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The Turkic Runic script: Is the hypothesis of its indigenous origin no more viable?

The present paper is an attempt to respond to a number of publications on the origin of the Old Turkic runiform script (hereafter cited as OTRS) which have appeared during the last few decades. With growing certainty their authors have been developing the hypothesis of a foreign origin and therefore the adoption of this script. First of all we mean the following contributions: G. Clauson (the OTRS was devised by one person, possibly a Sogdian, "by taking the Iranian alphabet as backbone, supplementing it with a few letters from a Greek alphabet"), I.V. Kormushin (the OTRS is based on a Semitic script), A.S. Amanžolov (searching after genetic relations of the runic signs), V.A. Livshits (elaborating the Sogdian version of the OTRS origin, going back to R. Gautiot, by means of graphic confrontations), O. Suleymenov (thoughts about probable genetic relations of the OTRS with other alphabets), O. Pritsak (theses on

¹ G. Clauson, The origin of the Turkish "Runic" Alphabet. "Acta Orientalia" XXXII, 1970, pp. 51-76.

 $^{^2}$ И.В. Кормушин, K основным понятиям тюркской рунической палеографии. "Советская тюркология", No 2, 1975, pp. 25–47.

³ А.С. Аманжолов, *К генезису тюркских рун* "Вопросы языкознания", No. 2, 1978, pp. 76–87.

⁴ В.А. Лившиц, *О происхождении древнетюркской рунической письменности* "Советская тюркология", No 4, 1978, pp. 84–98.

⁵ О. Сулейменов, Грамматика буквы (к истории древнетюркского алфавита) "Известия АН Каз. ССР, Серия филологических наук" No 2, pp. 43–53.

the derivation of the OTRS "from a hitherto unknown West Semitic Syllabary, through one or more Iranian and/or possibly, Altaic intermediaries"; on a syllabic character of the OTRS etc.), A. Róna-Tas (hypothesis according to which the OTRS goes back to an Aramaic alphabet which was near to the Old Sogdian and the Armazic; elaboration of the thesis on four stages of the evolution of the OTRS etc.).

As some of the authors overtly admit,⁸ their papers were inspired by the monography of D. D. Vasilyev which had summarized all the existing paleographic data concerning the OTRS.⁹

Beyond any doubt the phenomenon called by E.D. Polivanov "consonantal dualism" is the most striking peculiarity of the OTRS. According to Polivanov, the alphabet was created by Turks for one of the Turkic languages. Apart from the "etymology of some letters", it is the synharmonic principle laid as the basis of this alphabet which decisively indicates this.¹⁰

From a quantitative point of view not one of the scripts, ever used by Turks, displayed such a richness of consonantal representation of the vowel harmony as the OTRS did. This function was fulfilled by eleven pairs of consonantic signs for the consonantal phonemes.

The Old Turkic consonantal dualism is of great interest from a phonological point of view. In the Turkic languages the lingual distinctive features (velarized or palatalized, back or front) usually belong to the vowels, not to the consonants. It is the vowel of the initial syllable (quite often occuring as the first sound of the word) that determines the synharmonic row of all units (phones) of the given word or word form. According to N. S. Trubetzkoy: "Da der Konsonant j keine palatalisierten bzw. velarisierten Spielarten aufweist und viele Wörter nur aus Vokalen und j bestehen (aj "Mond", aju "Bär" usw.), so können die Vokalphoneme auch unabhängig von der konsonantischen Umgebung eine bestimmte Eigentoneigenschaft aufweisen, während die Konsonanten nur in Verbindung mit Vokalen palatalisiert bzw. velarisiert sind... Daher sind die Eigentongegensätze bei den

⁶ O. Pritsak, Turkology and the Comparative Study of Altaic Languages "Journal of Turkish Studies. Türklük Bilgisi Araştırmaları." Vol. 4., Harvard University Printing Office, 1980, pp. 83–100.

⁷ A. Róna-Tas, On the Development and Origin of the East Turkic "Runic" Script "Acta Orientalia Hung" XLI (I), 1987, pp. 7-14.

⁸ A. Róna-Tas, Op. cit., p. 8; O.N. Tuna, *Eski Doğu Türk Yazısında Kullanılan Ligatürler ve bunlarla ilgili Bazı Meseleler hakkında III. Sovyet-Türk Kollokyumu Göktürk Yazıtları. Tebliğler*. Malatya: İnönü Üniversitesi, 1990, p. 1.

⁹ Д.Д. Васильев, Графический фонд памятников тюркской рунической письменности азиатского ареала (Опыт систематизации), М. 1983.

¹⁰ Е.Д. Поливанов, Идеографический мотив в формации орхонского алфавита "Бюлетень Среднеазиатского государственного университета", Ташкент 1929, No 9, p. 179.

Vokalen phonematisch, wobei die palatalisierten und velarisierten Spielarten der Konsonanten nur kombinatorische Varianten...darstellen". ¹¹

At the same time, N. S. Trubetzkoy was the first to put forth the thesis that a native speaker seeks to reflect in the script he uses just the phonemes, being normally unconscious of the phoneme variants, i.e. of the units of the subphonemic level. This point is in fair accord with the treatment of the phoneme as a generalized sound representation, das "psychische Äquivalent des Sprachlautes" (J. Baudouin de Courtenay). Le. as an abstraction coming into being in the individual linguistic structure of the man on the basis of some concrete class of functionally equivalent minimum sound segments (phones) occuring in the speech. Let

As appears from the above phonological theses, in the script under scrutiny we encounter, first, a typical hypergraphy (notation of subphonological units) and, as a consequence of it, a bulky allography (the use of two or more alternate signs to render one phoneme), second, if the inventor of the script was a Turk, he had to be guided by the qualities of the vowels in order to represent the vowel harmony, not by these of consonants.

And if we assume that the script had been produced by non-Turks (because only a foreigner might have distinguished between velarized and palatalized allophones of a Turkic consonant), then surprisingly the use of two signs for the phoneme j, which (as it is clear from the remark of N. S. Trubetzkoy quoted above) does not and cannot posses the allophones in question.

The solution to the riddle seems to be promoted, on the one hand, by the fact that V. Thomsen, taking into account the increased number of signs (38) presumed to have to do not with an ordinary alphabetical script (the normal number of the letters is approximately 30), but with a syllabary, on the other hand, by all that we know about the vocalic signs in the OTRS.

It would be appropriate to recall that V. Thomsen succeeded first in discovering the three following vocalic letters: (u/u, v/o), (v/u, v/

¹¹ N.S. Trubetzkoy, Grundzüge der Phonologie, Prague 1939, p. 251.

N.S. Trubetzkoy, Les systèmes phonologiques envisagés en euxmêmes et dans leurs rapports avec la structure générale de la langue. Actes du deuxième Congrès international de linguistes. Genève 25-29 août 1931, Paris 1933, pp. 121-122.

¹³ N.S. Trubetzkoy, Grundzüge der Phonologie..., p. 37.

¹⁴ See: В.Б. Касевич, Фонологические проблемы общего и восточного языкознания, М. 1983, pp. 33-67.

¹⁵ H.L. Shorto, The Interpretation of Archaic Writing Systems. "Lingua", Vol. 14, 1965, pp. 88-97.

¹⁶ V. Thomsen, Samlede Afhandlinger. Tredje Bind. Kobenhavn. MCMXXII. p. 12-14.

as is nowadays generally admitted, is not older than the Orkhon one) it possessed in addition one vocalic sign more: \mathbf{k} for $/\ddot{a}/$ and $/\acute{e}/$.

It is absolutely natural to suggest that the OTRS represented by the inscriptions was an alphabetic-syllabic script, which might have already evolved in some way. It might have left behind the pictorial stages (the pictographic and idiographic), the word-syllabic one and — most probably — the syllabic stage. By the time of the creation of Orkhon and Yenisei-Tuba inscriptions it might be loosing its syllabic quality, elaborating the signs for vowels; the syllabograms might be regenerating into consonantic signs.¹⁷

Such a suggestion would signify that all the eleven pairs of consonantic signs originally had represented 22 syllables of one of the typical Turkic types. The fact that the "vocalic" sign a/\ddot{a} is always omitted in the absolute initial position and does always occur in the absolute final position brought O. Pritsak to the correct conclusion: it must have been of the VC (vowel plus consonant) type. ¹⁸

It is worth emphasizing that the morphophonological characteristics of the Turkic languages seem to be favourable for the formation of a syllabic script. Normally while vowels and consonants consecutively follow each other, vocalic clusters within a syllable are avoided and consonantic clusters are restricted to a number of definite types. In these languages short monosyllabic words and morphemes are predominant (and the latter feature is also favourable for the word-syllabic writing systems to emerge). In fact, most of the roots have the

¹⁷ E.D. Polivanov, op. cit., p. 180; cf.: O. Pritsak, Op. cit., p. 85–86; И.М. Дьяконов, *Предисловие*, И. Фридрих, *История письма*, М. 1979, p. 14.

¹⁸ O. Pritsak, Op. cit., p. 85 (According to O. Pritsak, one of the fragments found in Toyoq (Turfan, 1905) and published by A. von Le Coq (Köktürkisches aus Turfan "Sitzungsberichte d. Königlichen Preussischen Akademie d. Wissenschaften. Phil.-hist. Klasse", Vol. 41, 1909, pp. 1047–1061) serves as an evidence in favour of this conclusion: the values of 19 of the Turkic runic sings are reflected by means of the letters of the Manichaean alphabet. The same conclusion on the basis of the mentioned Manichaean material seems to have been independently arrived at by Talât Tekin; the opinion of the latter has given rise to objections from the side of O.F. Sertkaya (Kağıda Yazılı Göktürk Metinleri. III. Sovyet-Türk Kollokyumu. Göktürk Anıtları (Dil, edebiyat, sanat, arkeoloji, tarih, kültür) 8–15 Haziran 1990. Alma-Ata, Kazakistan SSR, Istanbul 1990. pp. 13–15)).

VC structure (alongside the V, VCC, CV, CVC and CVCC types), some of which could be laid as a basis of syllabogram values.

At this stage the list of the possible evidences of the OTRS indigeneousness is as follows: 1) presence of 24 syllabograms (out of 39 signs), which render the palatal vowel harmony; 2) the fact that one of the most typical Turkic syllable structure (VC) formed the most part of syllabogram values; 3) existence of both the graphemes, which denote syllable with low unrounded vowels and those denoting syllables with rounded (oq/uq) and high unrounded vowels $(yq, i\check{c})$.

O. Pritsak and A. Róna-Tas are in agreement that the cause of the great number of k-signs (5 units) is the high frequency of the phoneme k in the Turkic speech.²⁰ As for the authors of the present paper they find the following explanation by I. M. Djakonov concerning an analogous phenomenon in Etruscan script more convincing: Особенно показательно при этом наличие тройки $c,\ k,\ q$ назывались эти буквы соответственно "ке", "ка", "ку" и различались в зависимости от того, какой гласный следовал за ними в тексте — $e,\ a$ или u соответственно. Понятно, о чем может свидетельствовать это обстоятельство: о наличии древнего слогового письма, в котором $\it c$ значило "ке", k значило "ка" а q значило "ку", так что не было необходимости писать еще и гласный: данный знак сам по себе передавал следование "согласный + гласный". 21 ("Especially significant is the existence of the triad c, k, q; these letters had the names "ce", "ka", "ku", and were differentiated according to the vowel following the consonant in the text: e, a or u. It is quite clear what this signifies, namely, the existence, at an earlier stage, of a syllabic script where c was read "ke", k— "ka" and q— "ku", so that the spelling out of the vowel was superfluous: the signs in question themselves represented the sequence "consonant plus vowel".)

As for the so called "global signs" or "ligatures", i.e. signs for consonantal sequences which have been a subject of a vivid discussion in the literature, they were mostly interpreted as having been the result of two graphemes fused (especially in publications of O. N. Tuna). 22 It is noteworthy in this respect that the first component of all extant or supposed clusters in question is represented by a sonorant: nt, lt, $n\hat{c}$, rt (?). Taking into consideration that one of the Turkic syllabic types has the VCC structure and that the first component of the Turkic consonantal clusters in general can be either a fricative or a sonorant it appears quite possible that the "ligatures" are nothing else but former syllabograms for the following syllables: ant, alt, $an\hat{c}$, art (?).

²⁰ O. Pritsak, op. cit., p. 91; A. Róna-Tas, op. cit., p. 12.

²¹ I.M. Djakonov, op. cit., p. 13.

²² O. Pritsak, op. cit., p. 87; A. Róna-tas, op. cit., pp. 10, 12; O.N. Tuna, op. cit., pp. 1–15.

It was as early as in the publications of V. Thomsen concerning the OTRS that an obvious contradiction emerged, which was reproduced by a number of other authors. It consists on the one hand in the aspiration of finding a foreign source of this script: "La source d'où est tirée l'origine de l'alphabet turc, sinon immédiatement, du moins par intermédiaire, c'est la forme de l'alphabet semitique qu'on appelle araméenne. C'est ce que prouvent quantité de ressemblances spéciale dans la forme et la signification des lettres, outre que la direction de l'écriture de droite à gauche concorde aussi particulièrement bien avec cela". 23 On the other hand, the conviction in the pictorial origin of some of the consonantic signs. V. Thomsen again: "Toutefois, en ce qui concerne un certaine nombre de ces signes, il ne paraît pas douteux qu'ils soient en dernière analyse idéographiques, représentant un objet déterminé dont la dénomination turque se reflète dans la valeur phonétique du signe. C'est ainsi que, selon toute probabilité, \mathbf{D} j^1 , a_j n'est rien autre que l'image de la lune; turc $aj; \downarrow$, \uparrow oq, uq est celle d'une flèche, turc oq; λ b^2 , b^3 reproduit la tente turque, ab, avec son grillage caractéristique (käräkü) en bas et sa toiture en feutre... Ces rapprochements, qui, à mon avis, sont incontestables, font soupçonner qu'il y a d'autres signes dont il faut expliquer l'origine par la même voie, quoique elle soit moins évidente et encore très douteuse". 24 As a hypothesis V. Thomsen gives some more examples, admitting at the same time that they can be considered as more or less phantastic: $(r^2, \ddot{a}r = \ddot{a}r \text{ "man"}); (l^2, \ddot{a}l = \ddot{a}l \text{ "hand"}); \, ?, \, (t^1, at = at \text{ "horse"}); , ,$ $(n^2, \ddot{a}n \text{ cf. the verbal stem } en$ -"to step downwards"); $(\gamma, a\gamma, possibly, q)$

Later E. D. Polivanov repeated the idea about the ideographic origin of \mathbf{D} and \downarrow signs and pointed out an important feature of ideograms — the ability to function in isolation without vowels for denoting the corresponding word: aj "moon", aj "arrow". It might be added that the sign \mathbf{Q} behaves in the same way: \mathbf{Q} $\ddot{a}b + d\ddot{a}$ (Mogilan, 32) "(the troops were) at home".

E. D. Polivanov noticed another way of the emergence of the signs, when the initial phoneme of a phonetic word is denoted by its word-sign, e.g. stick symbolizing a lance (Turkic $s\ddot{u}\eta\ddot{u}$) is used as the sign for the palatalized allophone of the $/s/.^{27}$ The device meant here is called acrophonic. It is well known in grammatology in connection with the genesis of the Old Semitic alphabet. In the case of the sign in question it is very likely that in the primary syllabary,

²³ V. Thomsen, op. cit., pp. 73-74.

²⁴ V. Thomsen, op. cit., pp. 78-79.

²⁵ V. Thomsen, op. cit., pp. 79.

²⁶ E.D. Polivanov, op. cit., p. 178.

²⁷ Ibid.

according to the terms of the system, it represented the syllable $/\ddot{a}s/$. It can well be supposed that there are a number of other OTRS signs which might have arisen by the same (acrophonic) way, e.g. the sign \P for the syllable /as/ once could have symbolized hair, $sa\hat{c}$ in Turkic.

The sign of moon, the sign of lance as well as the sign for the word $\ddot{a}d$ "property, livestock" discovered by A. Róna-Tas²⁸ occur among the Turkic tamgas (ancient tribal and property signs) which form a foundation for the A. Schifners' hypothesis of tamga-origin of Turkic runs which was further developed by N.A. Aristov, N. G. Mallitzkij, D. N. Sokolov and supported by I. A. Batmanov.²⁹

It appears from the above that the indigeneous origin of the runiform signs might have been different but the unevenness of their evolution, the influence of various factors, especially, that of the material (wood, stone, paper, etc.) for writing (carving, incising) on, could have resulted in a complicated situation: one part of them can easily be interpreted while the other part has been transformed beyond recognition.

It is noteworthy that no serious scholars were attracted to pictorial or acrophonic ways of the Turkic runs origin nor agreed with the idea about the indigenous nature of this script. V. Thomsen ends his consideration of obvious and presumable pictograms as follows: "Il va sans dire que la verification exacte de ces rapprochements est hors de question". B. D. Polivanov also refrains from a further discussion of the "ideographic motif": "...for it would imply taking a deliberately dangerous path, which is devoid of the criterion of authenticity". 31

As for the scholars (A. C. Emre, A. Mahmutov et al.) who approached the idea about pictographic origin of the runic signs without having formed their own view concerning the OTRS' organization, without having taken into consideration the experience of grammatology, they were able to make only superficial speculations, unpersuasive argumentation and unmethodical interpretation of the material.³²

Nevertheless, the contradiction existing since the decipherment of the OTRS—between the presence of indications in favour of its indigenousness, on the one hand, and scholar's firm belief in its foreign origin, on the other—remains unsolved.

²⁸ A. Róna-Tas, op. cit., p. 9.

²⁹ See: А.С. Аманжолов, *Проблема происхождения тюркского рунического алфавита* "Казак тілі мен эдебеті." 8-шығуы, Алматы 1976, р. 60; *К генезису тюркских рун*, р. 82.

³⁰ V. Thomsen, op. cit., p. 79.

³¹ E.D. Polivanov, op. cit., p. 178.

³² A.C. Emre, Sur l'origine de l'alphabet vieux-turc (dit alphabet runique de Siberie). Istanbul, 1938; A. Махмутов Как возник древнетюркский алфавит. Исследования по тюркологии. Алма-Ата 1969, pp. 141-147.

The following observation of grammatologists, although it is more relevant to the modern period, seems to be rather useful for the solving of this contradiction: writing systems invented under the conditions of intensive cultural exchange and contact with languages which have already had their writing systems normally undergo rapid evolution through the same stages — pictorial, syllabic and verbal.³³ In J. Friedrich's view, the writing systems of this kind may be called "imitatively created".³⁴

The obvious background of the OTRS invention was marked by a significantly increased rate of cultural exchange in the contact zone of two supercivilizations — those of the Far East (Chinese) and the Near East (Semitic-Iranian) in the Pre-Turkic and Ancient Turkic periods (the first half and middle of the Ist millennium B.C.). Another factor which favoured the emergence of the OTRS consisted in the acute need of the establishing Turkic states of perfect (from the point of view of that period) communicative means for administrative, political and ideological purposes.

The ways for the solving of these problems were rather limited:

- 1. The use of foreign languages and writings for the domestic needs of the Turkic Empire. Such possibility was realized in the First Turkic Qaghanat, where the Sogdian language and writing functioned as the official language (the Bughut inscription of 582).
- 2. The adoption of italic Sogdian writing and adaptation to the Turkic language with its subsequent use both in official and religious texts (a number of Sogdian-Turkic documents).³⁵ Later (in the 8th-9th cc.) this way led to the formation of the so called Old Uighur script.
- 3. The invention of a "native" script on the basis of the already extant store of pictorial means. This way was realized under the conditions of a strong pressing from the side of two writing systems the hieroglyphic (Chinese) and alphabetic (Sogdian) one that were well known by the Turks and used by them.³⁶ From a note of Chinese dynastic chronicles concerning the existence by the Turks in the 6th century of two types of writing, one of which was like that of the people hu (i.e. Sogdians) and the other signs on wooden sticks (small planks), used for fiscal purposes, one can conclude that in the First Qaghanat alongside with the Sogdian script there was already a functionally limited non-italic one so called "rezy" (notches, "Kerbschrift"). It is not unreasonable to assume that a script of that kind was one of the early prototypes of the OTRS. The

³³ J. Friedrich, op. cit., pp. 194-206; V.B. Kasevich, op. cit., p. 152.

³⁴ J. Friedrich, op. cit., p. 194.

³⁵ A. Gabain von, Alttürkische Grammatik... 2. verbesserte Auflage, Leipzig 1950, pp. 28–31, §10.

³⁶ About political, cultural and other contacts of the Old Turks see: С.Г. Кляшторный, Древнетюркские рунические памятники как источник по истории Средней Азии, М. 1964, pp. 78–135.

existence of such prototypes may be concluded from non-canonical runic inscriptions found in Altai, at the Upper Yenisei, in Eastern Türkistan and in Jetysu. The further development of these variants of the writing later was reflected by the Eastern-European (Xazaro-Bulgarian) runic script, the latter being represented by a number of variants in the Eurasian steppe zone between the Volga and Danube.

It is difficult to say anything definite as regards the lowest (old) time threshold when the Turks got the first variants of their script. Judjing from the inscriptions on the silver cup out of the Issyq barrow near Alma-Ata (the 4th century B.C.) and the runiform variant of the inscription on the tringual stell from the Dašt-i Navur (Afghanistan, near Ghazni, the beginning of the I millennium A.D.) some runiform writing systems had been used already by the historical predecessors of the Turks — by the Iranian-speaking nomads of the Central Asia. Undeveloped pictorial and runiform script might have been used during a long historical period under the conditions of primarily limited space for the function of writing. This was possible even at the earliest stages of the formation of the Turkish-speaking unions.

Thus, in case we succeed in establishing the continuity between the signs of the Saka-Yueh-chih=script, reflected by both of the mentioned monuments, and the prenormative variants of the Turkic runic writings, the pictorial store which afterwards was used by the Turks for the creation of their own writing systems may prove to be rather ancient.

One should agree with the scholars who assume that the invention of the OTRS dates back to the 7th or the beginning of the 8th(?) century (G. Clauson, L. Bazin) with perhaps one important reservation: if the terms "invention" here denotes a reform of already existing variants of the runic script. The essence of the latter lies in the systematization and unification of the alphabet as well as possibly providing some of the signs that have already been in use with new phonetic values. This would explain the surprising uniformity of the Orkhon-Yenisei script that very rarely is broken by local variants of some signs.

The substance of the reform consisted in the creation of its odd inner form (although this process was in fair accord with the laws of the natural development of scripts). It resulted in the amalgamation which retained all of the preceding stages: 1) at least a part of the signs is able to function as logograms or ideograms ($\ddot{a}b$ "tent", $\ddot{a}d$ "property, livestock", aj "moon", $\ddot{a}l$ "hand", oq "arrow" etc.), it represents pictorial stages; 2) apparently, all signs (in the first instance, of course, the vocalic ones) are able to act as syllabograms with permissible (within the rules of the script) deviation from the predominant and, supposedly, premordial (for the script) syllabic structure — VC(C) — by turning the syllable around $(\ddot{a}b/b\ddot{a}, oq/qo, yq/qy, \ddot{a}d/d\ddot{a}$ etc.); 3) almost all of the signs assumed the ability to represent phonemes (though most of the consonantic signs are able to render only velarized or palatalized consonantal allophones) and therefore to function as

phonemograms (the "global signs", or "ligatures", as it was said above, may be considered as remainder of the syllabic stage of the OTRS evolution).

Taking advantage of A. M. Pevnov's terminology,³⁷ one could say that the OTRS was a signophonographic system, if this term may be applied not only for word-syllabic, but also for more mixed — word-syllabic-alphabetic systems: in the OTRS the graphemes were able to function as signograms, i.e. signs for signs, and as two types of phonograms — syllabograms and phonemograms.

It must be emphasized that everything set forth above is a deliberate attempt to trace the conditions and ways of the formation of the OTRS in the domain of the evolution of its inner form which is more concealed for observation, more conservative and, finally, more important from the point of view of better understanding the peculiarities of the culture and history of the Turkic peoples. Searching for those ways in the domain of the outer (graphic) form of writing signs, which is more liable to the influence of different factors (from writing means up to contacts with foreign cultures) and for this reason more changeable, seems to be less prospective and can be realized only as a subsidiary measure.³⁸

The latter is especially important to be stressed because the fruitless attempts to solve the problem of the origin of the Turkic runic script, remaining within the problems of its inner form, has been undertaken long before its decipherment by V. Thomsen on the 25th of November, 1893, and have continued up to present day.

 $^{^{37}}$ А.М. Певнов, *Проблемы дешифровки чжурчженьской письменности*, "Вопросы языкознания", No 1, 1992, pp. 25–47.

³⁸ J. Friedrich, Op. cit., p. 47.