Ecological Observations in the Writings of a 19th Century Enthusiastic Naturalist: Basiliu Basiota

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Abstract
The works mentioned in this paper are popularizing writings in the field of Earth sciences with reference to Transylvania, written in the second half of the 19th century as a result of the endeavours of an amateur of geology, Basiliu Basiota. He makes remarks about certain general environmental problems and natural phenomena, and emphasizes Transylvania's natural beauties and wealth, especially that of the Apuseni Mountains.

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Basiliu Basiota[1](Başotă), also known under the pseudonym Moțiu Dâmbul, born in Zagra village (Bistrița-Năsăud county), was one of the significant men of the county of Năsăud, as a descendent of a branch of an old Boyar family of Botoşani, who took refuge in the valley of the Someş in the troubled times of the reign of voivode Duca-Vodă (1665-1683).[2]

Educated as a jurist, he held important functions in Abrud, Odorheiul Secuiesc, and Alba Iulia, becoming in 1883 "judge at the

[1] The – sometimes excessive – Latinization of the family name was a frequent tendency of the Greek-Catholic intellectuals from Transylvania.
[2] This Boyar family is best known for the philanthropist *hatman* (general) Anastasie Başotă (January 22, 1797 – December 30, 1869), the founder of the first private village school in Moldavia, and of an institute bearing his name.

Royal court of law of first instance in Alba Iulia, and also of the court of law of the mountain region of Transylvania".[1] He collaborated with various publications, among which: *Foi'a Scolasteca: organu pedagogicu, literariu si scientificu* (Scholarly journal: a pedagogic, literary, and scientific organ) from Blaj, *Transilvani'a: fói'a Asociatiunii transilvane pentru literatur'a romana si cultur'a poporului romanu* (Transylvania: Journal of the Transylvanian Association for Romanian literature and the culture of the Romanian people) from Sibiu, often under various pseudonyms, the most famous of these being Moțiu Dâmbul, under which he published his verses in almost all Transylvanian periodicals of the time.[2]

As an adept of travelling, geography, and history, and an ardent admirer of the Transylvanian land and its natural riches, Basiliu Basiota published, after 1875, a series of works and articles that highlighted and remarked certain general environmental problems and natural phenomena, and emphasized Transylvania's natural beauties and wealth, especially that of the Apuseni Mountains. He wished to assist Romanians in understanding certain meteorological phenomena ("… the walking of time")[3], in finding out details on mining and the extraction of metals ("…in the western (Apuseni) mountains of Transylvania lives a Romanian population, who mostly deals with the cultivation of mines…").[4] He presented in short the causes and influences of certain meteorological manifestations, the history of "montanistics" (the study of mountains) and the knowledge of metals, and wrote a larger study on the geology of the Apuseni Mountains (resulting from a journey in these mountains in 1859). In this work he was inspired from the chapter on the Metalliferous Mountains of F. Hauer and G. Stache's 1863 work, *Geologie Siebenbürgens*. Basiota often describes in detail the geography

[1] "jude la tribunalulu regiu de I-ma instantia din Alba-Juli'a, totu odata judecatoria montana din Transilvani'a"

[2] Prahase M. şi Rus G., *Zagra: o monografie posibilă* (Cluj-Napoca: Carpatica, 1997), 166-167.

[3] "…amblarea timpului". Basiota B. M.D., "Ceva din cunoscientele meteorologice" (Some meteorological knowledge), *Transilvani'a: fói'a Asociatiunii transilvane pentru literatur'a romana si cultur'a poporului romanu,* Year X (1877) no. 9, 104.

[4] "...in muntii apusani ai Transilvaniei locuesce unu poporu romanu, care se ocupa in cea mai mare parte cu cultivarea mineloru....." Basiota B. M.D., "Ceva din istori'a montanisticei" (Some things regarding the history of mountain science), *Transilvani'a: fói'a Asociatiunii transilvane pentru literatur'a romana si cultur'a poporului romanu*, Year XI. (1878) no. 1, 1.

of the places he visited, their geological formation, and also social and economic aspects, highlighting certain problems of knowing one's environment, and efficiently exploiting the riches of the Transylvanian soil.

In 1876 he wrote about the possibility of founding a match factory ("catranitie [a tar factory] séu aprendiori")[1] in the neighbourhood of Năsăud, similar to the ones in Braşov, Cluj, Alba-Iulia, and Praid. He supported this idea with the argument that in the district of Năsăud the rich forests (pine and beech trees) were the property of schools and the Romanian population, and the foundation of a factory which would efficiently exploit the wood of these forests would increase the economic power of the region. The "opidulu"[2] (town) of Năsăud was an important centre for the Romanians inhabiting the valleys of the Rodna and Bârgău ("… as a central point for Romanians in the valley of the Rodna and Bârgău, being close to Bucovina, Moldavia, and the railway from Cluj…")[3], whose main occupation was the breeding of cows, as the land was not very productive. Its proximity to the valley of the Someşul Mare and the existence of an urban settlement were considered an advantage for establishing a factory ("… taking into consideration the waters of the Someşul Mare, which would make useful the establishment of a factory working with water power; taking into consideration the ruins of the schools burnt in 1848, which could be rebuilt and transformed into a match factory at a very low cost;…".[4] In this way new workplaces may also be obtained for the population in the area ("… for they could turn to

[1] Basiota B. M.D., "Fabric'a de catranitie séu aprendiori din Paraidu" (The factory of tar *séu aprendiori* from Paraidu [Praid]), *Transilvani'a: fói'a Asociatiunii transilvane pentru literatur'a romana si cultur'a poporului romanu*, Year IX (1876) no. 13, 145.

[2] ÓPIDUM, n. n. (Ant.) – a Roman fortified human settlement; an economic, political, religious, and military centre, marking the beginnings of a town. [Also written as *oppidum*, var. *opid* n. n. / < Fr., Lat. *oppidum*].

[3] "...cá punctu centrale alu romaniloru din valea Rodnei si a Borgoului, fiindu aprópe de Bucovin'a Moldavi'a si de calea ferata dela Clusiu, ..." Basiota B. M.D., "Fabric'a de catranitie séu aprendiori din Paraidu", no. 13: 146.

[4] "...considerandu-se apa Somesiului mare, care indemana stabilirea unei fabrice portate cu potere de apa; considerandu ruinele edificiului scóleloru arse in 1848, care cu spese fórte pucine s'aru poté reedifica si transforma intr'o fabrica de catranitie; ..."

good account the natural products right in the middle of the Romanian people to its well-being and advancement…").[1]

In a desire to assist the understanding of certain meteorological phenomena and explaining them in scientific terms, in 1877 he translated from Hungarian[2] in a popular language parts of the German author Aaron Bernstein's work,[3] which described notions of distance, light, meteorology, astronomy, and nutrition. In his work, Basiota explained how climatic variations ("the walking of time") were influenced by the position of earth in the solar system, by seas and oceans, and currents of air ("… because the walking of time [climate] is influenced only by our terrestrial position in relation to the sun, by the seas that surround us, as well as by the movement of the air and hence the winds from the poles to the Equator and vice versa, from the Equator to the polar areas").[4] The twelve chapters include: a. general information about the intervals between night and day, about the seasons, the influence of the Sun and the geographical position in establishing these intervals; b. the impossibility to precisely predict meteorological changes which will occur in the future, especially without specially equipped observation stations; c. the influence of the currents of air ("the waves of the air") and humidity in determining meteorological phenomena from various geographical areas; d. formation of precipitation; e. thermal balance in nature ("How is heat bound and released")[5]; f. climatic variations influenced by geographical position in the case of this country; g. difficulties in predicting climatic changes; h. the influence of the Moon

[1] "...ca si-aru poté fruptifica productele naturali chiaru in midiuloculu poporului romanescu si spre binele si inaintarea aceluia, ..."

[2] The work referred to here was also published in English in New York, in 1869 (Popular Books on Natural Science), and was sent to Albert Einstein by his mentor Max Talmey, having a particular influence on his development as a scientist.

[3] Aaron Bernstein (1912-1884): German scientist, reformer of the Judaic movement in Germany.

[4] "...cà asupra amblarei tempului are influentia singuru numai pusetiunea nósta terestre facia cu sórele, cu marile ce ne incungiura, precumu si misïcarea aerului si de aci a venturiloru dela poli càtra ecuatoru si viceversa dela ecuatoru càtra zonele polari." Basiota B. M.D., "Ceva din cunoscientiele meteorologice", no. 9:103-104.

[5] "Cumu se lèga si cum se elibera caldur'a" Basiota B. M.D., "Ceva din cunoscientiele meteorologice", no. 11: 126.

on climatic variations (which is "… almost unnoticeable on the walking of time").[1]

Living in Abrud for almost twenty years, Basiota had an extraordinary respect and admiration for the people of those regions, appreciating their efforts in exploiting precious metals. Therefore he endeavoured to contribute to their education by facilitating their access to information on the international evolution of knowledge and the use of mineral substances in their natural state, methods of exploiting metals and knowing their properties, publishing his studies in Romanian in popularizing periodicals. In those times texts published in Romanian about Earth sciences were extremely rare in this area, mainly because the specialized language and terminology of geology was difficult to use as opposed to the literary language which was much better homogenized in the Romanian provinces.

His works, *Ceva din istori'a montanisticei* (Some things for the history of mountain science, 1878) and *Unele cunoscintie din istori'a metaleloru [După Dr. F.K.M. Zippe, Viena 1857]* (Certain knowledge of the history of metals, 1886), were published in the periodical *Transilvani'a: fói'a Asociatiunii transilvane pentru literatur'a romana si cultur'a poporului romanu* from Braşov and later Sibiu. In these, he only summarized the important events in the history of extracting useful mineral substances, especially by mining, and the knowledge and use of metals in the course of time all over the world. In 1883 he publishes his geological study on the Apuseni Mountains, well documented and structured,[2] entitled *Studiu geologicu asupr'a structurei muntiloru metalici ai Transilvaniei* (A geological study on the structure of the metalliferous mountains of Transylvania), dedicated "to the memory of the brave Romanians of the Mountains of Abrud and Câmpeni".[3] The author's intention was to help the Romanians dealing with metal extraction to know better geological formations in order to search them more easily for precious metals: "… to help Romanian mining people to

[1] "...este aprópe neobservabila asupra amblarei tempului" Basiota B. M.D., "Ceva din cunoscientiele meteorologice", no. 12:140.

[2] The structure of the work much resembles that of the chapter on the Metalliferous Mountains in F. Hauer and G. Stache's *Geologie Siebenbürgens* (1863), consistently used as a source of inspiration by Basiota.

[3] "amintirei romaniloru celoru bravi din Munții Abrudului si ai Câmpeniloru"

easier know the strata of gravel and more reasonably and easily search for fine metals…".[1]

At the time of this work's publication[2] Romanian works on geology were extremely rare, and the specific terminology was practically just forming in Romanian. In this context it is worth noting that the first book on mineralogy in Romanian written in Cyrillic script was compiled by I. C. Cihac (1837) on the basis of I. Reinhard's manual published in Heidelberg in 1833. This work was later transcribed in Latin characters by I. Atanasiu (1941).[3] The first regional geological study in Romanian (on the Repedea limestone) was made two decades later by Gr. Cobâlcescu (1862).[4]

Besides geological observations and information, Basiota's study also contains the author's original remarks and contributions in matters of history, administrative and economical organization, mining, and even ecology.[5] The work begins with the description of Transylvania, condensed and comprehensive at the same time, comprising climatic and hydrological aspects, the potential of forests and agriculture, therapeutic characteristics of certain minerals, and anthropological, geographical, and economic remarks regarding the characteristics and main occupation of the population of the region: agriculture and livestock breeding ("One hasty look that we take at Transylvania – that land full of nature's riches – may take us to the conviction that here we have many fortunes of nature, because: its climate is the healthiest, its crystal-like rivers are numerous, its mineral

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[1] "... se ajutu pre poporulu metalurgu romanu a cunósce mai lesne straturile de pietrisiu prin care póte scrutá mai rationabilu sî mai usioru dupa metale fine, ..."

[2] Basiota B. M.D., "Muntii apuseni ai Transilvaniei (Studiu geologicu)" (Romania's Apuseni Mountains [A geological study]), *Foi'a Scolasteca: organu pedagogicu, literariu si scientificu*, Year I (1883), no. 2:25-28, no. 3:41-44, no. 4:54-57, no. 5:73-77), no. 7:109-112, no. 9:137-141, no. 15: 236-240, no. 16:253-256, no. 17:270-272, no. 18:285-288.

[3] Ion Atanasiu, "Cea mai veche mineralogie tipărită în limba română" (The oldest mineralogy printed in Romanian), *Analele Academiei Române. Memoriile secţiunii ştiinţifice* (Annals of the Romanian Academy. Proceedings of the scientific section), 3rd series, Vol. XVI (1941), mem. 15, 627-680.

[4] Cobălcescu G., *Calcariul de la Răpidea* (The Repedea limestone) ([Bucharest]: [s.n.], 1862), 14 p.

[5] Gabriela Rodica Morărescu, V.A. Codrea**, "**Un entuziast uitat: Basiliu Basiota" (A forgotten enthusiast: Basiliu Basiota), in: *Elanul* (a cultural magazine edited by the Cultural Association Elanul Rural Academy and Mihai Ioan Botez School from Giurcani, Găgeşti commune, Vaslui county) 67 (2007): 6-8.

water springs are of a quality like nowhere else in Europe, containing healing powers. The picturesque mountains are covered with the thickest forests, constituting a most romantic scene; the wide meadows and the most fertile land seem to be planned in such a way that the people may find their pleasure in them. The people are agile and laborious, nice in their appearance and Caucasian indeed; the cows fine, the multitude of sheep herds with their wool reaching down to earth, all these being able to testify that this here is heavens, and this is where people find their joy and satisfaction. A mountain region that you can hardly find its match in Europe…")[1]

The chapter on Trascău Mountains describes in details the building and maintenance of wooden dams in the region of Intregalde Pass (Alba county), meant both to control water course (forming thus an artificial lake), and as a defence method that the inhabitants inherited from their ancestors for holding against raids of barbarians (by raising the sluices and flooding the area down to the Mureş river).

"As the tradition of the people reminds us, the ancestors of this mountain people applied in cuts or drains or diggings thick wooden boards which they carved on all sides, being 3-4 *urme*[2] thick. These they introduced one on top of the other within two cuts, and this way they built 5 walls, filling them inside with rocks and earth to a height of several *orgie*.[3] This way they impounded the course of the waters from Intregalde, the water stagnated, and above the dam a large lake was formed which could be stopped for several days or even weeks, and in case of danger or when the enemy approached, they suddenly released

[1] "O singura sî rapede privire ce o facemu asupr'a Transilvaniei - ace'a tiera plena de bogatiele naturei – ne póte aduce la convingere, ca ací avemu de a face cu multi tesauri ali naturei, pentru-ca: clim'a ei este cea mai sanetósa, apele ei curgatorie sî cristaline sunt in abundantia, isvorele de ape minerali de o calitate cá nicairea in alte parti ale Europei, contienu o potere vindecatoria. Muntii pitoresci imbracati de selvele cele mai tufóse, constitue regiunile cele mai romantice; fenatiele estinse sî pamentulu celu mai roditoriu, pare ca este intr'adinsu astufeliu planuitu, cá ómenii se-si afle desfatarea pre elu. Unu poporu sprintenu sî laboriosu de unu esterioru frumosu sî intru adeveru caucasicu; vitele frumóse, multîmea turmeloru de oi cu lân'a loru pana in pamentu, tóte aru fí in stare se ne comprobéze, ca aci este raiulu, sî aci'si afla ómenii desfatarea sî indestulirea loru. Unu tinutu montanu, caruia abia poti se-i afli parechia in Europ'a; ...")

[2] Urmă – Undefined length measurement

[3] Orgie – Undefined length measurement used in Transylvania and the Banat region (definition from the *Dicţionarul limbii române* (Dictionary of the Romanian language), new series, vol. VII, Bucharest: Editura Academiei, 1969).

the water, and this caused the terrible flooding of the entire territory from Gârda de Sus down to the Mureş, and in this way they drove away all enemies from the walls of their natural fortress."[1]

Basiota also describes the geological sites from the Turda Pass (Cheile Turzii), Moldoveneşti, and Corneşti (*Chiaea Turdei, Siomfalaulu, Varfalaulu*), offering geo-morphological, petrographical, and mineralogical details. Likewise, the chapter on the Baia de Arieş (*Ofenbai'a*) Mountains presents detailed explanations on the appearance of veins of precious metals ("When I was in those mines, there were more than 30 veins of gold and silver discovered. Of these, 4 were very rich and the others were very much depleted, or as the miners express it: eaten")[2] and native gold ("The gold in the mines of Ofenbai'a (Baia de Arieş) is of 21-22 Karats, and it appears either as tow threads or fish teeth shaped crystals")[3] Basiota harshly criticized the transformation of certain mineral processing units from Baia de Arieş and Certege (a settlement near the town of Câmpeni) for creating a large plant at Zlatna; he remarked that the hasty decisions of the ruling power determined the decrease of economic value in the region ("… since then mining economy has everywhere reached to decadence; here and in Ofenbai'a (Baia de Arieş) as well; where a great number of beautiful buildings and some fine furnaces are turning to ruins only for the caprices of certain

[1] "Dupa cum ne amintesce traditiunea poporului, antecesorii acestui poporu munteanu aplicá in taiaturi seau sghiaburi ori sapaturi unele blane de suluri grose de lemnu, cari le cioplea in patru dungi, sî aveau o grosime dela 3-4 urme. Aceste le incapuia un'a preste alt'a intru o taiatura sî ceialalta, sî pre acésta cale cladea 5 pareti, alu caroru interioru lu-împleau cu pietrii sî pamentu pana la o inaltîme de mai multe orgii. Pre acésta cale inchidiendu cursulu apeloru dela Intregalde, ap'a stagná, sî dein susu de segazuri se formá unu lacu inmensu, care se potea oprí pentru mai multe dîle ori chiaru sî septemani sî venindu periclulu, seau apropianduse inamicii dá deodata apei cursu liberu, sî pre acésta cale causá pentru intregu teritoriulu dela Gald'a de susu, in diosu pana la Muresiu esundatiunea cea mai teribila sî astufeliu alungá ori ce agressori de la parietii fortaretiei loru naturali."

[2] "Cându amu amblatu eu in acele mine, erau descoperite preste 30 de vine portatórie de auru sî argentu. Deintre acele vine erau 4 forte bogate ér' celealalte tare exhauriate, seau dupa cum se esprima metalurgii: mancate."

[3] "Aurulu dein minele dela Ofenbai'a este de 21-22 carate, sî acel' vine in ainte ori in form'a fireloru de fuioru seau in form'a dentiloru de pesce crystalisatu."

people of poor theoretical knowledge and lack of practice in mountain affairs").[1]

The chapter which describes the group of mountains around Abrud, Roşia Montană, Bucium, and Zlatna refers to the influence of environmental factors (drought or frost) on the good functioning of stamp mills[2] as machines for the extraction of gold from the ore ("… but how misfortunate for mine owners if the summer went by in time of drought, and during the winter they are astounded by a terrible frost, because drought and frost alike brings the greatest misery on their heads; because, since stamp mills cannot be employed, their production of gold is largely insignificant…").[3] The mining tradition around Roşia Montană and Corna village is also mentioned, dating back as early as Dacian and Roman times, proved by the survival of certain technical terms connected to mineral extraction: *kram* – chamber, storage room for keeping tools and resting place for workers; *nod* – the hose of an installation for water extraction from the mine; *makaret* (or *macaietiu*) – a drill used for making mine holes to be filled with explosives; *meduha* – a mortar used for pounding the gold-bearing ore, from which gold is later separated with help of the *şaitroc* (or *siai-trocu*, Scheidetrock – Germ.).

In the description of the Bucium and the Detunata Valleys we find out about the beauty of these places and the existence of a tour for Romanian and foreign tourists with the purpose of admiring the basalt columns of the Detunata, tasting the cold water of the springs, taking delight in the rich pine woods and studying the endemic alpine flora ("… great many people, men of wisdom and education come and hasten from all parts of Europe to see the Detunata, that magnificent basalt hill the like of which can only be found in Ireland; … in front of the Detunata there is a nice pine forest where the botanist may collect the most

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[1] "...de atunci economi'a de mine a ajunsu preste totu in decadentia; sî asia sî cea dela Ofenbai'a; unde o suma mare de cladiri frumóse sî nesce ustrine pompóse se ruinéza, singuru pentru capritiulu unoru ómeni cu teorii seci, sî fara pracsa de ajunsu in afacerile montanistice".

[2] http://www.rosiamontana.ro/drumulaurului/docs/tehnici_miniere.htm: Californian type stamp mills with iron heads meant the technical level reach in Europe by the end of the 19th century. This type of stamp mill was used at Roşia Montană in the inter-war period and after, until its replacement with rotating stamp mills.

[3] "...dar' vaiu de proprietarii demine, déca ver'a o petrecu in tempu de seceta sî in tempu de iérna suntu surprinsi de unu geru teribilu, pentruca atâtu secet'a, câtu sî gerulu, le aducu preste capu seraci'a cea mai mare; pentruca morile sagitari nepotendu fí in cursu, productiunea loru de auru etse fórte neinsemnata, ..."

precious plants and alpine flowers, which can only be found here; and in the south-western part there is the best water to drink, in which you may still find plenty of ice even in August…").[1]

The description of the *opidum* of Zlatna, formerly a fortified Roman settlement of strategic importance both from a military and economic point of view due to gold extraction, also makes reference to the clay used since Roman times for the manufacturing of ceramic water pipes and bricks "wide and square-shaped, with <<*Leg. XIII.*>> printed on them", which used to pave the entire neighbourhood in Alba Iulia where Basiota lived.[2]

The region of the Crişul Alb Valley is represented in the study by the description of the gold-mines of Ruda-Brad, Zdrapți, and the remains of old extractions at Musari. On the way to Baia de Criş, the study mentions the coal stratum near Țebea and Mesteacăn settlements, and the gold-bearing clay and thermal baths in Țebea basin ("a natural bath, dug into one of the basins of only 3-4 square *orgie* and one *urma* deep. Small bubbles of hot water rise once in a while from the surface of the water, making it of a temperature of 18-20^{o} C. These bubbles are produced by flammable gases, exactly like those of Basn'a baths, and the people from the surrounding areas use these baths with great success for rheumatism and gastric fever.")[3]

The study goes on with geo-morphological, petrographical, and mineralogical descriptions of the geological structure delimited by the Crişul Alb Valley, the description of the paleontological site of Ribița (enumerating the limestone fossils in the area: *Erato laevis, Columbella scripta, Murex fistulosus, Cerithium, Corbula gibba*), and the sulphuric

[1] "...o multime de omeni, barbati intielepti sî invetiati dein tote partile Europei vinu sî acurgu pentru a vedé Detunat'a, ace'a colina marétia de basaltu, acreia parechia numai in Irlandi'a poti aflá ; .... In faci'a Detunatei se intende o padure frumosa de bradu, preintre care botaniculu si-ar' poté face culesulu celu mai pretiuitu de plante sî flori alpine, cari numai aci le poti aflá; ér' in partea suduvestica se afla ap'a cea mai buna de beutu unde sî in lun'a lui Augustu afli ghiacia destula, ..."

[2] The 13th Legion *Gemina* was stationed in Alba Iulia (Apulum) during the entire period of Dacia's Roman occupation.

[3] "scald'a cea naturale, care este ingropata intru unu basinu abia de 3-4 orgii patrati sî numai de una urma in afundîme. Dein oglind'a apei se redica dein candu in candu nesce besicutie de aeru caldu, carii dau apei o temperatura de 18-20^{0}. Aceste besîcutie constáu dein gazuri aprindibile, intocma cá sî cele dela scaldele dein Basn'a, sî poporulu dein pregiuru folosesce acésta scalda cu multu succesu in contra boleloru rheumatice sî friguri gastrice."

thermal waters from Vaţa de Jos ("At *Vati'a de diosu* (Vaţa de Jos) there are the baths famous ever since ancient Roman times, which I cannot describe for lack of balneological knowledge, but I remind here that the three springs from there spring from a clayey deposit of a tertiary formation, and that their water is warm and has a sulphurous smell.")[1]

This is followed by the presentation of the formation in the south of the Mureş Valley, the land of Săcărâmb, underlining the richness of precious metal minerals; then it presents the rivers which cross the Transylvanian Mountains, called here "mountains burdened with gold", rich in alluvial deposits of gold ("The field of gold washing in Transylvania"): the Mureş, the Someşul Mare and the Someşul Mic, the Olt, the Arieş, the Criş, the Cibin, the Abrud Valley, the Ampoi, the Rebra, the Ţibleş, and the Lăpuş. The native gold (auru virginalu) of 22-23 Karats obtained by the washing of alluvial deposits was granular, with irregular or round shapes, and a yellow-reddish colour.

Unfortunately, subsequent works particularly on the geology of the Apuseni Mountains made no reference whatsoever to Basiliu Basiota's writings. True, the *Muntii apuseni ai Transilvaniei (Studiu geologicu)* is largely the result of an amateur's ambitions, who took over and greatly adapted the German text of the *Geologie Siebenbürgens*, while Basiota's other works are clearly popularizing writings. However, the great merit of this enthusiastic naturalist lies in the historical significance of his writings, and first and foremost in their language which made this knowledge accessible to a wide range of Transylvanians interested in meteorology and geology, the extraction of metals in the Apuseni Mountains, and the problem of the knowledge and exploitation of the natural and economic potential of the Transylvanian region.

Translated by Emese G. Czintos

[1] "La Vati'a de diosu se afla scaldele cele renumite inca de pre tempulu romaniloru antici, cari dein lips'a unoru cunoscintie balneologice nu le potemu descrie, amintimu inse la acestu locu ca cele 3 isvore de acolo isvorescu dein unu depositu argilosu, care apartiene formatiunei tertiare, sî ca ap'a loru este calda sî de un mirosu de puciósa."