

## **Some novelties of the Runica Bulgarica**

**Edward Tryjarski**

There are actually very few Altaists and Turkologists who are able to formulate their individual opinions on the state of current studies on runiform texts in Bulgaria and in neighbouring countries. For western scholars the relevant studies, written mainly in Bulgarian or Russian, are rather difficult to access, while Bulgarian specialists are disposed to treat the problem of Protobulgarian runes as a rather troublesome element of their national past and are probably not eager enough to follow the scattered Turkological literature abroad.<sup>1</sup>

As a matter of fact, new discoveries of runiform inscriptions in that country are not rare, but since they are mainly made by archaeologists they must go through the long procedure of publishing the whole object until they become available for palaeographers and linguists. The problem of runiform scripts arouses no doubt a vivid interest, but the debate is rather chaotic and not always observing scientific rules. There prevail confidently formulated hypothetical opinions on various matters. «Quot capita, tot sensus.» The axioms laid down by generations of scholars concerning the ethnogenesis of the Huns and the Protobulgarians, as well as their languages and scripts, are not rediscussed in certain aspects, but rather questioned and often tacitly declined.

It is known that the Altaic peoples by and large do not enjoy the best opinion in Bulgaria, and acknowledging them as forefathers is for the Bulgars still a hard nut to crack. Thus, for instance, the historian P. Dobrev cites with satisfaction John's of Ephesos opinion ascertaining that part of the Protobulgarians were living (582–602) in the vicinity of the Imaos mountain by which the Pamir range is meant. He is pretty sure that they were akin to such ancient peoples as Sumerians, Akkadians, Elamites, Indoeuropeans, and especially Iranians and Caucasians, and that they had with them manifold, mainly cultural, ties. Consequently, the language of the Protobulgarians is regarded as Iranian and by no way Altaic. The terms of Altaic origin, mainly Turkic, are nothing else but loanwords. It stands to reason that the runiform inscriptions that are found in Bulgaria have nothing to do with the Turkic runes, Dobrev says. They were surely created in very old times, still before the «Landnahme» by Asparuh.

Dobrev means here the inscriptions originating from Murfatlar, which present the greatest collection of Protobulgarian runes and transmit in his opinion an inappreciably ancient and purely national cultural substance.<sup>2</sup> Dobrev is not bothered by the fact that the inscriptions in question are placed on walls of Christian-like churches, that they accompany the images of Christian saints, and that some of their signs are most probably of Greek and Slavic origin. In this connection he is inclined to admit, what was earlier suggested by V. Beševliev, that some signs from Murfatlar served as models for the Glagolitic letters.<sup>3</sup> But A. Daleva in her review of Dobrev's books explains that most of the letters have their established genealogies and that the arguments presented by Beševliev and Dobrev might be very difficult to prove.<sup>4</sup>

Dobrev is firmly convinced that the inscriptions from Murfatlar must be read from left to right, and in reality he rejects all earlier attempts at reading those inscriptions as wrong. I had already an occasion to express my critical opinion about his unfortunate conjectures.<sup>5</sup> Daleva also points to the fact that Dobrev cites the foreign words only in Cyrillic script and thus he awakes fundamental doubts about his linguistic arguments, which cannot be proved and inevitably approach science-fiction.<sup>6</sup> As a result, Daleva refuses to review his palaeographical concepts and gently states that they need a separate presentation.<sup>7</sup>

Dobrev acknowledges, like many earlier scholars before him, the inscriptions from Nagyszentmiklós to be Bulgarian and is undisturbed by the fact that they, compared with those from Murfatlar, display more differences than analogies.<sup>8</sup> In his turn, S. Mihajlov, an archaeologist, takes a conservative position and thus keeps out of such difficulties. He assumes namely that: (a) up to the present day we know no Protobulgarian inscription originating from the period either before or after the foundation of the Bulgarian state; (b) the Protobulgarians had no runic script at all but separate signs only.<sup>9</sup> Since these affirmations go surely too far, another archaeologist, D. Ovčarov, felt obliged to publish his critical remarks. He emphasized the fact that a group of other scholars from Bulgaria (V. Beševliev, M. Moskov, B. Simeonov, D. Popkonstantinov) and from abroad had demonstrated that in many a case the question is not of isolated signs but of groups of signs which form natural sequences and appear to be readable.<sup>10</sup>

The discussion on the character of the Rosette from Pliska and the way in which its signs should be interpreted cannot cross the magical circle of dry hypotheses and too often represents earlier concepts as new ones. Thus, Mihajlov comes back to Beševliev's idea saying that the object has an astral and solar character and was used for divination. According to him the signs are not letters but symbols of celestial bodies with the

main sign IYI denoting the Sun.<sup>11</sup> The same idea had some three years earlier been presented by Dobrev, who in search for the source of this symbol indicated Elam, Pamir, etc.. His attempts at explaining the signs reached again the height of linguistic phantasy.<sup>12</sup>

In a situation of crossing arguments, each reasonably weighed opinion, and especially each new piece of material, is welcome and increases the hope of solving the accumulated problems. This is the case with the papers recently published by R. Sefterski, which to a considerable extent enlarge our field of research. His preliminary reports titled «Pyrvijat runičeski nadpis na Kuberovite bylgari ot Makedonija» (The first runic inscription of Kuber's Bulgarians from Macedonia)<sup>13</sup> and «Nepoznata prabylgarska runičeska pismennost» (An unknown Protobulgarian runic script)<sup>14</sup> were published in 1991.

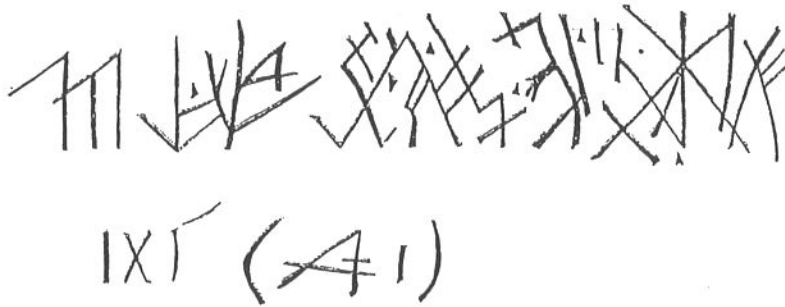


Fig. 1. Signs from Kruševo. After R. Sefterski.

While working at the archives belonging to the late academician Jordan Ivanov, Sefterski found two handcopies of a curious runic stone inscription originating from the village of Kruševo, Demirhisar district, northeastern Greece, near to the Bulgarian frontier. The inscription was copied by Ivanov in 1917 but was never published. It contains eight or twelve groups of runic signs which seem to be bound one with the other by means of capricious oblique dashes (Fig. 1). Sefterski thinks that: (a) we are confronted with an unknown type of runic script in which the oblique dashes binding the signs represent phonetical and other linguistic peculiarities of the script system and express additional ideas; (b) this script represents an unknown variety of some other runic script standing far from the Old Turkic runic system; (c) as indicated by the place in which the discovery was made, the inscription must have belonged to those Bulgarians who under the Khan Kuber settled down in 686 in the district of Bitolia-Solun; (d) this is the first Protobulgarian inscription from Macedonia.<sup>15</sup>

Even a cursory examination of the inscription allows us to distinguish a number of signs known from other texts like: | X ↓, probably also  $\text{X}$ , and some compound signs or ligatures (to compare  $\text{X}$  and  $\text{X}$  of Humara and  $\text{X}$  on one of the flasks from Novocherkassk.) On the other hand, the function of the oblique dashes, evidently thinner than the other signs, and their relationship with the rest of the script system, remain problematic. At the same time, it seems rather impossible to assume that they would have been used simply to strike out the whole inscription, or parts of it.

The topic of Sefterski's second paper, titled «Runičeski nadpisi ot selo Čukurovo, Sofijsko» (Runic inscriptions from Čukurovo village, Sofia district), are copies of another runiform inscription, also found among Ivanov's papers.<sup>16</sup> This time we are given fourteen reproductions of Ivanov's copies (Fig. 2).



Fig. 2. Sample of the Čukurovo inscriptions. After R. Sefterski.

Ivanov himself made by hand (with pencil) eight copies (probably in 1908–1909), while seven other hand copies were made by the local clergyman Rev. G. N. Byrzakov, who had first discovered the inscriptions. The inscriptions were initially placed on a rock near the village of Čukurovo (actually Gabra), Samokov district, some 30 km southeast from Sofia. In our century the stone blocks were split off the rock and used to construct a church. It is probable that not all extant inscriptions were copied. Sefterski dates these inscriptions back to the first half of the 9th century, the time when Khan Krum incorporated that territory into his state (809).<sup>17</sup>

Ivanov also made photographs of the inscriptions, out of which only seven have been preserved up to the present. The inscribed stone blocks were photographed from the distance of three or more meters so that they are out of focus and unfit for reproduction.<sup>18</sup> The signs are inscribed upon separate blocks, and it is difficult to know which of them form complete inscriptions. As in all similar cases, we sometimes cannot be

certain whether we are dealing with outlines of real signs or with crackings of the stone. The list of the signs that can be identified is worth to be noticed. Alongside with banal signs like | ↓ λ X < Λ √ Υ ∨ there appear some more characteristic ones like ⊥ ∩ ∩ ∩ \* † ‡, some of which are known from Murfatlar, or a ligature like ∩∩. It should be observed, however, that in the Čukurovo inscriptions we do not find those signs from Murfatlar that are supposed to be related with Slavic letters like † ‡ ∩ ∩. On the other hand, signs like † ⊥ or ∩, do not seem to have existed in Murfatlar. Only a few signs from Čukurovo ( √ √ ) can be found in a short shamanistic inscription from Monastira by Ravna<sup>19</sup> (Fig. 3).



Fig. 3. The shamanistic inscription from Monastira. After M. Moskov.

A rare compound sign from Čukurovo  $\bowtie$  resembles that appearing on one of the flasks from Novocherkassk  $\bowtie$ .<sup>20</sup> Sefterski also detects connections with the inscriptions of Sitovo in the Rhodope mountains, as well as with those of Kruševo, Murfatlar, and northeastern Bulgaria. A general impression is that the inscriptions from Čukurovo are of two types, or simply of two hands. One comes to this conviction analyzing the reproductions of Ivanov's materials. No attempt at interpreting or reading the Čukurovo signs has been made. Sefterski, as if excusing himself for it, supposes that the Protobulgarian script possibly had a logographical character in the sense given to this term by I. Gelb.<sup>21</sup>

Taking into consideration our actual state of knowledge we necessarily come to the conclusion that the Protobulgarians possessed several types, or varieties, of runiform script. The question whether all of them were mutually connected remains, however, open.<sup>22</sup> Such a supposition should not be surprising if we remember that the steppe empires were poly-ethnic. It is also not difficult to imagine that a given ethnic group had its own variety of script, and that the variety used by the ruling class automatically gained the status of a state institution.

It seems that we can, indeed, point out one such writing system. Since most scholars nowadays assume that the treasure of Nagyszentmiklós is of a Protobulgarian origin and once belonged to a rich magnate proprietor, or proprietors, of single vessels, the system of runes engraved and scratched on their surface should probably be acknowledged as official and widely spread, the more so since, according to Gy. Németh, there exist a number of other short inscriptions on small objects of daily use, like mirrors, a spindle whorl, a girdle, and a silver vessel.<sup>23</sup> At the same time we know, however, that the above supposition cannot be accepted by and large, since such signs as  $\mathfrak{F}$   $\mathfrak{D}$  or  $\mathfrak{O}$  are not attested on the hundreds of objects found in the centres of the Danube Protobulgarians in Pliska, Preslav and other localities like Shumen, Varna, Vidin, etc. This is a fact that makes us think of other ethnic groups. As we remember, Németh, A. M. Ščerbak, K. H. Menges, and some others, have been ready to attribute the treasure to the Pechenegs.

Very important in this respect would appear to be the inscription on a famous bas-relief from Shumen presenting a man—apparently a ruler—with a three-cornered crown on his head and a spear or a mace in his hand (Fig. 4). On his both sides there are six lines of signs which F. Altheim tried to identify and to translate.<sup>24</sup> However, on the ground of the photographs published by Altheim and G. I. László (reprinted by S. J. Bajčorov) it is very difficult to qualify those signs as runic signs, and so all conclusions concerning them are based on Altheim's authority. Since his time nobody has tried to reexamine his proposals. Altheim's conclusion was: «Der erste Augenschein zeigt, daß sie in dem gleichen Alphabet geschrieben ist wie die Inschriften des Schatzes von Nagy-Szent-Miklós und ein Teil der Steinmetzzeichen von Aboba-Pliska.»<sup>25</sup>

The short fragments from Shumen interpreted by Altheim do not furnish us with criteria that would enable us to establish their linguistic appurtenance. It should be remembered that Altheim tried to read the Shumen inscription as if its signs were simple variants of the classical letters from the Orkhon and Yenisei areas. Therefore, his translation is neither satisfactory nor reliable. The problem concerning the language of the Shumen and Nagyszentmiklós monuments is extremely complicated.



What concerns Nagyszentmiklós we must keep in mind the following statement by Németh: «As to the phonetic stock of the material I wish to remark and even to emphasize that the Old-Turkish *z* is represented by *z* (*s*) (*čeriz*, *egiz* ~ Chuvash *sêvar*). Thus here also, there is no trace of anything Bulgarian. The word *egiz* represents a typically Kypchak form [...] I emphasize here again: the forms of the Turkish words in our inscriptions are always old Kypchak forms.»<sup>26</sup>



Fig. 4. The bas-relief from Shumen.

H. W. Haussig comes back to the problem of the Nagyszentmiklós signs and presents his own conception: «Wenn die eingravierten und eingeritzten Runen keine Verwandtschaft mit den proto-bulgarischen und den chasarischen Runen aufweisen, könnte die Anbringung der Runen auf ihn [d.h. den Goldschmied] oder andere aus Baktrien stammende Personen zurückzuführen sein. Das würde bedeuten, dass sie sowohl die Runen wie auch die griechische Schrift zur Schreibung einer vielleicht damals noch in Baktrien gesprochenen anderen Sprache benutzten.»<sup>27</sup>

Apart from the Bactrian hypothesis, and since some characteristic signs from Nagyszentmiklós do not appear on a multitude of single objects

all over Bulgaria, it is reasonable to suppose—until the moment of proving the contrary comes—that the imperious inscription from Shumen and the runiform inscriptions from Nagyszentmiklós present two separate varieties of runic script.

The next variety would be the script of the already mentioned shamanic inscription from Monastira by Ravna, quite similar to the Orkhon-Yenisei type. Unfortunately, this variety remains insufficiently researched due to the small number of letters used in the inscription. Still another variety would be the runic script known from Murfatlar and the Rosette of Pliska. Notwithstanding the fact that Dobrev has declared it to be the only veritable national script of the Protobulgarians, which they had brought from their distant homeland in the Pamir region,<sup>28</sup> it is difficult to accept his main arguments.

It seems reasonable to assume that Asparuh and his bodyguards may well have brought with them not only their tamgas but also a runiform script system. The latter, however, should by no way be identified with the alphabet from Murfatlar and the Rosette of Pliska. The reasons are, firstly, that the alphabet from Murfatlar represents an advanced system of writing, the secrets of which are still unknown to us. It is a heterogeneous and developed script, and as such it must be of a later date. Secondly, it contains signs which are in direct relation to the Glagolitic and Cyrillic alphabets. Thirdly, up to the present day it has been mainly known from inscriptions related to religious functions in Christian chapels. No case is known in which that script might have fulfilled any state, military or commercial functions. One may therefore suppose that the early newcomers possessed a relatively poor system of signs which, at the early period of Christianisation, was enriched and developed into a more complicated system. The use of the script continued to be functionally restricted. It is also possible that both Asparuh and Kuber brought with them different varieties of runic script.

To sum up: discussing the problem concerning the runiform script, or scripts, of the Balkan area (Bulgaria, Roumania, Macedonia, Serbia, Greece, partially Hungary and the Ukraine), and, in particular, of the Protobulgarians, we must consider at least the following systems, or variants of systems: (1) Nagyszentmiklós-Szarvas, (2) groups of signs from Aboba-Pliska, Madara Preslav and many localities from north-eastern Bulgaria, (3) Murfatlar, Pliska (Rosette), Obzor-Bjala, Capidava, Šudikovo, (4) Kruševo, (5) Čukurovo, (6) Monastira by Ravna, (7) Shumen (bas-relief), (8) inscriptions from the northern Caucasus ascribed by many scholars to the Huns or to the Protobulgarians.



On this occasion, it also seems useful to give some thoughts about the very term «runes». The happy time when we had to distinguish between German-Scandinavian and Turkic runes has irrevocably gone away. Even the concept of the Turkic runic alphabet being divided into two or three groups, traditionally called after the names of rivers, localities and peoples, is at the point of changing. In his new classification of Central Eurasian runic scripts, I. L. Kyzlasov operates with terms such as the «Don alphabet», the «Kuban alphabet», the «Tisza alphabet», the «Ačyq Taš alphabet», the «Isphara alphabet», and the «South Yenisei alphabet».<sup>29</sup> Bajčorov, in a more traditional approach, distinguishes in Europe three main regions where the Turkic runes are spread: the northern Caucasus, the Volga-Don region, and the Danube region.<sup>30</sup> At the same time, mainly in the West, ethnic names are frequently used in connection with runic scripts, so we hear about Hunnic, Khazarian, and Protobulgarian runes. Some decades ago Németh claimed to have discovered the Pecheneg runes. In the last few decades it has been confirmed that also other peoples, mainly of an Iranian origin, made use of runes. As a result, the problem of the Scythian, Hephthalitic, Khorezmian, Bactrian, and Alanian runes has been added to the old Szekler problem. Owing to H. Váry and his discoveries made in the Cunni cave we may probably also speak of a separate variety of Anatolian runes, which are not identical with the Old Turkic runes.<sup>31</sup>

As far as the signs from Murfatlar and Pliska are concerned, many scholars (Németh, Ligeti, Ščerbak, Beševliev, Bajčorov) call them «runes». A decidedly opposite opinion is represented by I. L. Kyzlasov who states that «...notwithstanding the existence of a number of signs similar to runes, this script does not resemble any known alphabet of the Turkic speaking peoples. It has no relation to runic scripts and should not be identified as such.»<sup>32</sup>

It is also a rather delicate question as to how those scripts which are treated as presumable models for the Turkic runes should be named. The question is, of course, of the Aramaic, Armazic, and Hephthalitic alphabets, to which the term «runes» is not commonly applied. One may have doubts whether this term should be used with regard to the alphabetic list of signs contained in the book of «*Cosmographia*» by Aethicus Ister.<sup>33</sup>

## Notes

- 1 Cited are mainly Bulgarian and Russian studies. In the originals, there are often errors and misprints.

- 2 «...nositel na tozi osoben vid pismenost sa bili prabylgarite i nikoj drug narod», P. Dobrev, *Kamennata kniga na prabylgarite*. Sofija 1992, 71.
- 3 P. Dobrev, *Kamennata kniga na prabylgarite*. Sofija 1992, 111–112.
- 4 A. Daleva, Dve novi knigi za prabylgarite. *Palaeobulgarica—Starobylgaristika* XVII: 2 (1993), 139–141.
- 5 E. Tryjarski, Kritische Bemerkungen über die neuen Versuche der Entzifferung der protobulgarischen Inschriften. *Turfan, Khotan und Dunhuang*. Vorträge der Tagung «Annemarie v. Gabain und die Turfanforschung», veranstaltet von der Berlin-Brandenburgischen Akademie der Wissenschaften in Berlin (9.–12.1994). Hrsg. von R. E. Emmerick, W. Sundermann, I. Warnke und P. Zieme. Berlin 1996, 348–351.
- 6 «...na granicata na naučnata fantastika». A. Daleva, Dve novi knigi za prabylgarite. *Palaeobulgarica—Starobylgaristika* XVII: 2 (1993), 138.
- 7 «...za tjah e neobhodima otdelna recenzija». A. Daleva, Dve novi knigi za prabylgarite. *Palaeobulgarica—Starobylgaristika* XVII: 2 (1993), 138.9.
- 8 The resemblances are reduced to signs like:  $\uparrow > + \Upsilon$ .
- 9 S. Mihajlov, Kym tylkuvaneto na bronzovata sedmolyča rozeta ot Pliska. *Palaeobulgarica—Starobylgaristika* XIX: 2 (1995), 94–101.
- 10 D. Ovčarov, Otnovo za bronzovata sedmolyča rozeta ot Pliska (Po povod tylkuvaneto na Stamen Mihajlov. *Palaeobulgarica—Starobylgaristika* XIX: 4 (1995), 114–115. There is no doubt that the groups of signs accompanying the pictures of saints at Murfatlar are inscriptions, and not «symbols», «accidental groups of signs» or «logographs». The same is true regarding the signs from Monastira (Ravna) published by M. Moskov.
- 11 This has been approved by D. Ovčarov: «...slynceto v centyra sys znaka IYI i izvestnite togava planeti (lyčite). Tova mnenie e vjarno...». Otnovo za bronzovata sedmolyča rozeta ot Pliska (Po povod tylkuvaneto na Stamen Mihajlov). *Palaeobulgarica—Starobylgaristika* XIX: 4 (1995), 115.
- 12 «...avtoryt podnasja materiala edinstveno na kirilica. [...] pridava neubeditelnost na predstavenite fonetični prehodi v razvoja na dumata». A. Daleva, Dve novi knigi za prabylgarite. *Palaeobulgarica—Starobylgaristika* XVII: 2 (1993), 136.n7.
- 13 R. Sefterski, Pyrvijat runičeski nadpis na Kuberovite bylgari ot Makedonija, *Nauka* 5 (1991), 26.
- 14 R. Sefterski, Nepoznata prabylgarska runičeska pismennost. *Patriot* 34 (22.08. 1991), 6. More information can be found in his paper: Prabylgarski skalen runičeski nadpis ot selo Kruševo, Demirhisarsko, Gyrcija (Iz arhiva na akad J. Ivanov).

- Palaeobulgarica—Starobylgaristika* XVI: 3 (1992), 61–66. See also his generalizing study: Starobylgarska runičeska pismennost ot VII–XI v. (Razprostranie, pismeni različija i proizhod). *Spisanie na Bylgarska Akademija na Naukite* XXXVIII: 3, 85–95. On J. Ivanov and his archives see also R. Sefterski, *Knižovnoto i arhivnoto nasledstvo na akademik Jordan Ivanov* (25.XII.1870–29.VIII.1947); *Palaeobulgarica—Starobylgaristika* XI (1987), 105–115.
- 15 R. Sefterski, *Nepoznata prabylgarska runičeska pismennost. Patriot* 34 (22.08.1991), 6.
- 16 R. Sefterski, *Runičeski nadpisi ot selo Čukurovo, Sofijsko. Palaeobulgarica—Starobylgaristika* XVII (1993), 84–99. Id., *Sveščennik otkril 'čryti i rezki' po lomenite kamyni, dokarani za čerkva. Runičeski nadpisi ot Čukurovo. Otečestven vestnik* no. 14103 (12.01.1993), 8.
- 17 R. Sefterski, *Runičeski nadpisi ot selo Čukurovo, Sofijsko. Palaeobulgarica—Starobylgaristika* XVII (1993), 99.
- 18 «... sa počti negodni za klišarane», R. Sefterski, *Runičeski nadpisi ot selo Čukurovo, Sofijsko. Palaeobulgarica—Starobylgaristika* XVII (1993), 86.
- 19 M. Moskov, *Prabylgarski runičeski nadpis (razčitane i tylkuvane), Palaeobulgarica—Starobylgaristika* VII: 1 (1983), 35–46.
- 20 Cf. the plates in J. Németh, *The runic inscriptions from Nagy-Szent-Miklós and the runiform scripts of Eastern Europe. Acta Linguistica Hung.* 21: 1–2 (1971), 44–45.
- 21 R. Sefterski, *R. Sefterski, Runičeski nadpisi ot selo Čukurovo, Sofijsko. Palaeobulgarica—Starobylgaristika* XVII (1993), 89
- 22 See the monograph by I. L. Kyzlasov, *Runičeskie pis'mennosti evrazijskih stepej*, Moskva 1994. I have changed my opinion on this problem: earlier I did not admit for that period the simultaneous existence of various writing systems within one and the same ethnic or state unit.
- 23 J. Németh, *The runic inscriptions from Nagy-Szent-Miklós and the runiform scripts of Eastern Europe. Acta Linguistica Hung.* 21: 1–2 (1971), 6
- 24 F. Altheim, *Literatur und Gesellschaft im ausgehenden Altertums*, erster Band, Halle-Saale 1948, 203f. Id., *Geschichte der Hunnen*, fünfter Band, Berlin 1950, 304 f.
- 25 F. Altheim, *Literatur und Gesellschaft im ausgehenden Altertums*, erster Band, Halle-Saale 1948, 204.
- 26 J. Németh, *The runic inscriptions from Nagy-Szent-Miklós and the runiform scripts of Eastern Europe. Acta Linguistica Hung.* 21: 1–2 (1971), 37.

- 
- 27 H.-W. Haussig, Die Runen des Schatzes von Nagy-Szent-Miklós in ihrer Bedeutung für die Runenschriften Osteuropas. *Runen, Tamgas und Graffiti aus Asien und Osteuropa*, herausgegeben von K. Röhrborn und W. Veenker, Wiesbaden 1985, 28.
- 28 P. Dobrev, *Kamennata kniga na prabylgarite*. Sofija 1992, passim.
- 29 I. L. Kyzlasov, *Runičeskie pis'mennosti evrazijskih stepej*, Moskva 1994, 15, 23 et passim.
- 30 S. J. Bajčorov, Drevnetjurkskie runičeskie pamjatniki Evropy. *Otnošenie severo-kavkazskogo areala drevnetjurkskoj runičeskoj pis'mennosti k volgo-donskomu i dunajskomu arealam*. Otv. red. E. R. Tenišev, [Stavropol'] 1989.
- 31 Váry H, Alttürkische Felszeichnungen in Nordost-Anatolien. *Ural-Altäische Jahrbücher* 40:1–2 (1968), 50–78.
- 32 I. L. Kyzlasov, *Runičeskie pis'mennosti evrazijskih stepej*, Moskva 1994, 38.
- 33 Aethici Istrici *Cosmographia Vergilio Salisburgensis Rectine Adscripta*. Codex Leidensis Scoligeranus 69. Introduction by T. A. M. Bishop, Amsterdam MCMLXVI.