tendencies.

Cvijić explicitly stressed the fact that Turkish influences in this area were dominant up to political changes during the reign of Prince Mihailo Obrenović. In this part of the manuscript he cited statements by Novaković (1894), Gavrilović (1912) and Stanojević (1908).

In addition, the manuscript further stresses that the impact of European powers on social changes in Serbia was especially apparent during the reign of Prince Miloš Obrenović and his successor, Prince Mihailo Obrenović. He added that the Russian influence in the Balkans intensified at that time, until the wars of 1876–1878 and the liberation of Bulgaria. In this section, the author clearly pointed to the war between the Ottoman Empire, on the one hand, and Russia and the Orthodox Balkan states, on the other. He further elaborated on these historical and political-geographical events in the first and second editions of the book *The Balkan War and Serbia* (1912a; 1912b).

Marko D. Petrović

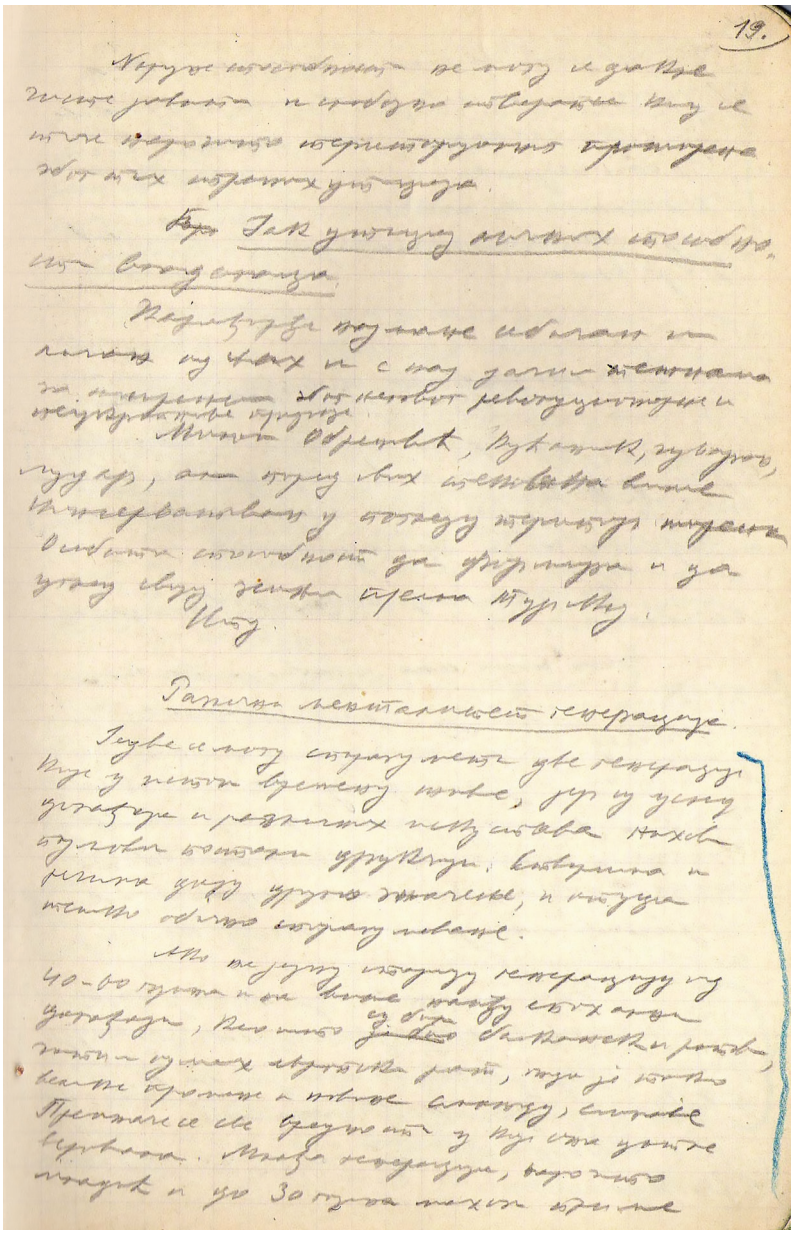


JC_267_15a

Jovan Cvijić further continued his manuscript with observations regarding the Russian impact in Serbia during the reign of Prince Milan Obrenović. The Treaty of San Stefano caused a major shift in Serbia's foreign policy orientation. Until this Agreement, the state policy was very loyal to Russia, expecting the support of its foreign policy. However, when it became apparent that the main result of the two wars Serbia had faught with Turkey was the creation of Greater Bulgaria, it was understood that Serbian foreign policy was based on a risky "Slavic sentimentality". Prince Milan and Minister of Foreign Affairs Jovan Ristić played a key role in further negotiations. Their negotiations would bring great political benefits to Serbia. Cvijić again paraphrased von Ranke (1879), pointing out that this German historian, who described the developments in this area in the latter half of the 19th century, noted that, with regard to Serbia, he realised *"a significant phenomenon of the creation of history."*

Cvijić further argued that, after the death of King Milan, *"the Austro-Hungarian enmity, especially since the beginning of the 20th century, was becoming more overtly hostile and more profound."* The further events culminated in the Tariff War, which was a trade conflict between the Kingdom of Serbia and the Austro-Hungarian monarchy. It commenced on the 12th of January 1906, following the termination of negotiations in Vienna. The conflict continued with the Bosnian Annexation Crisis (1908–1909), also known as the First Balkan Crisis. Cvijić further highlighted that the foreign states explicitly exerted an external influence on Serbia, and as he remarked *"very often on both internal affairs and internal circles"* of the Serbian society of that time. With how much dedication he wrote on the socio-political events of that period, we can see from his monographs *Speeches and Articles*, which, after it was first published (1921b), saw three additional editions (1921c; 1923b; 1923c).

Marko D. Petrović

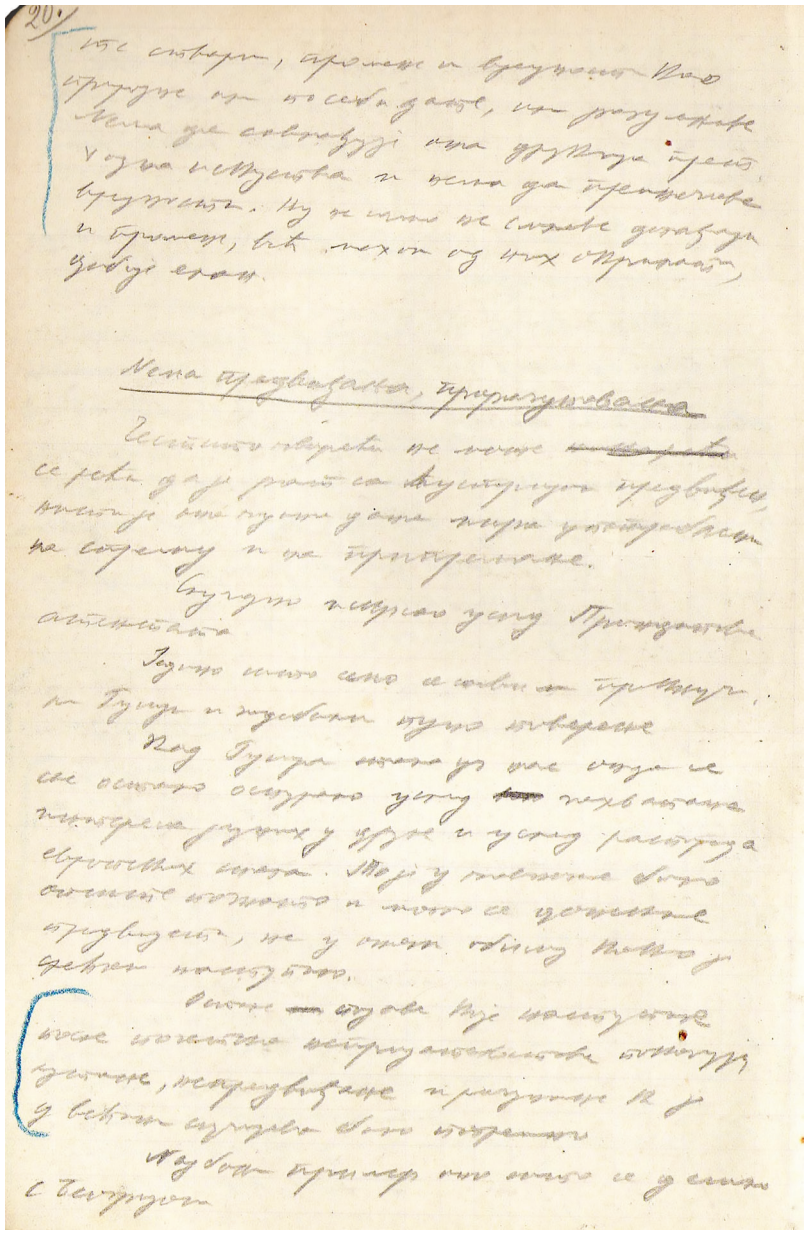


JC_267_15b

Jovan Cvijić further remarked that the territory of Serbia remained unchanged for long periods of time and the territorial expansion hardly realised "*because of all these foreign impacts*", that successfully prevented further progress of the state unification of the Serbian people. He further emphasised (and explicitly underlined) that the personal abilities of the Serbian rulers had a very strong impact on historical events in the periods of their reign. In this observation, he compared two prominent political figures of Serbia and the leaders of the ruling houses in Serbia – Đorđe Petrović Karađorđe and Miloš Obrenović. He noted that Karađorđe epitomises the strongest aspirations for fighting in the name of the interests of Serbia and its people, steming from, as Cvijić claimed, "*his revolutionary and untamed nature.*" On the other hand, he concluded that Miloš Obrenović, although calmer in nature and temper, was substantially "*more devoted to territorial expansion*" and diplomatic benefits. "*A special ability to establish and regulate his state…"* is part of a sentence written by Cvijić, on the basis of which we gained insight into what appears as his admiration of the way Prince Miloš managed to lead the country.

In the next part of the text, bearing the subheading *"Different Generation Mentalities*", Cvijić further elaborated on the influence the foreign countries had on the behavior and habits of individuals in Serbia. In this light, Cvijić wrote the following: "*Two generations that live at the same time can barely understand each other, for their concepts have become disparate, due to different events and experiences.*" In this part of the manuscript, the author gave his view of the sudden changes and modernisation of society at the beginning of the 20th century, underlying that people of different ages in Serbia "*attribute different meanings to things and words*". Also, Cvijić's great interest in antopogeographical and psychological research is evident, because in the text below he discussed very precisely the external influences on the behavior and everyday life of the inhabitants of Serbia. In addition, this influence was also visible on comprehensive social changes that were not so rapid and obvious in the past. He noticed this especially in the behavior of the youth, as evidenced by the following: "*The younger generation, especially a young man, up to 30 years of age, mostly adapts to these things, changes and values as natural ones, as inherently given…. "* In the article on Cvijić's way of observing numerous social phenomena, Vlahović noted the following: "Explanations and conclusions about national life are forthright, according to the data available, and each problem is discussed only as much as the facts permitted" (Vlahović, 2000, p. 8).

Marko D. Petrović

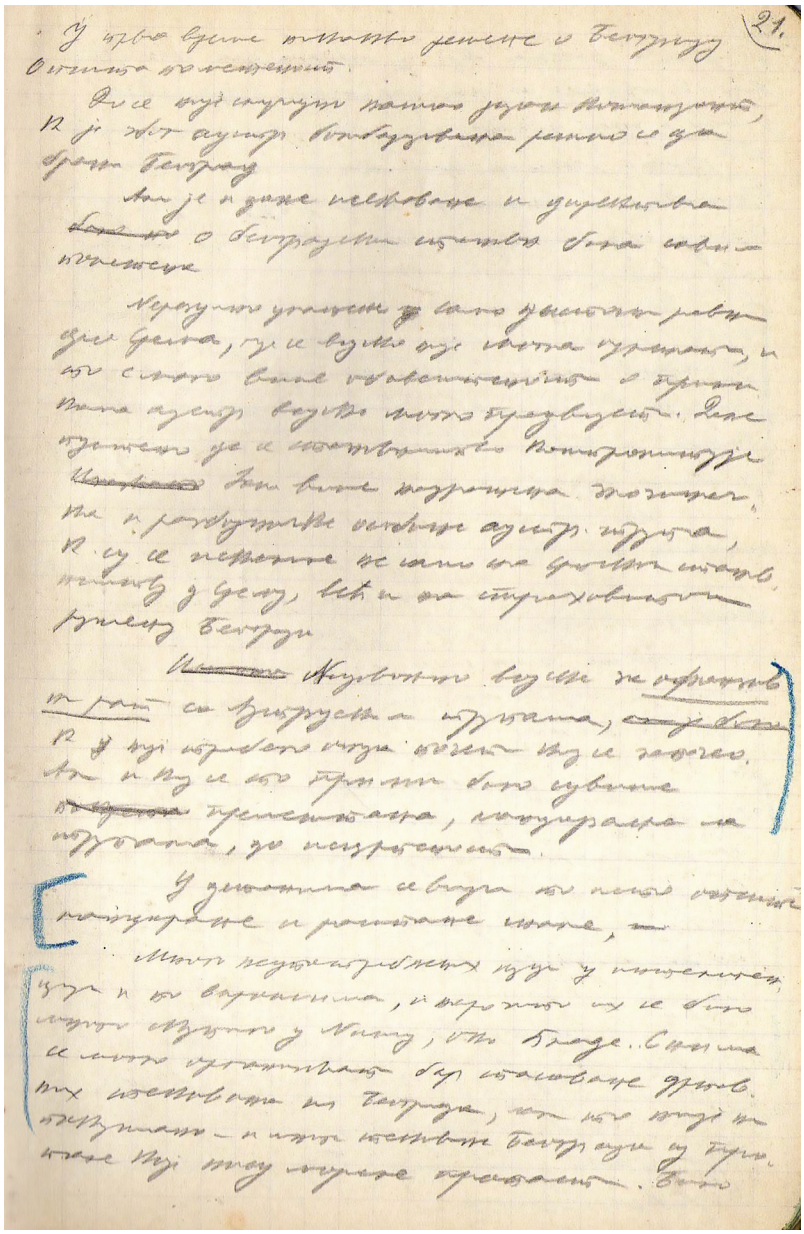


JC_267_16a

Jovan Cvijić continued his manuscript with the new subtitle "*No Predictions and Calculations*", which began with a sentence apparently alluding to his view of the relationship between Serbia and Austro-Hungarian Empire. On this occasion, he wrote the following: "*Honestly speaking, it cannot be said that the war with Austria has been foreseen…*", adding that the conflict "*escalated accidentally due to the assassination of the Archduke.*" From this we come to realise Cvijić's attitude concerning the unjustified and forcibly created interstate tensions, culminating in the *Vidovdan assassination* in Sarajevo in 1914, which was taken as the reason for the outbreak of the First World War.

Cvijić further pointed out the strong support of Russia to the authorities in Serbia, after accusation of direct involvement in the assassination at Sarajevo. On this occasion, he stated the following: "*Once Russia sides with us, then everything else is ensured…*", although he expressed a general fear because of the unfavorable geopolitical position of Serbia "*…due to the position of European countries.*" From a historical viewpoint, Cvijić cited a sort of misunderstanding within the Central Powers, when Austro-Hungary considered that Germany would protect its northern borders from Russia. However, Germany sent most of its troops to the front towards France, which forced the Austro-Hungarian army to divide its forces on two fronts, towards Russia and Serbia. In this way, external pressure was weaker than anticipated, but – as Cvijić further remarked – this did not prevent great destruction of the Serbian capital – Belgrade. He wrote on this subject in more detail in several editions of the books *Speeches and Articles* (1921b; 1921c; 1923b; 1923c).

Marko D. Petrović



JC_267_16b

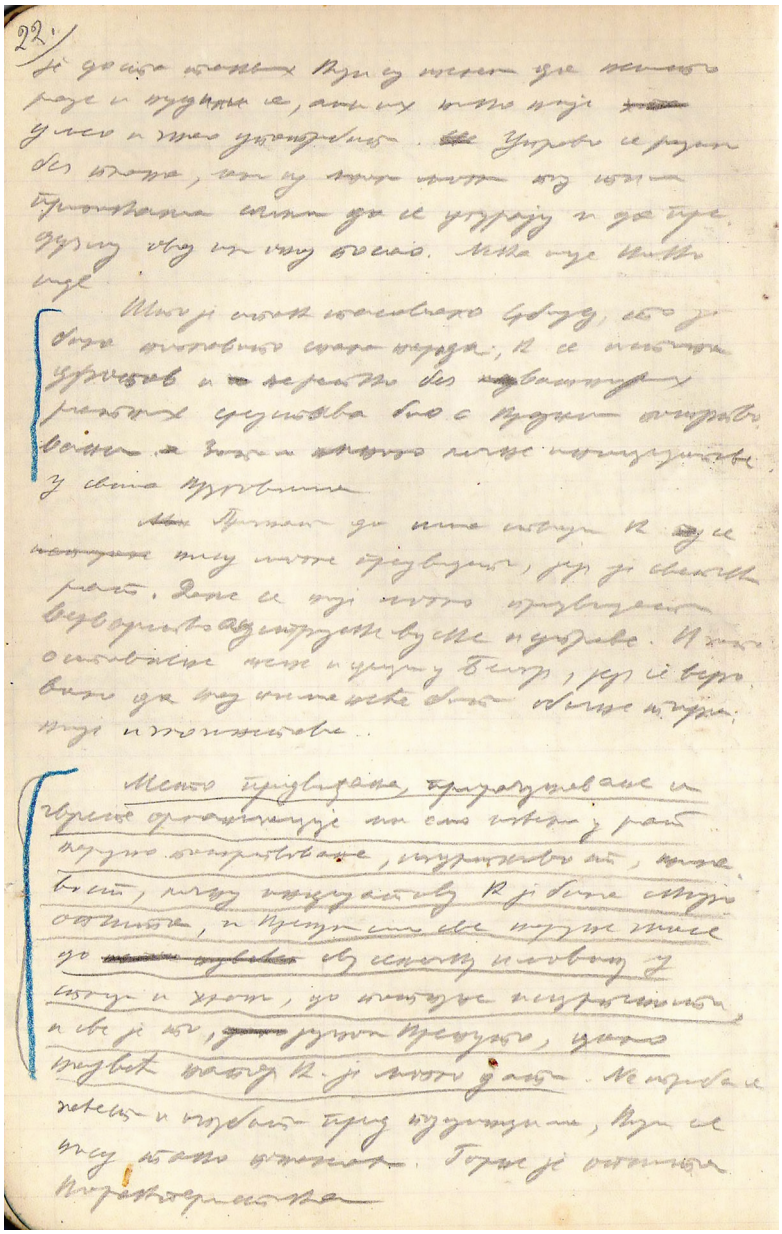
In his notebook, Jovan Cvijić gave insight into the general situation during the 1914–1915 bombing of Belgrade. According to Stevan Stanković (2015), in 1914, Cvijić headed from Belgrade to Niš, accompanied by the Crown Prince Aleksandar I Karađorđević, members of the Serbian Government and the Supreme Command. As a "soldier without a rifle", he spent a short time in Kragujevac, whence he returned to Niš again. In the same year (1914) he completed and published two treatises entitled *The Unity of Yugoslavs* and *Uniformity and Psychological Types of Dinaric Southern Slavs, with an accompanying map*, and the views expressed in these publications were later adopted at the Paris Peace Conference in 1919. At the request of the Serbian Government, at the beginning of 1915, Cvijić travelled for diplomatic reasons to London, to be later sent to Paris, then to Athens via Marseille and Malta, and then finally returned to Belgrade.

Despite being absent from Belgrade, Cvijić was deeply disturbed by the events in the Serbian capital and news of great destruction and casualties. Belgrade, which was at that period located at the very southeastern border edge of the Austro-Hungarian territory, was a significant obstacle to their further advancement towards Thessaloniki and Constantinople. Thus, the position of Belgrade, as the Serbian capital, became a strategic war objective in their drive to the east, as well as for further conquest of Central Serbia and territorial expansion towards the southern and southeastern parts of the Balkan Peninsula. For this reason, Belgrade was repeatedly attacked and bombed by the Austro-Hungarian artillery units, concentrated in Zemun.

The author also pointed out the role of the Serbian army in Srem [Syrmia], during the advance of the Austro-Hungarian divisions from the northwest, heading towards Belgrade. The Srem Offensive of 1914 was launched by the Serbian army, with the aim of stopping and pushing the Austro-Hungarian troops from Posavina (area along the Sava River course). The ongoing military operations were successfully continued, enabling the Belgrade Defense Troops to enter Zemun. The Srem Offensive was supposed to be of limited scope, aimed at giving the Serbian First Army more room for manoeuvring in the event of a new Austro-Hungarian offensive in the region of the Drina River. More comprehensive overview of internal and foreign circumstances and influences was provided by Cvijić in the supplementary editions of the books *Speeches and Articles* (1921b; 1921c; 1923b; 1923c).

As stated by S. Stanković (2015, p. 67), the personal dimension of Cvijić's observations on the bombing of Belgrade can be grasped from a letter written by his wife Ljubica, in which she recalled his impressions after the end of the war: "He returns to Belgrade, war-torn Belgrade, and finds his house and library looted and damaged, and his Geographical Institute razed to the ground."

Marko D. Petrović

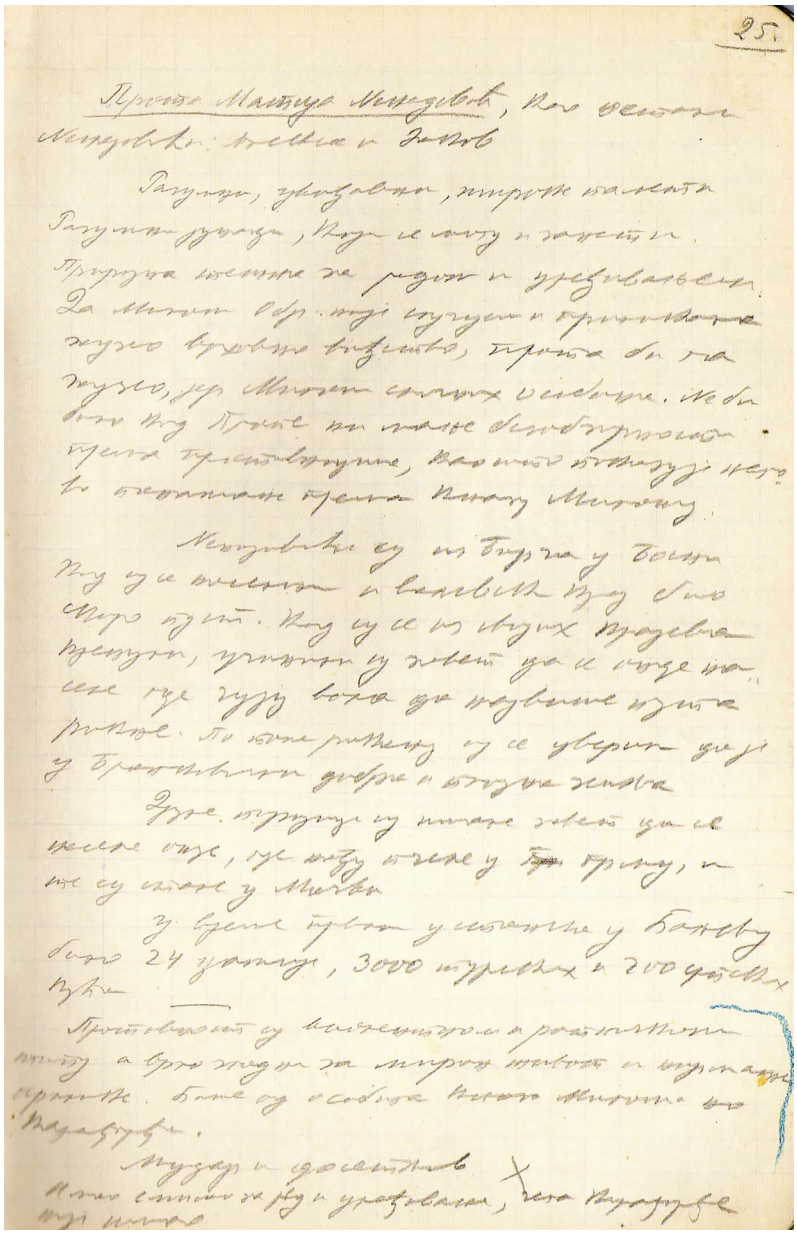


JC_267_17a

The subsequent text segments presented the author's thoughts on the role of the people and general organisation of Serbian society in Belgrade during the war in 1914–1915. Cvijić's criticism of the poor leadership of the authorities in crisis situations and defense of Belgrade is more than apparent, as can be concluded from the following: *"There were plenty of those who wanted to work and join together, however there was no one who could know how to use their potential. No plan… Let the chips fall where they may."* Evidently, the state authorities, as well as the population, were unprepared for the upcoming danger, which further increased the overall war damage and the absolute number of casualties in Belgrade and throughout Serbia. Two important historical circumstances can be added to the situation under consideration at this time: following the Balkan Wars, Serbia was significantly, both economically and militarily weakened and was completely unprepared for a conflict, either against the Austro-Hungarian Empire, and especially against its traditional ally Germany. In Serbia, at that time, the pre-election campaign was being fought (the most intensive campaign among the Belgrade voters), so all the activities of the Government, headed by Nikola Pašić, were aimed at winning over as many voters as possible, not on planning for the defense of the country or fighting a war (Mitrović, 2007).

Cvijić further highlighted his concerns about the developments and the lack of a more effective state and military strategy in the defense of the capital. On this occasion, he noted the following: *"To say that there were certain matters that could not have been foreseen because of a world war. The movements of the Austrian army and administration could not have been foreseen…"*. These observations by Cvijić presumably pointed to his view of an insufficiently successful military organisation and inadequate response in the key moments of the city's defense. In the same manner, the author highlighted and underlined the following assertion: *"Instead of prediction, calculation and solid organisation, we invested into this war the national sacrifice, stubbornness, toughness, personal initiative which had almost perished, and all national masses put down their property in cattle and food, to utter exhaustion, and all of that gave the greatest effort that could be exerted."* According to Stevan Stanković (2015, p. 63): "Cvijić clearly showed distrust of daily politics and contempt for political parties. Although he was gaining a fuller and more thorough insight into the political and economic situation in Serbia, he did not meddle into politics." Notable is Cvijić's remarkable sympathy with his people and grief over the great losses that the state, society, property, and especially individuals had endured during the war. It should be noted that after the war, Cvijić was invited as expert to participate at the Paris Peace Conference (1919). As president of the Ethnographic-Historical Section, he made a great contribution in determining the borders between the Kingdom of Serbs, Croats and Slovenes and neighbouring countries.

Marko D. Petrović

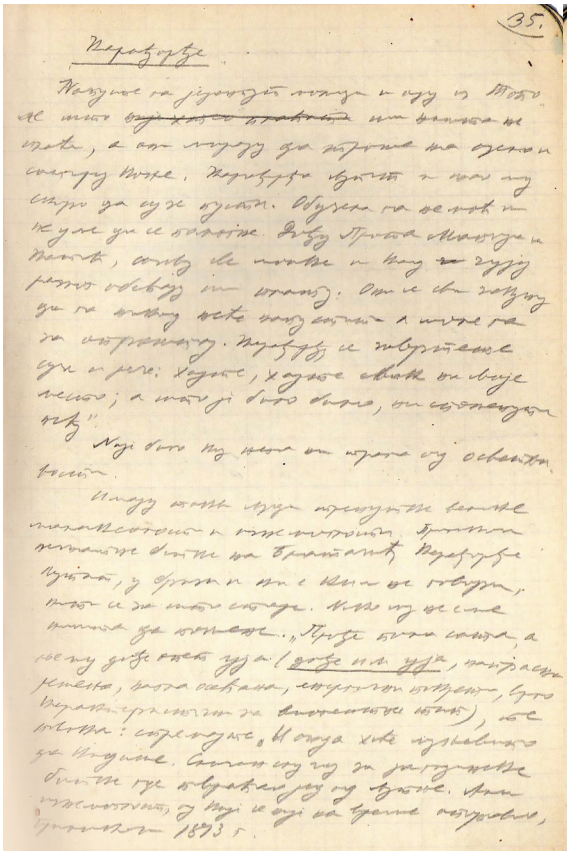


JC_267_18

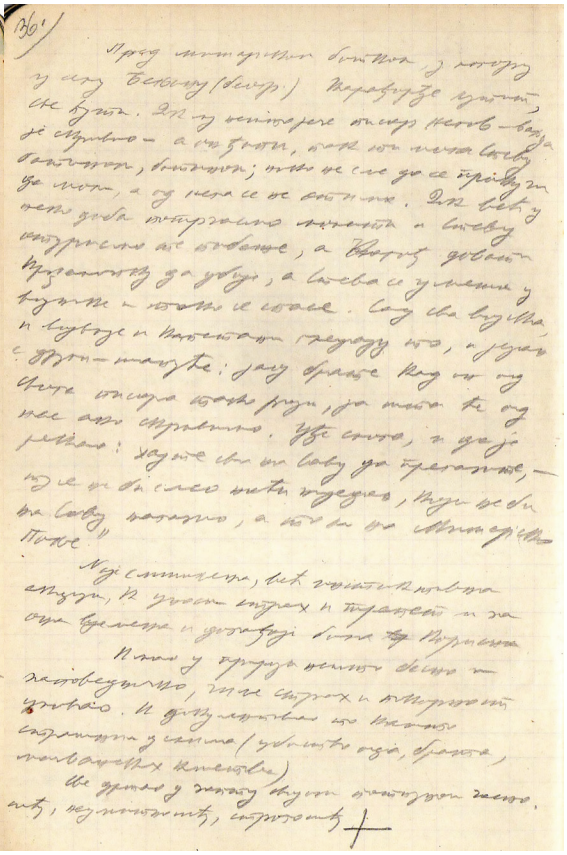
Prota [Archpriest] Matija Nenadović (1777–1854) was a Serbian writer, statesman, diplomat, military leader and president of the first Serbian government – *Praviteljstvujušči Sovjet Serbski*. He published his "Memoirs" in which he reflected on the people and events at the time of the First Serbian Uprising, as well as his diary, whilst Cvijić maked mention in his notebooks on Matija and his brothers.

Matija Nenadović and his brothers Aleksa and Jakov were described as "*reasonable, insightful and well-educated.*" In Cvijić's opinion, if Miloš Obrenović had not become the ruler of Serbia, the Archpriest would have been suitable for that position, because he was rather like him. Unlike Karađorđe, the Archpriest "*had a sense of order and organization.*" The brothers moved from Borač in Bosnia to Brankovina, because the oxen made stronger mooning sounds therein, thus indicating that the land was particularly fertile. At that time, there were more Turkish than Serbian houses in the area they settled. Cvijić wrote that the three brothers were aware that they were part of the people, but "*they are sometimes too enthralled about achieving the Austrian and Turkish honours and friendship.*" Archpriest Matija used to advise the villagers not to rise up against the emperor, but for him, and against the Janissaries who killed Mustafa-pasha. This was more convenient for the peasants than to be told to go straight to the final liberation. On the other hand, he was able to find common ground with the Austro-Hungarian Empire, and he used to say that the cause of the uprising was "*apart from the general oppression, the fact that Turks executed some of the notable Serbs who fought against the Turks alonside the Austrians.*" The Archpriest considered that the people must be heard of and come into terms with, and that in this way they can make every effort.

Stefana Matović



JC_267_22



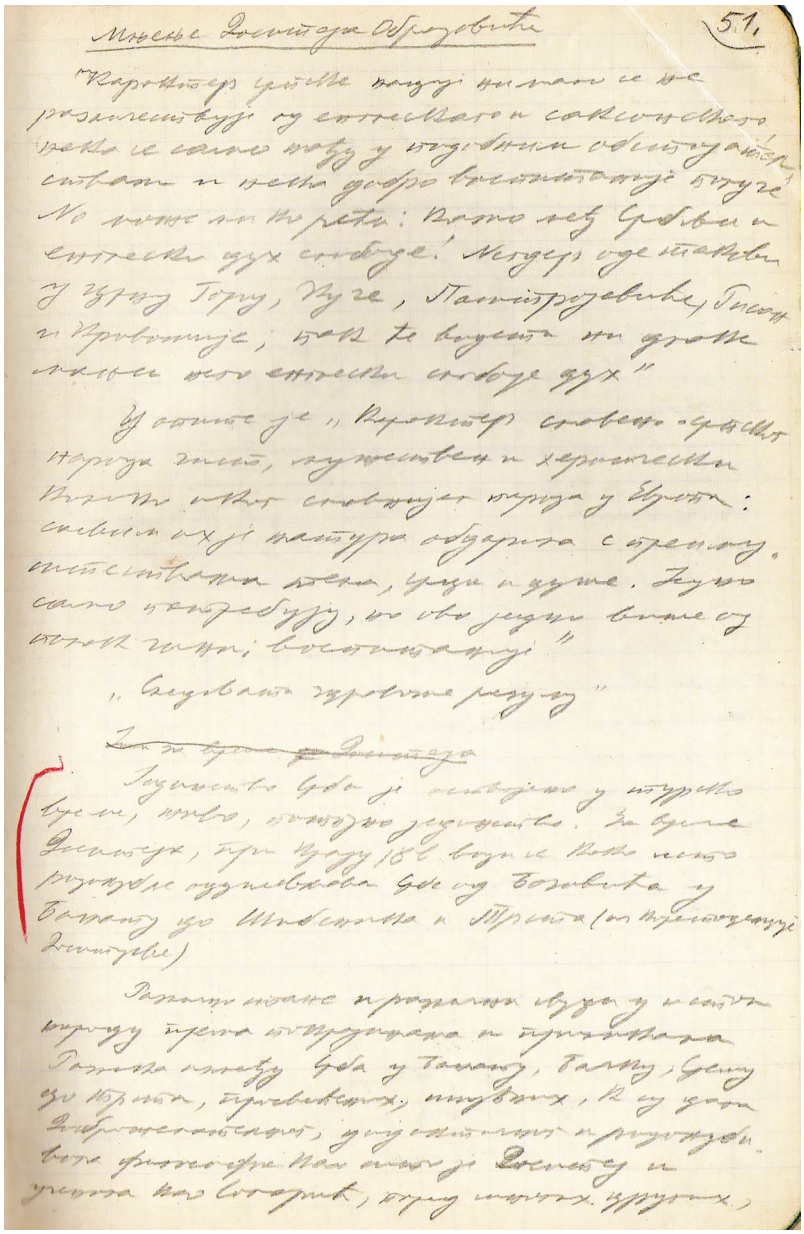
JC _267_23

Đorđe (Georgije) Petrović Karađorđe (1762–1817) was the leader of the First Serbian Uprising and the founder of the House of Karađorđević.

In his notebooks, Jovan Cvijić described several anecdotes of the life of Karađorđe, testifying that he was quick tempered, though not vindictive. When he was angry and unresponsive, no one was allowed to approach or address him. Occasionally, he would find himself in one of those "uja" moods, which is the term implying traits characteristic of the violent type: rash resolution, sudden feelings, energetic movements. In Cvijić's manuscript, we read the following anecdote: *"Just before the Battle of Mišar, in the camp in the village of Beljina (near Belgrade), Karađorđe sat in angry silence. As his clerk approached to address him – he must have been guilty of something – all of a sudden, Karađorđe broke his silence and run at Steva, beating and beating him with a whip; no one dared to oppose or beg for the poor man's life. When, finally at some point we broke up the fight and separated them, Steva fled from before us, and Karađorđe got a hold of his krdžalinka* [type of rifle] *to execute him, but Steva ahid himself among the soldiers, thus saving himself. Now all the army and commanders and captains witnessing the incident whispered to each other: Gee, when he treats his clerk like this, we are not sure what to expect in case of our own offenses either. Even if he had said, Seize him!, you all would have taken hold of Steva, and then forward into the Mišar Field."* Cvijić argued that this reaction of Karađorđe was not premediated but instinctive, even useful for that time. Karađorđe's temper was somewhat *"furious and commanding, triggering fear and obedience."* He murdered his father, his brother and the serfs from Mačva. Even if everything went downfall, in moments of weakness, he would not make a single move. He was expressly against revenge. Stories about Karađorđe, like this one, noted just before the Battle of Mišar, were recorded by Milićević (1904), based on the testimonies by Petar Jokić, Gajo Pantelić, Milan Marković Đapa and other contemporaries, or they were extracted from the writings of Sima Milutinović, Janićije Đurić (Karađorđe's secretary), Ante Protić, Vuk Stefanović Karadžić and others.

In his book "Vožd Karađorđe" (1993), in the chapter "Historiography on Karađorđe", Radoš Ljušić listed a number of historians, writers and other historical figures who published, with greater or less success, books and works on Karađorđe. Among others, these include: Stefan Stratimirović, Isidor Stojanović, Jovan Hadžić, Dimitrije Tirol, Lazar Arsenijević Batalaka, Konstantin Nenadović, Milenko Vukićević, Vladimir Ćorović and many others. Notable literary works have also been inspired by Karađorđe's life. Petar II Petrović Njegoš dedicated his "Gorski vijenac" [Mountain Wreath] "to the ashes of the father of Serbia", that is Karađorđe. Sima Milutinović Sarajlija poetically portrayed the history of the First Serbian Uprising in his epic poem "Srbijanka".

Stefana Matović



JC_267_30

Dimitrije Dositej Obradović (1742–1811) was a Serbian educator, writer, philosopher, pedagogue and the first minister of education. In one of his notebooks Cvijić reflected upon Dositej's perspective on Serbian people.

Dositej Obradović asserted that the character of the Serbian people did not differ much from the character of the English or Saxon peoples. The spirit of freedom can be recognised in the Montenegrin tribes, and what only lacked the Serbian families was the education that the English families received. He described the character of his people as *"pure, masculine and heroic"*, endowed with *"preoccupations of the heart and soul"*, but lacking good manners. Cvijić mentioned that at the time of Dositej Obradović patriotism was characteristic of Serbs, from Banat to Šibenik and Trieste. Dositej was delighted with Serbia: "If only our loving mother Serbia could breathe the sweet air of freedom, for me, that would be like breathing for the first time… it would be my heaven on earth".

In the manuscript, Cvijić remarked *"that there could not be greater differences in a single nation than among Serbs."* Prominent representatives of the Serbian people at that time include Pavle Solarić and Dositej Obradović, who were educated people *"by cultural standards of their time"*, and peasants who led the two Serbian Uprisings for the freedom of the Serbian state. In Montenegro, most notable representative was Petar II Petrović Njegoš.

The character and work of Dositej Obradović has been the subject of works authored by: Jernej Kopitar, Janez Bleiweiss, Matija Murko, Ivan Derkos, Vjekoslav Babukić, Stanko Vraz, Matija Antun Reljković. The Bulgarians, Romanians and many others who understood and praised him enthusiastically talked about him. Vuk Stefanović Karadžić and Petar Petrović Njegoš criticised him for his heretical thoughts, but Metropolitans Stefan Stratimirović and Petar Jovanović, as well as Patriarch Josif Rajačić, approved the printing of his books; in other words, the church looked favorably on his work (Petrović, 2007).

Stefana Matović

BIBLIOGRAPHY

Barjaktarović, M. (1960). O grobljima i grobovima u gornjem Polimlju [Cemeteries and Tombs in the Region of Upper Polimlje]. *Bulletin of the Ethnographic Museum in Belgrade, 22–23*, 217–224.

Blagojević, N. (1984). Narodno stvaralaštvo u vezi sa smrću [Funeral Customs]. *Bulletin of the Ethnographic Museum in Belgrade, 48,* 273–310.

Boblaye, P. (1831). Notice sur les alterations des roches calcaries du littoral de la Grèce. *Journal de Géologie,* 144–165.

Božović, G. (1998). *Moj Kolašin: priče i putopisi iz Starog Kolašina* [My Kolašin: Stories and Travelogues from Old Kolašin]. Beograd: Ars Libri and Priština: Novi Svet.

Chisholm, G. G. (1908). The Ninth International Geographical Congress. *The Geographical Journal, 32*(4), 364–376.

Cvijić, J. (1893). Geografska ispitivanja u oblasti Kučaja u Istočnoj Srbiji [Geographical Study of the Kučaj Area in Eastern Serbia]. *Annales géologiques de la Peninsule Balkanique, 5*, 7–172.

Cvijić, J. (1894). *Razna imena Balkanskoga Poluostrva*. [68. Theob. Fischer, Die südosteuropäishe (Balkan-) Halbinsel. (Länderkunde von Europa herausgegeben unter fachmännischer Mitwirkung von Alfred Kirchoff. Lieferungen 88–97. c. 65–281.) 1890–1892.]. *Pregled geografske literature o Balkanskom Poluostrvu za 1892. i 1893. godinu.* „Delo" sv. 2. 3. i 4. za 1894. g. (62–66). Beograd: Parna radikalna štamparija.

Cvijić, J. (1896). *Uputstva za proučavanje sela u Srbiji i ostalim srpskim zemljama* [Guidelines for the Study of Villages in Serbia and other Serbian areas]. Beograd: Srpska kraljevska državna štamparija.

Cvijić, J. (1899). Glacijalne i morfološke studije o planinama Bosne, Hercegovine i Crne Gore [Glacial and Morphological Studies on the Mountains of Bosnia, Herzegovina and Montenegro]. *Bulletin of the Serbian Royal Academy of Sciences,* 84–112.

Cvijić, J. (1901). *Die tektonischen Vorgange in der Rhodopenmasse*. Sitzungsberichte d. kais. Akad. d. Wiss, Wien, Mathem. – natur. CI, Bd. CX, Abth. I, 409–432.

Cvijić, J. (1902a). *Antropogeografski problemi Balkanskog poluostrva – Naselja srpskih zemalja* [The Anthropogeographical Problems of the Balkan Peninsula – Settlements of the Serbian Lands] (Book 1). Beograd: Kraljevska srpska državna štamparija.

Cvijić, J. (1902b). Kulturni pojasi Balkanskog poluostrva [Cultural Belts of the Balkan Peninsula]. *Serbian Literary Gazette, 6*(4), 909–921.

Cvijić, J. (1903). *Die Tektonik der Balkanhalbinsel*. Proceedings from: Compte Rendu du IX Congrès géologique international de Vienne, Vienna, 347–370.

Cvijić, J. (1908). *Entwicklungsgeschichte des Eisernen Tores*. Ergänzungsheft No 160 zu Petermanns Mitteilungen, Gotha, 1–64.

Cvijić, J. (1909). Jezerska plastika Šumadije [Lacustrine Morphology of Šumadija]. *Bulletin of the Serbian Royal Academy, LXXIX*, 1–94.

Cvijić, J. (1911). *Osnove za geografiju i geologiju Makedonije i Stare Srbije s promatranjima u južnoj Bugarskoj, Trakiji, susednim delovima Male Azije, Tesaliji, Epiru i severnoj Albaniji* [Fundamentals of Geography and Geology of Macedonia and Old Serbia, Including Surveys in Southern Bulgaria, Thrace, the Neighbouring Parts of Asia Minor, Thessaly, Epirus and Northern Albania] (Book 3). Beograd: Srpska kraljevska akademija.

Cvijić, J. (1912a). *Balkanski rat i Srbija* [The Balkan War and Serbia] (1st edition). Beograd: Publikacija Informacionog biroa.

Cvijić, J. (1912b). *Balkanski rat i Srbija* [The Balkan War and Serbia] (2nd edition). Beograd: Srpski književni glasnik.

Cvijić, J. (1913). *Ethnographische Karte der Balkanhalbinsel*, 1:5 000 000. Gotha: Justus Perthes.

Cvijić, J. (1914a). *Jedinstvo i psihički tipovi dinarskih Južnih Slovena* [Unity and Psychological Types of the Dinaric South Slavs]. Niš: Fototip.

Cvijić, J. (1914b). Pregled Dinarskih ekskurzija 1897. do 1913. god, i rezultati o ledenom dobu u Prokletijama [Overview of Dinaric Excursions from 1897 to 1913 and Findings Concerning the Ice Age in Mt. Prokletije]. *Bulletin of the Serbian Geographical Society, 3–4,* 192–210.

Cvijić, J. (1918a). *Carte ethnographique de la Péninsule des Balkans*, 1:3 000 000. Paris: Librairie Armand Colin.

Cvijić, J. (1918b). *La Péninsule Balkanique*. Paris: Librairie Armand Colin.

Cvijić, J. (1920). *Granice i sklop naše zemlje* [Borders and Complexity of our Country]. Beograd: Srpska kraljevska državna štamparija.

Cvijić, J. (1921a). Abrazione i fluvijalne površi [Abrasion and Fluvial Levelled Surfaces]. *Bulletin of the Serbian Geographical Society, 6,* 1–61.

Cvijić, J. (1921b). *Govori i članci* [Speeches and Articles] (Book 1). Beograd: Napredak.

Cvijić, J. (1921c). *Govori i članci* [Speeches and Articles] (Book 2). Beograd: Napredak.

Cvijić, J. (1921d). Konformni i inversni reljef, poligenetske doline, nakalemljeni meandri [Conformal and Inverse Relief, Polygenetic Valleys and Entrenched Meanders]. *Bulletin of the Serbian Geographical Society, 6,* 94–112.

Cvijić, J. (1922a). *Balkansko poluostrvo i južnoslovenske zemlje. Osnove antropogeografije* [The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeo-

graphy] (Book 1). Beograd: Državna štamparija Kraljevine Srba, Hrvata i Slovenaca.
Cvijić, J. (1922b). *Metanastazička kretanja, njihovi uzroci i posledice* [Metanastasic Movements and their Causes and Effects]. Srpski etnografski zbornik, XXIV. *Naselja i poreklo stanovništva* (Book 12). Beograd: Srpska kraljevska akademija.
Cvijić, J. (1922c). Đerdapske terase [Đerdap Terraces]. *Bulletin of the Serbian Royal Academy, 101,* 1–33.
Cvijić, J. (1923a). *Iz uspomena i života* [Lifetime Memories and Stories]. *Omladinska matica za Vojvodinu* (Book 4). Novi Sad: Nova Vojvodina.
Cvijić, J. (1923b). *Govori i članci* [Speeches and Articles] (Book 3). Beograd: Napredak.
Cvijić, J. (1923c). *Govori i članci* [Speeches and Articles] (Book 4). Beograd: Napredak.
Cvijić, J. (1924a). Vatroslav Jagić. *Serbian Literary Gazette, XI,* 6–16.
Cvijić, J. (1924b). *Geomorfologija* [Geomorphology] (Book 1). Beograd: Državna štamparija.
Cvijić, J. (1924c). O Skerliću [On Skerlić]. *Serbian Literary Gazette, XII,* 2–16.
Cvijić, J. (1924d). The Evolution of Lapies. *The Geographical Review, 1,* 26–49.
Cvijić, J. (1925a). O Njegošu [On Njegoš]. *Serbian Literary Gazette, XVI,* 7–12.
Cvijić, J. (1925b). Stogodišnjica Đure Daničića [The Centenary of Đura Daničić]. *Serbian Literary Gazette, XVI,* 5–11.
Cvijić, J. (1926). *Geomorfologija* [Geomorphology] (Book 2). Beograd: Državna štamparija Kraljevine Srba, Hrvata i Slovenaca.
Cvijić, J. (1927). Škrape [Lapies]. *Bulletin of the Geographical Society, 13,* 17–29.
Ćalić, J., & Stošić, M. (2015). Terenske beležnice Jovana Cvijića [Field Notebooks of Jovan Cvijić]. In: V. Jović and A. Kostić (eds.) *Jovan Cvijić: život, delo, vreme, povodom 150 godina od rođenja* [Jovan Cvijić – Life, Work, Times: On the Occasion of the 150th Anniversary of the Birth], 233–249. Beograd: SANU and Geografski institut „Jovan Cvijić" SANU.
Daubrée, A. (1887). *Les eaux souterraines à l'époque actuelle: leur régime, leur température, leur composition, au point de vue du rôle qui leur revient dans l'économie de l'écorce terrestre*. Paris: Vve C. Dunod. – Tome 1 et tome 2.
Dedijer, J., & Grđić, V. (1905). Glacijalni tragovi na Zelengori, Tovarnici i Magliću [Glaciation Traces in the Mountains of Zelengora, Toravnica and Maglić]. *Bulletin of the Serbian Royal Academy, 69,* 169–190.
Deroko, A. (1962). *Monumentalna i dekorativna arhitektura u srednjevekovnoj Srbiji* [Monumental and Decorative Architecture in Medieval Serbia]. Beograd: Naučna knjiga, Univerzitetski udžbenik.
Deroko, A. (1964). *Folklorna arhitektura u Jugoslaviji* [Vernacular Architecture in Yugoslavia]. Beograd: Naučna knjiga, Univerzitetski udžbenik.
Deroko, A. (1968). *Narodno neimarstvo. Stara seoska kuća - I* [Vernacular Architecture. Old Rural House - I] Spomenik, CXVIII. Odeljenje društvenih nauka (Book 20). Beograd: Srpska akademija nauka i umetnosti.
Drobnjaković, B. (1923). *Jasenica* [The Region of Jasenica]. Srpski etnografski zbornik, XXV, *Naselja i poreklo stanovništva* (Book 13). Beograd: Srpska kraljevska akademija.
Drobnjaković, B. M. (1929). Glavni tipovi kuća [Main House Types]. *Savremena opština,* 86–94.
Đurović, P., Petrović, A. S., & Simić, S. (2010). Uticaj pleistocenske glacijacije na morfološku raznolikost uvala Durmitora i Žijova [The Overall Impact of Pleistocene Glaciation on Morphological Diversity of Uvalas at Durmitor and Žijovo]. *Bulletin of the Serbian Geographical Society, 90*(1), 17–34.
Džajević, J. (1965). Cvijićeva geomorfološka proučavanja u okolini Kragujevca [Cvijić's Geomorphological Research in the Vicinity of Kragujevac]. *Geographical Yearbook, 1,* 6–9.
Elezović, G. (1931). *Kolašin na Tari i Kolašin na Ibru* [Kolašin on the Tara River and Kolašin on the Ibar River]. Skoplje: Južni pregled.
Elezović, G. (1998). *Rečnik kosovsko-metohijskog dijalekta* [Dictionnary of the Dialect of Kosovo-Metohija]. Priština: Institut za srpsku kulturu, Kulturna manifestacija „Gligorije Gliša Elezović", Narodna i Univerzitetska biblioteka.
Erdeljanović, J. (1902). *Donje Dragačevo. Antropogeografska proučavanja.* Srpski etnografski zbornik, IV. *Naselja srpskih zemalja*. [Donje Dragačevo. Antropogeographic Studies. Settlements of Serbian Lands] (Book 1). Beograd: Srpska kraljevska akademija.
Erdeljanović, J. (1922). Predgovor [Foreword]. In: J. Cvijić. *Balkansko poluostrvo i južnoslovenske zemlje: osnove antropogeografije* [The Balkan Peninsula and the South Slavic Lands: Basics of Anthropogeography] (Book 1). Beograd: Državna štamparija Krajevine Srba, Hrvata i Slovenaca.
Erdeljanović, J. (1927). *Značaj etnoloških ispitivanja u Vojvodini* [The importance of ethnological research in Vojvodina]. Novi Sad: Matica Srpska.
Findrik, R. (1982). O prostoru stare seoske kuće [About the Organisation of Space in Old Rural Houses]. *Saopštenja, XIV,* 143–162.

Findrik, R. (1984). Kuća i stan na selu u Srbiji u drugoj polovini XVIII veka, prema svedočenjima savremenika [Rural Houses and Dwellings in Serbia in the Second Half of the 18th Century, According to the Testimonies of the Contemporaries]. *Saopštenja, XVI,* 103–118.

Fleury, E. (1917). *Les lapiés des calcaires au nord du Tage*. Travaux du Laboratoire de Géologie del'Institut technique supérieur de Lisbonne. Extrait du tome XII des: *Communicações do Serviço Geologico de Portugal. Lisbonne: Service géologique du Portugal*.

Fournier, E. (1902). Sur un nouvel exemple de phénomène de capture des cours d'eau superficiels par érosion souterraine. *Bull. Soc. Géol. de Fr. ive série, II,* 380–382.

Freeman, T. W. (1967). *The Geographer's Craft*. New York: Manchester University Press.

Gavrilović, M. (1912). *Miloš Obrenović I–III*. Beograd: Kraljevska srpska državna štamparija.

Glišić, R. (2002). *Jasenica: morfološko-hidrološke karakteristike* [Morphological and Hydrological Features of the Jasenica River]. Mladenovac: Beoknjiga.

Grčić, M. (1999). *Politička geografija* [Political Geography]. Beograd: Univerzitet u Beogradu, Geografski fakutet.

Grčić, M. (2004b). Migracije i poreklo stanovništva Jadra: zapadna Srbija [Migrations and Origin of the Population in the Jadar Region: Western Serbia]. *Buletin of the Serbian Geographical Society, 84*(1), 41–50.

Grčić, M. (2004a). Gnoseološki model antropogeografije prema koncepciji Jovana Cvijića i njegova naučna aktuelnost [Gnoseological Model of the Anthropogeography According to Jovan Cvijić's Concept and Its Scientific Topicality]. *Demografija, 1,* 25–48.

Grčić, M., & Grčić, Lj. (2002). *Mačva, Šabačka Posavina i Pocerina* [The Regions of Mačva, Posavina and Pocerina]. Beograd: Univerzitet u Beogradu, Geografski fakultet.

Grubić, A. (2015). Tektonika u delu Jovana Cvijića [Tectonics in the work of Jovan Cvijić]. In: V. Jović, A. Kostić (eds.) *Jovan Cvijić: život, delo, vreme, povodom 150 godina od rođenja* [Jovan Cvijić – Life, Work, Times: On the Occasion of the 150th Anniversary of the Birth], 159–176. Beograd: SANU and Geografski institut „Jovan Cvijić" SANU.

Harlacher, A. R. (1881). *Die Messungen in der Elbe und Donau und die hydrometrischen Apparate und Methoden des Verfassers*. Leipzig: Leipzig Duncker & Humblot.

Hasanbegović, R. (1964). Gradska i seoska kuća [Urban and Rural House]. *Bulletin of the Ethnographic Museum, 27*, 201-246.

Hasanbegović, R. (1984). Tradicionalna arhitektura u Požeškom kraju [Traditional Architecture in the Region of Požega]. *Bulletin of the Ethnographic Museum in Belgrade, 48*, 11–43.

Hilferding, A. (1972). *Poězdka po Gercegovině, Bosnìi i Staroî Serbìi* [A Visit to Herzegovina, Bosnia, and Old Serbia]. Sarajevo: Izdavačko preduzeće „Veselin Masleša".

Hughes, P. D., Woodward, J. C., Van Calsterenb, P. C., & Thomas, L. E. (2011). The Glacial History of the Dinaric Alps, Montenegro. *Quaternary Science Reviews, 30,* 3393–3412.

Ilić, B. (2005). Stanovništvo Ibarskog Kolašina u istorijskoj građi XIX i početkom XX veka [The population of the Ibar Kolašin in the Historical Sources of the 19th and early 20th centuries]. *Kosovsko-metohijski zbornik, 3,* 193–200.

Ilić, J. (1995). The Serbs in the Former SR of Croatia. In: Hadži-Jovančić, D. (Ed.) *The Serbian Question in the Balkans* (pp. 307–348). Belgrade: University of Belgrade, Faculty of Geography.

Ilić, J., Nikolić, D., Vlahović, P., Kicošev, S., Kurdulija, S., Miljković, E., & Vlahović, B. (1993). *Srbi u Hrvatskoj. Naseljavanje, broj i teritorijalni razmeštaj.* Etnički prostor Srba. [The Serbs in Croatia. Settlement, Number and Territorial Distribution] (Book 3). Beograd: Univerzitet u Beogradu, Geografski fakultet.

Ivanović, M. (2005). Crkveni spomenici Ibarskog Kolašina [Sacral Monuments in the Region of the Ibar Kolašin]. *Kosovsko-metohijski zbornik, 3,* 135–152.

Ivić, A. (1923). *Migracije Srba u Hrvatsku tokom 16, 17 i 18 stoleća* [Migration of Serbs to Croatia during the 16th, 17th and 18th Centuries]. Srpski etnografski zbornik, XXVIII. *Naselja i poreklo stanovništva* (Book 16). Beograd: Srpska kraljevska akademija.

Ivić, A. (1926). *Migracije Srba u Slavoniju tokom 16, 17 i 18 stoleća* [Migration of Serbs to Slavonia during the 16th, 17th and 18th Centuries]. Srpski etnografski zbornik, XXXVI, *Naselja i poreklo stanovništva* (Book 21). Beograd: Srpska kraljevska akademija.

Jakšić, S. (1996). *Prosveta i škole u Starom Kolašinu* [Education and Schools in Old Kolašin]. Zubin Potok: Stari Kolašin i Beograd: Ars Libri.

Jovanović, B. P. (1956). *Reljef sliva Kolubare – prilog poznavanju razvitka polifaznog i poligenetskog reljefa sliva* [Relief of the Kolubara River Basin – A Contribution to Knowledge of Polyphase and Polygenetic Relief Basin Development]. Posebna izdanja, CCLXIII. Geografski institut (Book 10). Beograd: Naučno delo.

Jovanović, B. P. (1969). Reljef srednjeg i donjeg dela Velikomoravske udoline [Relief of the Middle and Lower Sectors of the Velika Morava Valley]. *Journal of the Geographical Institute "Jovan Cvijić", 22,* 93–144.

Jovanović, B. P., Milić, S. Č., Zeremski M., Kostić, M., &Ršumović, R. (1969). Udolina Velike i Južne Morave [The Velika and Južna Morava Valley]. *Journal of the Geographical Institute "Jovan Cvijić", 22,* 1–92.

Jovanović, P. S. (1932). *Proučavanja abrazionih i fluvijalnih elemenata reljefa* [Study of the Abrasion and Fluvial Elements of Relief] (Book 1). Beograd: Srpsko geografsko društvo.

Jovanović, P. S. (1922). *Pribrežni jezerski reljef beogradske okoline* [Lake Relief Rim of Belgrade Vicinity]. (Doctoral Dissertation). Beograd: Prirodno-matematički fakultet Univerziteta u Beogradu.

Jovanović, P. S. (1951). Osvrt na Cvijićevo shvatanje o abrazivnom karakteru reljefa na obodu Panonskog basena [Review of Cvijić's Understanding of Abrasion Relief Around the Pannonian Basin Southern Rim]. *Journal of the Geographical Institute SAS, 1*, 1–23.

Jovičić, Ž. (1957). Reljef sliva Kalenićke reke [Relief in the Kalenićka River Basin]. *Collected Papers of the Geographical Institute, Faculty of Science and Mathematics, 4*, 45–68.

Jovičić, Ž. (1968). *Prilog geomorfološkim proučavanjima Vranjske kotline i Grdeličke klisure* [Contribution to the Study of Geomorphological features of the Vranje Valley and the Grdelica Gorge] (Book 4). Vranje: Narodnji muzej Vranje.

Kanic, F. (1989). *Srbija: zemlja i stanovništvo od rimskog doba do kraja XIX veka* [Das Königreich Serbien und das Serbenvolk von der Römerzeit bis zur Gegenwart] (4th edition). Beograd: Srpska književna zadruga.

Kojić, B. (1949). *Stara gradska i seoska arhitektura u Srbiji* [Old Town and Village Architecture in Serbia]. Beograd: Prosveta.

Kojić, B. (1950). Novija seoska kuća u Srbiji [Newer Rural House in Serbia]. *Collected Papers of the Ethnographical Institute SAS, 4*(1), 293–306.

Kojić, B. (1958a). Savremeni urbanistički zadaci i antropogeografska proučavanja [Contemporary Urban Tasks and Anthropogeographical Studies]. *Bulletin of the Ethnographical Institute SAS, VII*, 5–11.

Kojić, B. (1958b). *Seoska arhitektura i rurizam. Teorija i elementi* [Rural Architecture and Rurism. Theory and Elements]. Beograd: Građevinska knjiga.

Kojić, B., & Simonović, Đ. (1975). *Seoska naselja Srbije* [Rural Settlements of Serbia]. Beograd: Izdavačko-informativni centar studenata.

Korićanac, T. (2015). *Beogradski atlas Jovana Cvijića – Vek i po od rođenja 1865–2015* [The Belgrade Atlas of Jovan Cvijić: Century and a Half Since the Birth: 1865–2015]. Beograd: Srpska akademija nauka i umetnosti, Muzej grada Beograda.

Krebs, N. (1922). *Beiträge zur Geographie Serbiens und Rasciens*. Stuttgart: J. Engelhorns.

Krstić, O. (1961). *Grdelička klisura i Vranjska kotlina – prirodni uslovi, erozija i šumska privreda* [The Grdelica Gorge and Vranje Valley – Natural conditions, Erosion and Forest Economy]. Beograd: Institut za ekonomiku poljoprivrede.

Lazarević, R. (1957). Sliv Ralje, Jezave i Konjske reke [Jezava, Ralja and Konjska River Basins]. *Journal of the Geographical Institute SAS, 13*, 95–163.

Lazarević, R. (1959). *Azanjska fosilna dolina* [Fossil Valley of Azanja] (Book 36). Beograd: Srpsko geografsko društvo.

Lazarević, R. (1960). O morfogenezi površi na južnom obodu Panonskog basena [About Levelled Surfaces Morphogenesis in the Panonnian Basin Southern Rim]. *Bulletin of the Serbian Geographical Society*, *40*(1), 17–30.

Lazarević, R. (2007). *O reljefu Šumadije* [About Relief in Šumadija]. Proceedings from the First Congress of Serbian Geographers, Belgrade, 201–206.

Ljušić, R. (1993). *Vožd Karađorđe I.* Smederevska Palanka: Invest-Eksport.

Luković, M. (2009). Saobraćajne i privredne veze Ibarskog Kolašina sa susednim oblastima u prošlosti [Transport and Economic Links of the Ibar Kolašin with Neighbouring Regions in the Past]. In: M. Stojanović, (ed.) *Ibarski Kolašin. Priroda i tradicijska kultura* (pp. 79–116). Kragujevac: Centar za naučna istraživanja SANU.

Lutovac, M. (1954). Ibarski Kolašin: antropogeografska istraživanja [The Ibar Kolašin: Anthropogeographical Investigations]. Srpski etnografski zbornik LXVII. *Naselja i poreklo stanovništva* (Book 34). Beograd: Srpska akademija nauka.

Lutovac, M. (1958). Migracije i kolonizacije u Jugoslaviji u prošlosti i sadašnjosti [Migrations and Colonisation in Yugoslavia in Past and Present Times]. *Bulletin of the Ethnographical Institute SAS, VII,* 13–23.

Lutovac, M. (1959). Negotinska Krajina i Ključ. Privredno-geografska proučavanja [The Negotin Krajina and Ključ. Economic-geographical Studies]. *Journal of the Geographical Institute SAS, 15,* 1–89.

Lutovac, M. (1960). *Rožaje i Štavica: antropogeografska ispitivanja* [Rožaje and Štavica: Anthropogeographical Investigations]. Srpski etnografski zbornik, LXXV. *Naselja i poreklo stanovništva* (Book 37). Beograd: Srpska akademija nauka.

Lutovac, M. (1967). *Bihor i Korita: antropogeografska ispitivanja* [Bihor and Korita: Anthropogeographical Investigations]. Srpski etnografski zbornik, LXXXI. *Naselja i poreklo stanovništva* (Book 40). Beograd: Srpska akademija nauka i umetnosti.

Lutovac, M. (1968). *Migracioni procesi stanovništva Jugoslavije.* U: M. Lutovac (ur.) *Cvijićev zbornik u spomen 100-godišnjice njegovog rođenja* [Migration Processes of the Population of Yugoslavia: Proceedings on the Occasion of the 100th Birth Anniversary of Jovan Cvijić], 189-198. Beograd: Srpska akademija nauka i umetnosti.

Lutovac, M. (1973). Opšte geografske odlike đerdapskog područja [General Geographical Features of the Đerdap Region]. *Collected Papers of the Ethnographical Institute SASA, 6,* 19–22.

Lutovac, M. (1978). *Etničke promene u oblasti Stare Raške* [Ethnic Changes in the Region of Old Raška] (Book 20). *Glas SANU, CCCVII*, Odeljenje društvenih nauka, 20, 205-230.

Lutovac, M., Maletić, M., & Ranković, D. (Eds.). (1987). *Jovan Cvijić: Sabrana dela – Antropogeografski spisi* [Collected Works of Jovan Cvijić – Anthropogeographical Records] (3rd Edition, Book 4, Vol. 1). Beograd: Srpska akademija nauka i umetnosti, Zavod za udžbenike i nastavna sredstva.

Lutovac, M. (1980). *Župa Aleksandrovačka: antropogeografska ispitivanja* [Aleksandrovac Župa: Anthropogeographical Surveys]. Srpski etnografski zbornik, XCIII. *Naselja i poreklo stanovništva* (Book 43). Beograd: Srpska akademija nauka i umetnosti.

Macura, V. (1989). *Grad i urbanizovani predeo* [The City and Urbanised Landscape]. Beograd: Univerzitet u Beogradu, Šumarski fakultet.

Macura, M. (2005). Zubin Potok u Oblasti Brankovića 1455. godine [Zubin Potok in the District of Branković]. *Kosovsko-metohijski zbornik, 3*, 65–78.

Maksimović, B. (1962). *Urbanizam u Srbiji: osnivanje i rekonstrukcija varoši u 19. veku* [Urbanism in Serbia: The Establishment and Reconstruction of *Varoši* in the 19th Century] (2nd Edition). Beograd: Građevinska knjiga.

Marijanac, Z. (1996). Jovan Cvijić – život, rad i djelo (1865–1927) [Jovan Cvijić – Life and Work (1865–1927)]. *Duh srpske Usore: časopis za kulturu, duhovnost i istoriju,* 57–71.

Marković, J. Đ. (1965). Fluvio-denudaciono poreklo nižih površi po našem obodu Panonskog basena [Fluvio-denundation Origin of the Lower Levelled Surfaces on our Pannonian Basin Rim]. *Collected Papers of the Geographical Institute, Faculty of Science and Mathematics, 12,* 11–22.

Marković, J. Đ. (1978). Rečna plastika Šumadije [Lake Plastics of Šumadija]. *Collected Papers of the Geographical Institute, Faculty of Sciences and Mathematics, 25,* 5–13.

Mijatović, S. (1948). *Belica* [The Region of Belica]. *Naselja i poreklo stanovništva* (Book 30). Beograd: Srpska akademija nauka.

Miladinović, M. J. (1928). *Požarevačka Morava*. Srpski etnografski zbornik, XLIII. *Naselja i poreklo stanovništva* (Book 25). Beograd: Srpska kraljevska akademija.

Milanović, A. (2006). Hidrološka prognoza velikih voda u slivu Lepenice i zaštita od poplava [Hydrological Forecast of Maximal Water Level in the Lepenica River Basin and Flood Control Measures]. *Bulletin of the Serbian Geographical Society, 86*(1), 47–54.

Milanović, A. (2007a). *Hidrogeografska studija reke Lepenice* [Hydrogeographical Study of the Lepenica River] (Book 70). Beograd: Geografski institut „Jovan Cvijić" SANU.

Milanović, A. (2007b). Analiza rečnog režima i vodnog bilansa u slivu Lepenice [Analysis of River Regime and Water Balance in the Basin of Lepenica]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 56*, 35–50.

Milić, Č. (1985). Fosilne i rescentne plavine u slivu Jasenice [Fossil and Recent Sediment Deposits in the Jasenica River Basin]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 37,* 21–40.

Milićević, M. Đ. (1876). *Kneževina Srbija I* [The Principality of Serbia No. I]. Beograd: Državna štamparija.

Milićević, M. (1904). *Karađorđe u govoru i tvoru* [Karađorđe in Word and in Deed]. Beograd: Državna štamparija Kraljevine Srbije.

Milivojević, M. (2007). *Glacijalni reljef na Volujaku sa Biočem i Maglićem* [Glacial Relief of Mts. Volujak, Bioč and Maglić] Posebna izdanja (Book 68). Beograd: Geografski institut „Jovan Cvijić" SANU.

Miljković, Lj., & Stojanjelović, D. (2002). Tradicionalno nasleđe Vlaha kao turistički motiv Homolja [Traditional Heritage of the Vlachs as a Tourist Motive of Homolje]. *Researches Review of the Department of Geography, Tourism and Hotel Management, 32,* 119–124.

Milojević, B. Ž. (1913). *Rađevina i Jadar, antropogeografska ispitivanja* [The Regions of Rađevina and Jadar] Srpski etnografski zbornik, XX. *Naselja i poreklo stanovništva* (Book 9). Beograd: Srpska kraljevska akademija.

Milojević, B. Ž. (1922). Glečerski tragovi u oblasti Vlasulje, Bioča i Kručice [Traces of Glaciers in Mts. Vlasulja, Bioč and Kručica]. *Bulletin of the Geographical Society, 7–8*, 275-294.

Milojević, B. Ž. (1934). *Treskavica*. Sarajevo: *Glasnik zemaljskog muzeja BiH, 46*, 65-72.

Milojević, B. Ž. (1937). *Visoke planine u našoj kraljevini* [High Mountains in Our Kingdom]. Beograd: Državna štamparija Kraljevine Jugoslavije.

Milojević, B. Ž. (1948). *Dolina Zapadne Morave, Morače i Treske* [The Zapadna Morava, Morača and Treska River Valleys] Posebna izdanja (Book 26). Beograd: Srpsko geografsko društvo.

Milojević, S. M. (1930). Geografski prikaz Prahovo-Knjaževac [Geographical Survey of Prahovo-Knjaževac]. In: P. Vujević (ed.) *Opis puta III kongresa geografa i etnografa u Kraljevini Jugoslaviji*, Beograd, 68–78.

Mitrović, A. (2007). *Serbia's Great War, 1914–1918*. London: Purdue University Press.

Nakićenović, S. (1926). *Kninska krajina*. Knin: Zavičajni klub „Kninska Krajina", Beograd: Srpsko kulturno društvo „Zora", Knin–Beograd: Udruženje Srba iz Hrvatske.

Nenadović, S. M. (2002). *Ilustrovani rečnik izraza u narodnoj arhitekturi* [Illustrated Dictionary of Folk Architecture]. Beograd: Prosveta.

Nešić, D. (2004). Niski polifazni fluvijalni nivoi Crnog Timoka u Zaječarskom basenu [Low Polyphase Fluvial Levels of the Crni Timok in the Zaječar Basin]. *Bulletin of the Serbian Geographical Society, 84*(1), 29–40.

Novaković, S. (1894). *S Morave na Vardar – putne beleške* [From the Morava to the Vardar – Travel Notes]. Beograd: Kraljevska srpska državna štamparija.

Pantelić, N. (1986). Izvori i literatura za proučavanje narodne likovne umetnosti u Jugoslaviji [The Sources and Literature for the Study of Folk Art in Yugoslavia]. *Bulletin of the Ethnographic Museum in Belgrade, 50*, 89–99.

Pavlović, Lj. (1925). *Užička Crna gora* [The Region of Užička Crna gora]. Srpski etnografski zbornik, XXXIV. *Naselja i poreklo stanovništva* (Book 19). Beograd: Srpska kraljevska akademija.

Pavlović, D. S. (1986). Stanje zaštite i vrednovanje spomenika narodne arhitekture u Evropi [The State of Preservation and Evaluation of Vernacular Architectural Monuments in Europe]. *Saopštenja, XVIII,* 315–319.

Pavlović, Lj. (1930). *Sokolska nahija – Ko smo mi Podrinci* [The Sokolska District – Origin of the Podrinje Population]. Srpski etnografski zbornik, XLVI. *Naselja i poreklo stanovništva* (Book 26). Beograd: Srpska kraljevska akademija.

Pavlović, R. (1948). *Podibar i Gokčanica* [The Regions of Podibar and Gokčanica]. Srpski etnografski zbornik, LVI. *Naselja i poreklo stanovništva* (Book 30). Beograd: Srpska akademija nauka.

Pešić-Maksimović, N. (2014). *Moravska kuća Srbije: bogatstvo oblika* [The Moravian Type of House in Serbia: Richness of Shapes]. Beograd: Društvo konzervatora Srbije i Republički zavod za zaštitu spomenika kulture.

Petrović, D. (1949). *Šumadijska Kolubara* [The Regions of Kolubara of Šumadija]. *Naselja i poreklo stanovništva* (Book 31). Beograd: Srpska akademija nauka.

Petrović, D. (1953). Epigenetska klisura Velikog Timoka kod Zaječara [Epigenetic Gorge of the Veliki Timok River Near Zaječar*]. Journal of the Serbian Academy of Sciences, XXIV; Geographical Institute, 4,* 65-75.

Petrović, D. (1954). Vratarnička klisura [The Vratarnica Gorge]. *Collected Papers of the Geographical Institute, Natural-Mathematical Faculty, 1,* 1–9.

Petrović, D. (1956a). *Dolina Velikog Timoka* [The Veliki Timok Valley]. In: Izveštaj o radu IV kongresa geografa FNR Jugoslavije u Beogradu, 121-135. Beograd: Savez geografskih društava FNR Jugoslavije.

Petrović, D. (1956b). Asimetrija neposrednog sliva Velikog Timoka [Asymmetry of the Direct Timok River Basin]. *Bulletin of the Serbian Geographical Society, 36*(2), 1–8.

Petrović, D. (1958). Klisura Velikog Timoka [The Veliki Timok Gorge]. *Journal of the Geographical Institute SAS, 5,* 1–9.

Petrović, D. (1970). *Sliv Crnog Timoka (geomorfološka studija)* [The Veliki Timok Basin (Geomorphological Study] Poseba izdanja (Book 22). Beograd: Geografski institut „Jovan Cvijić".

Petrović, D. (1988). Problemi jezerskih površi na obodu Panonskog i Vlaško-pontijskog basena u Srbiji [Problems of Lake Levelled Surfaces Along the Panonian and Vlacho-Pontian Basin Rims in Serbia]. *Journal of the Geographical Institute „Jovan Cvijić" SASA, 40*, 69–79.

Petrović, R. (2007). Dositej, Vuk i Sterija – tri nacionalne paradigme [Dositej, Vuk and Sterija – Three National Paradigms]. *Collected Papers of the Faculty of Philosophy in Priština, 36,* 105–117.

Popović, S. L. (1950). *Putovanja po Novoj Srbiji 1878 i 1880* [Traveling across New Serbia in 1878 and 1880]. Beograd: Srpska književna zadruga.

Radivojević, T. (1911). *Lepenica* [The Region of Lepenica]. Srpski etnografski zbornik, XV. *Naselja srpskih zemalja* (Book 7). Beograd: Srpska kraljevska akademija.

Radovanović, V. (1958). *Jovan Cvijić*. Beograd: Prosveta.

Radovanović, V. S. (1924). *Tikveš i Rajec: antropogeografska ispitivanja* [Tikveš and Rajec: Anthropogeographical Investigations]. Srpski etnografski zbornik, XXIX. *Naselja i poreklo stanovništva* (Book 17). Beograd: Srpska kraljevska akademija.

Radovanović, V. S. (1959). *Opšta antropogeografija* [General Anthropogeography]. Beograd: Građevinska knjiga.

Radovanović, M. (1961). *Prizrenski Podgor: antropogeografska studija* [The Prizren Podgor: Anthropogeographical Study] (Doctoral dissertation). Beograd: Univerzitet u Beogradu, Prirodno-matematički fakultet.

Radovanović, M. (1978). Demografske promene u Đerdapskim naseljima od 1961. do 1971 [Demographic Changes in the Đerdap Settlements From 1961 to 1971]. *Collected Papers of the Ethnographical Institute SASA, 6,* 39–56.

Radovanović, M. (2004). *Etnički i demografski procesi na Kosovu i Metohiji* [Ethnic and Demographic Processes in Kosovo and Metohija]. Beograd: Liberpress.

Radovanović, M. (2008). *Kosovo i Metohija: antropogeografske, istorijskogeografske, demografske i geopolitičke osnove* [Kosovo and Metohija: Anthropogeographical, Historical-geographical, Demographical and Geopolitical Fundamentals]. Beograd: Službeni glasnik.

Radovanović, M. V. (1989). Opština Veliko Gradište – Prilog sintezi rezultata timskog naučno-istraživačkog rada [Municipality of Veliko Gradište – A Contribution to the Synthesis of the Team Research Findings]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 41,* 315–335.

Rakić, M. (1905). *Kačer. Naselja srpskih zemalja* [The Region of Kačer. Settlements of the Serbian Lands] (Book 3). Beograd: Srpska kraljevska akademija.

Ribar, M. (2001). Tradicionalna seoska kuća Šumadije i Pomoravlja [Traditional Rural House in Šumadija and Pomoravlje]. *Bulletin of the Ethnographic Museum in Belgrade 1901–2001,* 211–243.

Roglić, J. (1952). *Problem neogenog abrazionog reljefa* [Problem of the Neogene Abrasive Relief]. In: P. Kiroski (ed.) *Proceedings of the FPRY Congress of Geographers*, 1-10. Skopje: Geografsko društvo NR Makedonije i Filozofski fakultet.

Ršumović, R. (1960). *Reljef sliva Goliske Moravice* (geomorfološka studija) [Relief of the Goliska Moravica River Basin - Geomorphological Study]. Posebna izdanja, CCCXXIX. Geografski institut (Book 16). Beograd: Naučno delo.

Savić, O. (1989). Veliko Gradište – privredni razvoj, teritorijalni rast, značaj i uticaji u oblasti [Veliko Gradište – Economic Development, Territorial Growth, Importance and Influences in the Region]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 41,* 259–313.

Savić, O. (1977). Donji Milanovac i njegovo stanovništvo [Donji Milanovac and Its Population]. *Journal of the Geographical Institute "Jovan Cvijić" SASA,* 29, 171–216.

Sikimić, B. (2009). Svakodnevni život u Ibarskom Kolašinu [Everyday Life in the Ibar Kolašin]. In: M. Stojanović (ed.) *Ibarski Kolašin, Priroda i tradicijska kultura* (117–149). Kragujevac: Centar za naučna istraživanja SANU.

Sikimić, B. (2010). Ibarski Kolašin između tradicije i svakodnevice [The Ibar Kolašin Between Tradition and Everyday Life]. In: S. Miloradović (ed.) *Kosovo i Metohija u civilizacijskim tokovima,* Međunarodni tematski zbornik (Book 1) Jezik i narodna tradicija (pp. 275–289). Kosovska Mitrovica: Univerzitet u Prištini, Filozofski fakultet.

Sindik, I. (1926). *Dubrovnik i okolina* [Dubrovnik and its Vicinity]. *Naselja i poreklo stanovništva* (Book 23). Beograd: Srpska kraljevska akademija.

Sretenović, Lj. (1955). Režim Moravice i mogućnosti korišćenja njenih voda [The Moravica River Regime and the Possibility of Using Its Waters]. *Collection of Papers of the Geographical Institute, Faculty of Sciences and Mathematics,* 6–27.

Stamenković, S., & Bačević, M. (1992). *Geografija naselja* [Geography of Settlements]. Beograd: Univerzitet u Beogradu, Geografski fakultet.

Stanković, S. (2007). *Jovan Cvijić: Život i rad* [Jovan Cvijić: Life and Work]. Beograd: Intersistem.

Stanković, S. M. (2015). Jovan Cvijić: Biografija [Jovan Cvijić: A Biography]. In: V. Jović, A. Kostić (eds.) *Jovan Cvijić: život, delo, vreme, povodom 150 godina od rođenja* [Jovan Cvijić – Life, Work, Times: On the Occasion of the 150th Anniversary of the Birth], 11–77. Beograd: SANU and Geografski institut „Jovan Cvijić" SANU.

Stanojević, S. (1908). *Istorija srpskoga naroda* [History of the Serbian People]. Beograd: Štamparija: "Dositej Obradović".

Statistical Office of the Republic of Serbia. (2014). *Uporedni predgled broja stanovnika 1948–2011* [Comparative Overview of the Number of Population, 1948–2011] (Book 20). Beograd: Republički zavod za statistiku.

Statistics of the Kingdom of Serbia. (1893). *Popis stanovništva u Kraljevini Srbiji 1890* [Population Census in the Kingdom of Serbia] (Book 1). Beograd: Statistika Kraljevine Srbije.

Stepanović, Ž. (1966). Kragujevačka kotlina [The Kragujevac Basin]. *Geographical Yearbook, 2,* 35–48.

Stepanović, Ž. (1969). Jezera u Šumadiji [Lakes in Šumadija]. *Geographical Yearbook, 5,* 19–32.

Stepanović, Ž. (1974). *Hidrološke karakteristike Kragujevačke kotline sa posebnim osvrtom na snabdevanje Kragujevca vodom* [Hydrological Characteristics of the Kragujevac Basin with Special Emphasis on Water Supply of Kragujevac]. Kragujevac: Fond za finansiranje visokoškolskih ustanova, naučne i naučno-izdavačke delatnosti Skupštine opštine Kragujevac.

Stevanović, P., Maletić, M., & Ranković, D. (eds.) (1987). *Jovan Cvijić: Sabrana dela, Karst: geografska monografija – Novi rezultati o glacijalnoj eposi Balkanskog poluostrva* [The Collected Works of Jovan Cvijić, Karst: Geographical Monograph – New Results on the Glacial Epoch in the Balkan Peninsula] (Book 1). Beograd: Srpska akademija nauka i umetnosti, Književne novine, Zavod za udžbenike i nastavna sredstva.

Stojančević, V. (1965). *Jovan Cvijić - Autobiografija i drugi spisi* [Jovan Cvijić – Autobiography and Other Wri-

tings] (Edited Edition, Book 394). Beograd: Srpska književna zadruga.
Timotijević, M. (2006). Privatni prostori i mesta privatnosti [Personal Spaces and Places of Privacy]. In: A. Stolić and N. Makuljević (eds.) *Privatni život kod Srba u devetnaestom veku*, 165–244. Beograd: Clio.
Trifunovski, J. (1964). *Grdelička klisura – antropogeografska rasprava* [The Grdelička Klisura Gorge – Anthropogeographical Discussion]. Leskovac: Biblioteka Narodnog muzeja u Leskovcu.
Urošev, M. (2007). *Sliv Golijske Moravice – hidrološka analiza* [Golijska Moravica Basin – Hydrological Analysis]. Beograd: Geografski institut „Jovan Cvijić" SANU.
Urošević, A. (1935). *Gornja Morava i Izmornik* [The Gornja Morava and Izmornik Rivers]. Srpski etnografski zbornik, LI. *Naselja i poreklo stanovništva* (Book 28). Beograd: Srpska kraljevska akademija.
Urošević, A. (1950). *Novobrdska Kriva reka* [Kriva Reka River Near Novo Brdo]. Srpski etnografski zbornik, LX. *Naselja i poreklo stanovništva* (Book 32). Beograd: Naučna knjiga.
Urošević, A. (1965). *Kosovo.* Srpski etnografski zbornik, LXXVIII. *Naselja i poreklo stanovništva* (Book 39). Beograd: Srpska akademija nauka i umetnosti.
Urošević, A. (1987). *Etnički procesi na Kosovu tokom turske vladavine* [Ethnic Processes in Kosovo During the Ottoman Rule]. Posebna izdanja, DLXXVII. Odeljenje društvenih nauka (Book 94). Beograd: Srpska akademija nauka i umetnosti.
Van den Broeck, E., & Rahir, E. (1903). La Lesse souterraine. *Bulletin de la Société Belge de Géologie, de Paléontologie et d'Hydrologie, 17,* 119–144.
Vlahović, M., Milosavljević, P., & Dabac, T. (1956). *Seoski nadgrobni spomenici u Srbiji* [Rural Funeral Monuments in Serbia]. Beograd: Jugoslavija.
Vlahović, P. (2000). *O antropogeografskim i etnografskim spisima Jovana Cvijića* [On Anthropogeographical and Ethnographic Writings by Jovan Cvijić]. In: M. Lutovac, et al. (Ed.), *Jovan Cvijić: Sabrana dela – Antropogeografski spisi* [The Collected Works of Jovan Cvijić – Anthropogeographical Writings] (3rd Edition, Book 4, Vol. 1). Beograd: Srpska akademija nauka i umetnosti, Zavod za udžbenike i nastavna sredstva.
von Ranke, L. (1879). *Serbien und die Türkei im neunzehnten Jahrhundert* [Serbia and Turkey in the 19th Century]. Leipzig: Leipzig Duncker & Humblot.
Vujević, P. (1912). Uticaj okolnih mora na temperaturne prilike Balkanskog poluostrva [The influence of the Surrounding Seas on the Temperature Conditions of the Balkan Peninsula]. *Bulletin of the Serbian Geographical Society, 1,* 5–19.
Zeremski, M. (1957). Fluvio-denudaciono ili abraziono poreklo Mačkatske površi [Fluvio-denundation or Abrasion Origin of the Mačkatska Levelled Surface]. *Collected Papers of the Geographical Institute, Faculty of Science and Mathematics, 4,* 87–105.
Zeremski, M. (1974). Tragovi neotektonskih procesa u reljefu istočne Srbije (Prilog strukturnoj geomorfologiji istočne Srbije) [Traces of Neotectonic Processes in the Relief of Eastern Serbia (A Contribution to the Study of Structural Geomorphology of Eastern Serbia]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 25,* 1–83.
Zeremski, M. (1982). Ortogonalne morfostrukture i jednosmerne asimetrije – geomorfološki pokazatelji neotektonskih procesa niske Šumadije [Orthogonal Morphostructures and Oneway Asymmetry – Geomorphological Indicators of Neotectonic Processes of Low Šumadija Area]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 34,* 27–44.
Zeremski, M. (1983a). Neotektonika Kragujevačke kotline sa gledišta geomorfologije [Neotectonics of the Kragujevac Basin with Geomorphological Review]. *Journal of the Geographical Institute "Jovan Cvijić" SASA, 35,* 1–21.
Zeremski, M. (1983b). *Tragovi neotektonskih procesa u reljefu Zapadne Srbije* [Traces of Neotectonic Processes in the Relief of Western Serbia] Posebna izdanja (Book 33). Beograd: Geografski institut „Jovan Cvijić" SANU.
Zeune, A. (1808). *Gea [Gaea]. Versuch einer wissenschaftlichen Erdbeschreibung*. Berlin: Wittich.
Žujović, J. M. (1929). *Postanak zemlje i naše domovine* [The Origin of the Earth and of Our Country] (Part II). Beograd: Poučnik V, SKZ.

CIP - Каталогизација у публикацији -
Народна библиотека Србије, Београд

91:929 Цвијић J.
91(081)

FROM the notebooks of Jovan Cvijić : selected pages and interpretations
/ [editors Ana Milanović Pešić (editor-in-chief) ... [et al.] ;
[translation Dejan Vukelić]. - Belgrade : SASA : Geographical Institute
"Jovan Cvijić" SASA, 2019 (Belgrade : Službeni glasnik). - 199 str. :
ilustr., faks. ; 24 cm

Na spor. nasl. str.: Из бележница Јована Цвијића. - Slike J. Cvijića. -
Tiraž 300. - Str. 11-12: Foreword / Ana Milanović Pešić. - Str. 13-16:
Legacy of Jovan Cvijić / Tatjana Korićanac. - Str. 17-37: Historical and
Geographical Context of Cvijić's Notebooks / Aleksandra Terzić. -
Bibliografija: str. 192-199. - Sadrži faksimile Cvijićevih beležaka sa
komentarima.

ISBN 978-86-7025-792-4 (SASA)
ISBN 978-86-80029-75-7 (GIJC)
1. Cvijić, Jovan, 1865-1927 [особа или установа којој је књига (рукопис)
посвећена]
a) Цвијић, Јован (1865-1927) b) Физичка географија
COBISS.SR-ID 27304167