

SUBTERRANEAN WATERS DESCRIBED IN CARNIOLAN LETTERS MAILED TO A. KIRCHER (* 1601; †1680)

PODZEMNE VODE V KRANJSKIH PISMIH POSLANIH A. KIRCHERJU (* 1601; †1680)

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Abstract

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Stanislav Južnič: Subterranean waters described in Carniolan letters mailed to A. Kircher (1601; †1680)*

Kircher's letters connected with the area of today's Slovenia were analyzed. His Jesuit informer Wilpenhoffer's reports on the Cerknica Lake and Idrija Mine were put forward. He also helped distribution of Kircher's books among Auerspergs and other Ljubljana nobles. Janez Vajkard Auersperg's letters as an example of high nobility correspondent patronage were put at the limelight in connection with Janez and his admirer Valvasor's own research of the Postojna Cave flora and fauna.

Keywords: Athanasius Kircher, Christophorus Wilpenhoffer, Janez Vajkard Auersperg, Janez Vajkard Valvasor, History of Karst Research, Cerknica Lake, Jesuits.

Izveček

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Stanislav Južnič: Podzemne vode v kranjskih pismih poslanih A. Kircherju (1601; †1680)*

Prvič so obravnavana pisma, ki so jih Kircherju pošiljali jezuiti in plemiči povezani z območji sedanje Slovenije. Kircher je z njihovo pomočjo sestavil eno prvih tehtnih teorij Cerkniskega jezera in objavil številna druga dognanja o krasu. Ugotovljeni so zbiralci Kircherjevih podatkov o Cerkniskem jezeru in idrijskem rudniku, ki ju osebno ni obiskal. Pregledana so poročila jezuita Wilpenhofferja, ki je skrbel za širjenje Kircherjevih del na Kranjskem. Opisana so pisma, ki jih je Kircherju pošiljal Janez Vajkard Turjaški, mecen Kircherjevih knjig, samosvoj pionir raziskovanja rib v globinah Postojnske jame in Valvasorjev vzornik.

Ključne besede: Athanasius Kircher, Krištof Wilpenhoffer, Janez Vajkard Turjaški, Janez Vajkard Valvasor, zgodovina raziskovanja krasa, Cerkniško jezero, jezuiti.

INTRODUCTION

The baroque letters are important source for the history of science and karst in particular. In fact, they are sometimes the only baroque sources available because at those times the printed publications were not such necessary part of the research as they are nowadays. Kircher's correspondence kept at Roman Archive of the Pontificia Università Gregoriana (APUG) contains 2291 letters of 763 writers distributed at 14 folios. Almost one third of the correspondents were Jesuits. We knew some of

the letters contained information about Cerknica Lake which Kircher never visited personally but nevertheless described as one of its first scientific researchers. We suspected that he had Carniolan informers and the guess proved to be a true one. We examined all letters mailed to Kircher from Carniola or Gorica, and also the letters of people connected with those areas. We are happy to report that at least some success was obtained.

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KOBAV

Tab. 1: Latin Kobav's letters mailed from Vienna to Kircher's Rome (Gramatowski & Rebernik, 2001, 63).

Date	APUG
January 1, 1640	567 ff. 20r-21v
February 20, 1640	567 f. 205rv

Our first "suspect" was Cerknica native Andreas Kobav (* November 7 or 11, 1593 Cerknica; joined *Societatis Jesu* (SJ) October 22, 1610 Brno at Moravia; † February 12, 1654 Trieste), one of the most talented Paul Guldin's (Habakkuk, * 1577; † 1643) students at Graz University. After his youth at native Notranjska, Kobav joined the Franciscans but soon changed his mind and became a Jesuit. At least in 1652 he was a confessor at Ljubljana College. Just few months before death he moved to Trieste College, probably stopping at Cerknica on his way. As the native of Cerknica he was certainly an expert for the Cerknica Lake phenomena, but he did not describe them at his known letters mailed to Kircher. He rather examined the properties of new comet paving the way for his forthcoming book.

CUZZIO

Tab. 2: Italian letters of Giulio Cuzzio (SJ; † 1688) mailed from Gorica to Kircher's Rome (Gramatowski & Rebernik, 2001, 37, 131)

Date	APUG
September 6, 1675	565 f. 184rv
November 1, 1675	565 f. 263rv

Besides Ljubljana also Jesuits from Gorica or Trieste College could have informed Kircher about the nearby Notranjska limestone area phenomena. Just two letters from Gorica mailed to Kircher are kept at APUG. Cuzzio wrote both of them in Italian language with Latin appendix of his college rector. Among other reports he described Jesuit visit to the Count Torrismondo de la Torre's (*Thurn-Valsassina*) castle Devin (*Duino, Tybein*). He described the administrative curiosities and did not take care of the limestone region Timav River near Devin or Cerknica Lake.

WILPENHOFFER'S CERKNICA LAKE REPORT

Tab. 3: Wilpenhoffer's Latin letters mailed to Kircher after Wilpenhoffer's settlement at Ljubljana in 1653

Date	APUG
October 24, 1658	567 f. 111rv
October 23, 1669	559 f. 95rv
November 28, 1669	559 f. 50rv

Ljubljana Jesuit Christophorus Wilpenhoffer (Krištof Wilpenhofer, Wilpenhofer, Vilpenhoffer, Bilpenhofer, * February 1597 Radstadt on Enns at Salzburg; SJ March 19, 1614 Brno; † March 30, 1671 Ljubljana) stayed at Ljubljana between 1640-1641 and 1644-1648. At that time he did not write to Kircher, who was just beginning his ascent to fame. During his third and final stay at Ljubljana Wilpenhoffer mailed several letters to Kircher's Rome (Gramatowski & Rebernik, 2001, 113, 136; Dolinar, 1976, 186). Those documents are of greatest interest for this study. At least one of Wilpenhoffer's Ljubljana letters went through Venice and got a mark "franchise of Venice".

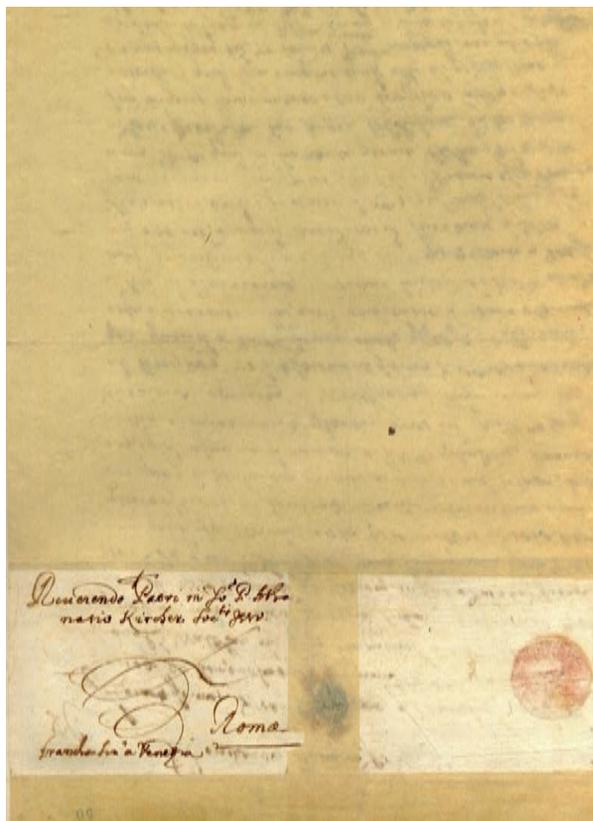


Fig. 1: Wilpenhoffer's October 24, 1658 letter with Kircher's address and a mark of franchise (APUG 567 folio 111v). (Courtesy of Stanford University and Glen Worthey).

expected them anyway. Just by reading the titles and descriptions of his “planned” works everybody was wondering how clever and erudite man Kircher must be. The Baroque authors actually knew very well how to sell their books and we could learn a lot from their examples.

In addition Wilpenhoffer brought previously unknown facts about karst to Kircher’s attention. In *Mundus* Kircher did not mention Idrija Mine or Cerknica Lake yet, although at the paragraph “Alpine hydraulic” he described waters at Alps region with silver and other minerals beneath the mountains (Kircher, 1657, 185-186). He carefully described Danube River (Kircher, 1657, 162) and properties of quicksilver (Kircher, 1657, 202) but failed to mention famous Idria mercury mine.

Wilpenhoffer reported on the mercury mine without mentioning the city of Idrija. He also described the vein of «fossil silver» and cited the Jesuit Casati’s work connected with mining. Wilpenhoffer put special concern on the lake »near the town named Cerknica«. The lake altogether sank to enable ploughing of the dried fields and even hunting. After a while the lake reappeared again and flooded the fields with the water and fish, according to Wilpenhoffer’s report.

Eleven years later on October 23, 1669 Wilpenhoffer again wrote from Ljubljana to Kircher’s Rome without mentioning any karst phenomena. A week later he wrote a new letter (November 28, 1669) with last lines somewhat compressed to fit the single page. He mentioned two parts of Kircher’s *Ars Magna sciendi seu combinatorica* under the shortened title *Ars combinatorica*. That book again pleased very much »the Count his Eminence Land Governor« Volf Auersperg. In the meanwhile Volf was promoted to a higher status of emperor’s secret counselor (1660) and consequently got the prestigious title “his Eminence” (Molè, 1937, 50). Volf certainly got Kircher’s book *Ars combinatorica* too, and Schönleben shelved it at the class of – linguistics. Certainly, the words of the baroque times did not always have the meaning we ascribe to them today. At the front page bookplates of three other Kircher’s books Schönleben wrote a note: “author’s (Kircher’s) present”. *Ars combinatorica* and *Mundus Subterranei* were not among them. Volf certainly have to buy some of his books as had all ordinary mortals, even if he was the Carniolan Governor.

Kircher continued Frischlin’s research of Carniola subterranean waters (Habe, Kranjc, 1981, 20-21; Korošec, 1967, 12) without ever seeing the phenomena he described. Kircher’s museum at Rome was in fact the Jesuit collection of all world curiosities and Carniolan ones just fit there. Already before Wilpenhoffer’s notes Kircher received some other information about Carniolan peculiarities focusing on Idrija Mercury Mine. Kircher’s informer was very young Klagenfurt Jesuit Sigismund

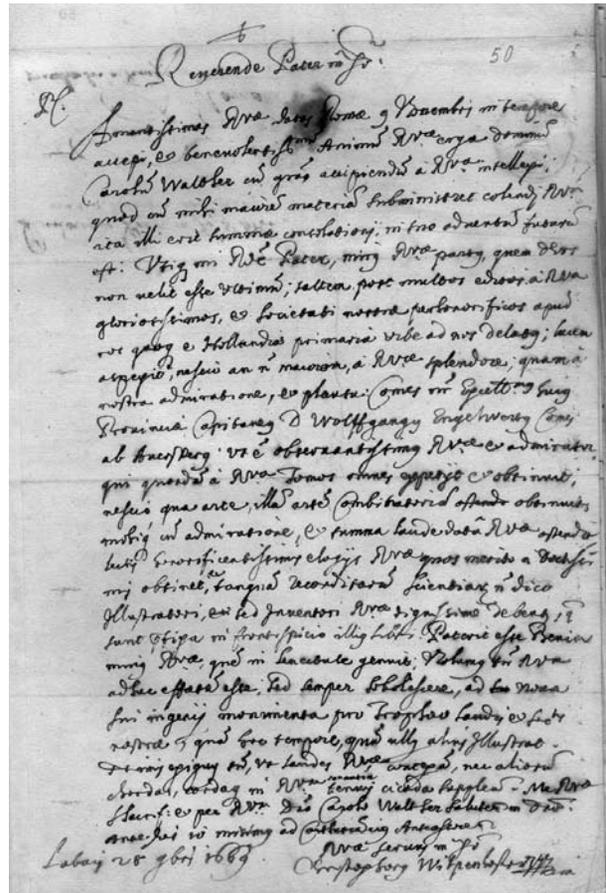


Fig.4: Wilpenhoffer reports to Kircher about Volf’s excitement while reading his *Ars combinatorica* on November 28, 1669 (APUG 559 folio 50r). (Courtesy of Stanford University and Glen Worthey)

Siserius (* May 1, 1636 Klagenfurt; SJ; † December 29, 1693 Vienna). Kircher published Siserius’ letters as he was used to do with other fellow Jesuits reports, although he eventually did not care to publish Wilpenhoffer’s contributions. Siserius’ work was put at the limelight as the appendix of first edition of Kircher’s subterranean book under the title *Epistola ad R.P. Kircherum, in qua hydria sive fodina argenti vivi in Carniola describitur* (Kircher, 1657, 2: 173). Wilpenhoffer certainly read the item at Auersperg’s Ljubljana library and decided to improve Kircher’s understanding of the phenomena with his own Idrija Mine and Cerknica Lake descriptions. Kircher eventually used the new data acquired from Wilpenhoffer’s letter for his *Mundus Subterraneus* (Kircher, 1678, book 9, part 2, paragraph 7).

From the early little booklet later published as the addenda to Kircher’s outer space trip, the third printing of *Mundus* (1678) with Cerknica Lake description have grown up to nearly thousand pages of the great folio format. Its weight is almost 5 kg! The book was not just

heavy, it was considered to be the most important caves and underground waters baroque research. Kircher put at the limelight early description of the caves Antiparos at the middle of Greek Kiklads (Kyklads) Islands southeast of Athens, Ghar Kebir of Tunis, Drachenhöhle near Mixnitz southeast of Styrian Bruck on Mur River, and, least but not last, the Cerknica Lake. He founded the modern hydrology of karst and connected the subterranean springs with seas and precipitations.

In 1669 Englishman Edward Brown (* 1642; † 1708) continued Kircher's Cerknica Lake research on behalf of the London Royal Society. Brown's mistakes stimulated the development of Valvasor's own opinions and ideas crowned with Valvasor's ambitious ellection at the same Royal Society as it's first and so far the only fellow from Carniola on December 14, 1687. Former Jesuit Schönleben and Valvasor modified Kircher's explanation of fludds (Valvasor, 1689, 1: 626, 630), and Valvasor bought almost all Kircher's works including *Mundus*. During Kircher's lifetime E.G. Kappelius (1672, 1685) described Cerknica Lake fish and fields at Hamburg Journal (Korošec, 1967, 13) and paved the way for the research of local authorities, namely the Prince Janez Vajkard Auersperg.

JANEZ VAJKARD AUERSPERG

Tab. 4: Count, later Prince Janez Vajkard Auersperg's letters mailed to Kircher

Date	Place	APUG
May 30, 1651	Vienna	556 ff. 214r, 215v
February 9, 1654	Regensburg	556 ff. 212r, 213v
October 27, 1655	Vienna	556 ff. 204r, 205v
May 3, 1661	Vienna	562 ff. 26rv
November 12, 1665	Vienna	555 ff. 212r1, v1, 213v1
April 23, 1671	Ljubljana	565 ff. 70rv, 70av

Janez Vajkard Auersperg, his older brother Volf Engelbert, and their protégé Valvasor were among the most erudite Carniolans. Six Janez Vajkard Auersperg's letters to Kircher were preserved at APUG. In first letters Janez ensured his patronage and eventually also payment of Kircher's usually very expensive books. Kircher dedicated a part of his *Oedipus* to Janez, who was just promoted to the rank of Prince (Kircher, 1654, 139). Janez mailed the last preserved letter to Kircher from Ljubljana on April 23, 1671, more than a year after he was dismissed from his highest positions at Viennese Court on December 10, 1669.

On July 3, 1669 the Prince Janez Vajkard Auersperg bought the Prince Janez Anton Eggenberg's Notranjs-

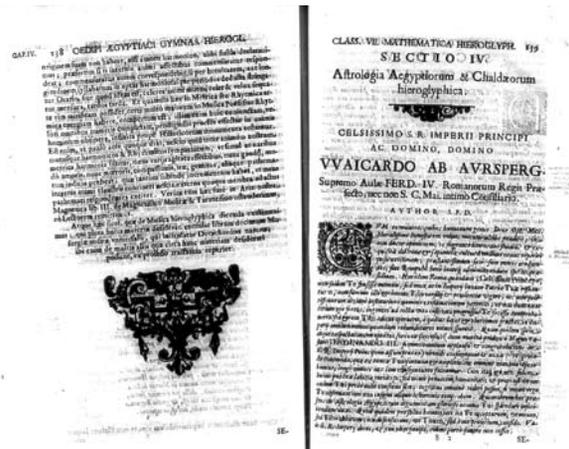


Fig. 5: Kircher dedicates 110 pages of the *Oedipus'* second part fourth section to Ljubljana Prince Janez Vajkard Auersperg (Kircher, 1654, 139).

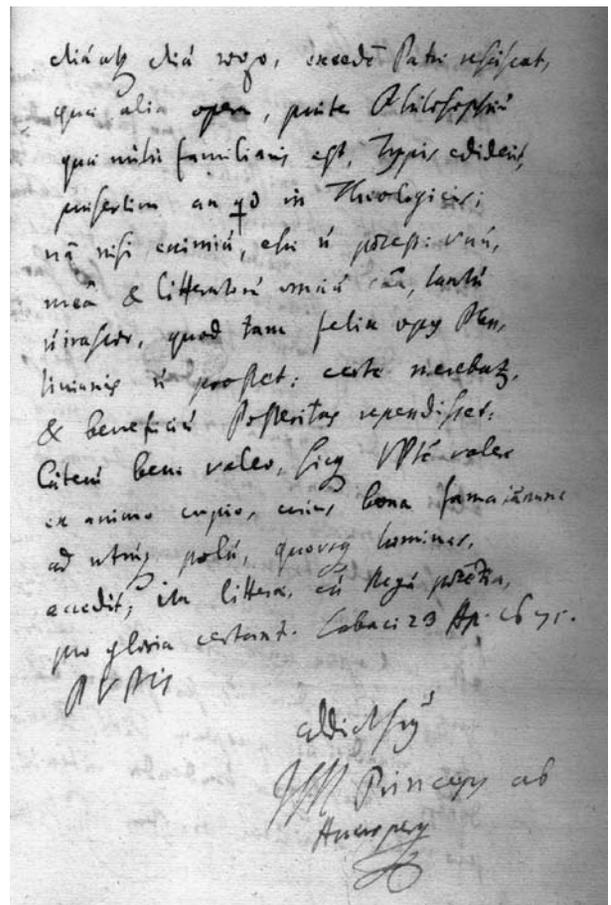


Fig. 6: Prince Janez Vajkard Auersperg writes to Kircher from Ljubljana on April 23, 1671, first page (APUG 556 folio 70r (courtesy of Stanford University and Glen Worthey)).

ka manors Snežnik and Lož and also took over Postojna manor. Probably he expected the Viennese troubles

would force him to return to his native Carniola few months later.

The Prince Janez Vajkard Auersperg was aware of the Leyden Professor Philippus Cluverius' (Cluverij, * 1580 Danzig; † 1622) description of Postojna Cave (1623) as a »big cave with noisy river at hollow hill near Ljubljana«. Janez' brother Volf had at least four Cluverius' items at first or early editions (1619, 1624, 1631, and 1653) bound into three volumes. Five Cluverius' works were on sale at Ljubljana and Valvasor eventually bought all of them for his Bogenšperg library (Sotheby's, 1982, 30-31; Mayr, 1678, 71-72; Valvasor & Magič, 1995, 219-220).

Soon after his last letter mailed to Kircher, the Prince Janez Vajkard Auersperg used ropes to descend one of his peasants-fishermen beneath one foot thick Postojna Cave natural bridge (1673). Janez' ownership of the Postojna area stimulated his curiosity which culminated after reading Culverius and Kircher's books he inherited from his recently deceased brother Volf. Janez became one of the first systematic researchers of Postojna Cave subterranean flora and fauna. Kircher would certainly love to read his results, but no Janez' letters eventually written after 1671 were preserved.

Just before Kircher died, Valvasor (1679) tried to upgrade the discoveries of his model Prince Janez, but he was eventually not quite successful. Valvasor discovered the Auersperg's subject-fisherman who formerly brought some fish from subterranean of Postojna Cave. The poor old fellow was still alive and in pretty good health. But he was certainly not very cooperative being still somewhat frightened by the ghost he seems to have met at the dark Postojna Cave underground (Reisp, 1983, 144; Kovač Artemis, 2005, 72; Valvasor, 1689, 1/4: 532).

Es wird ein Mann mit einem Fischern hinab gelassen. Johann Weichard / Fürst von Auersperg / ruhmwürdiger Gedächtniß / hat im Jahr 1673 / befohlen / einen Mann / auf einem Strick / zum Wasser gar hinab zu lassen / mit einem Fischern / um zu versuchen / ob er damit etliche Fische bekommen mögte. Derselbe / als man ihn wieder herauf gezogen / brachte drey Fische mit / so er gefangen hatte / nemlich einen Hecht / einen Karpffen / und einen Alten: Welche aber gar nicht fett / sondern ziemlich mager gewest; doch gleichwohl / nachdem sie gefocht worden / gutes Geschmacks / und gar kernig befunden worden.

Welcher zum andern Mal durch ein Loch wieder hinab wil. Des andern Tags / hat gedachter Fürst befohlen / daß der Mann wieder um hinabgelassen werden sollte. Welcher aber durchaus nicht mehr hinunter gewollt; wie gute Worte / und Versprechungen eines ehrlichen Trunkgelbs / man ihm auch gegeben. Es hatte ihm der Fürst / gleich des ersten Tags albereit / eine Cron / so zweien Gulden machte / geschenkt / und ihm jeko noch eine mildere Verehrung zugedacht. Geld pflegt sonst / bey vielen Hohen und Niedrigen / sonderlich aber bey solchen geringen Leuten / der glücklichste Redner zu seyn / und ihren ehrenen Nacken bald zu bewegen: aber hie wolte es / bey diesem Kerl / keine Wirkungen thun: er war gar nicht dazu zu überreden; sondern sagte / Man sollte ihn nur mit Ruhe lassen / er ginge doch ein Mal nicht / ja alle seine Lebetage nicht / mehr hinunter / wenn man ihm gleich die Herrschaft Adelsberg schencken würde. Die Urjach hat man / von ihm / nicht erfahren können: weil er sich stets / mit dieser Antwort / dieselbe zu entdecken / geweigert: Ich sage nichts / daß ich drunten was gesehen habe: Allein ich gehe einmal nicht mehr hinunter; will lieber mein Leben verlieren. Und ich rathete es auch Keinem / daß er hinunter gehe: und ich sage dennoch nichts / warum man nicht hinunter gehen solle. Also hat man ihn zu frieden gelassen.

Man hat aber vermeint / er müsse ein Gespenst erblickt haben / welches zu ihm gesprochen / es sollte wieder er / noch ein Anderer / sich gelüsten lassen / mehr hinunter zu kommen; und wann er ein Wort

Fig. 7: Prince Janez Vajkard Auersperg's subject-fisherman examines Postojna Cave subterranean flora and fauna on the first planned expedition of its kind in 1673 (Valvasor, 1689, 1/4: 532).

CONCLUSION

The Jesuits from Carniola informed Kircher about the Cerknica Lake karst phenomena. Kircher was considered an expert in several fields, but he did not widely travel after his young years. His books were in fact the compilation of letters he received from his fellow Jesuits all over the world, and with that in mind we claimed that

the Carniolian Jesuits were partly the authors of Kircher's books describing Carniola local subterranean limestone regions. Kircher became well aware of the local peculiarities, corresponded with the highest Carniolan nobility, and eventually stimulated the Auersperg's subterranean karst fauna research programme.

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PODZEMNE VODE V KRANJSKIH PISMIH POSLANIH A. KIRCHERJU (* 1601; †1680)

POVZETEK

Pisma, ki so jih Kircherju pošiljali jezuiti in plemiči z območja sedanje Slovenije, so prvorazredni zgodovinski dokumenti. Znano je, da Kircher naših krajev osebno ni obiskal; prav logično se zdi, da je moral imeti v Cerknici obveščevalce, ki so mu pripovedovali o notranjskih kraških pojavih. Že dolgo nas zanima, kdo bi utegnili biti ti ljudje, katerih pisma je Kircher vtikal v svoje opise kraškega podzemlja. V poštev je kazalo vzeti predvsem ljubljanske, goriške in tržaške jezuite. In res, prav z ljubljanskega kolegija je Kircher dobival potrebne podatke o notranjskem krasu.

Kircher je s pomočjo Kranjskih dopisnikov sestavil prvo upoštevanja vredno teorijo Cerkniškega jezera po N. Frischlinovih pesnitvah in objavil številna druga dognanja. Med najbolj uglednimi zbiralci podatkov za Kircherja je bil njegov sobrat Wilpenhoffer, tisti čas pomemben jezuit ljubljanskega kolegija. Salzburžan Wilpenhoffer

se je dodobra seznanil z nenavadnimi kraškimi pojavi o Cerknškem jezeru, zanimal pa ga je tudi rudnik živega srebra v Idriji kot tedaj najdonosnejše kranjsko podjette. Zato smo pregledali poročila in življenjsko pot jezuita Wilpenhofferja, ki je obenem skrbel še za širjenje Kircherjevih del na Kranjskem, predvsem po željah deželnega glavarja Volfa Engelberta Turjaškega.

Volfov brat Janez Vajkard Turjaški, mecen Kircherjevih knjig in zelo samosvoj pionir raziskovanja rib v globinah Postojnske jame, je pošiljal Kircherju pomembna pisma. Med prvimi je organiziral ekspedicijo s potrebno opremo, da je lahko dal na plan privleči ribe iz podzemnih voda; le-te so se resda izkazale za nekoliko mršave in komajda vredne knežjega obeda. Zaenkrat še ne vemo na kakšen način je o tem obvestil svojega dopisovalca Kircherja. Janezova postojnska raziskovanja je nadaljeval Valvasor. Kupil je domala vsa Kircherjeva dela, ki jih je zaradi denarnih težav pozneje prodal v Zagreb.