

NOTES

Tamgas and Runes, Magic Numbers and Magic Symbols

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ONE OF THE IMPORTANT ACQUISITIONS of recent years for our department is an exquisite silver-mounted flintlock garniture by Nicolas Noël Boutet, made about 1800, consisting of a hunting rifle, two matching pistols, and a full set of accessories in the original case.¹ It is especially remarkable for the fact that the rifle has engraved on its escutcheon—a great rarity—the name and coat of arms of the original owner it was commissioned for (Figure 1). The name, in Cyrillic characters, is Nikolai Pompeyevich Schabelski; surrounding the arms: a crescent between two broken swords. Though I have not yet turned up any biographical data about Schabelski, the search for his arms brought me up against an old heraldic and iconographical problem. The charges of the Schabelski arms and similar combinations of curved objects, such as crescents, horse-shoes, or hunting horns, with cross- or arrow-shaped figures are considered to be typical for eastern European, and particularly Polish, heraldry. These charges are generally accepted as being derived from preheraldic signs of authority—stannitze—of early medieval dynastic families,² or even from clan symbols—

1. A study of this garniture by Stuart W. Pyhrr, von Kienbusch Fellow to the Arms and Armor Department, appears in "Hidden Marks on Boutet Firearms," *Arms and Armor Annual* I (1973) pp. 266–274, fig. 7.

2. H. G. Ströhl, *Heraldischer Atlas* (Stuttgart, 1899) section LIV.



FIGURE 1
Escutcheon with the arms and name of Nikolai Pompeyevich Schabelski, detail from a flintlock hunting rifle made by Nicolas Noël Boutet, Versailles, about 1800. The Metropolitan Museum of Art, Fletcher Fund, 1970.179.1

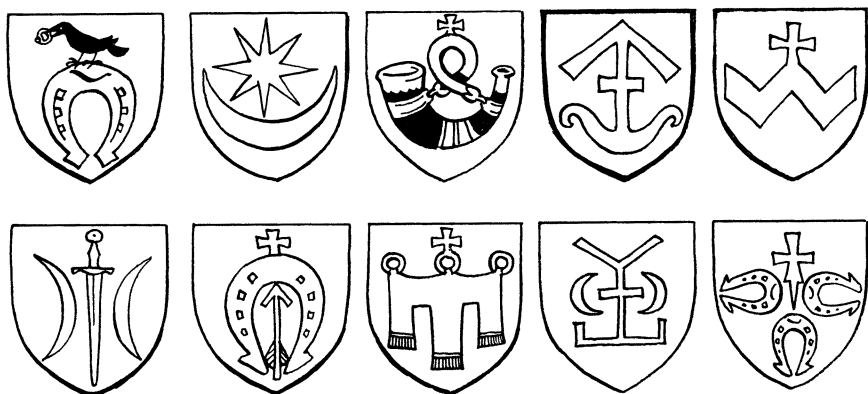
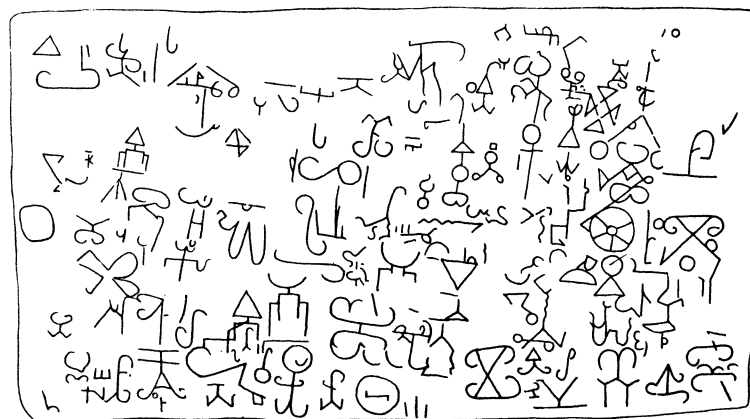
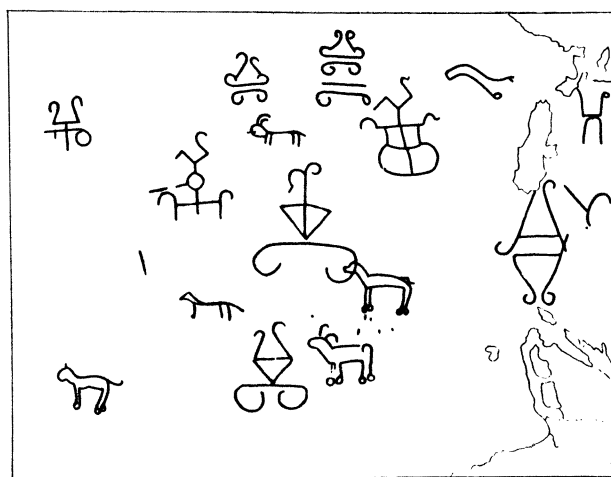


FIGURE 2
Polish heraldry: charges
derived from Sarmatian tamgas

tamgas—of the Sarmatian nomadic tribesmen of the Great Migration period (Figure 2).³ As early as the first century A.D. tamgas appear among the Sarmatian tribes north of the Black Sea as petroglyphs, carvings on gravestones, graffiti in tomb chambers, and marks on metal objects such as cauldrons, belt buckles, and bronze mirrors (Figures 3–5). The contexts indicate that they were symbols of magic power, signs of authority, and also marks of property comparable to family crests, though these different uses were evidently assigned to distinct types of tamgas.

In the most comprehensive study of the subject available,⁴ Hans Jänichen singles out as the most important symbols those he names the “Hauptzeichen,” of which he distinguishes two types; following his nomenclature, they will be called here grosses Hauptzeichen or Type A, and kleines Hauptzeichen or Type B. In addition to these Hauptzeichen he identifies others, the Doppelgabelzeichen and the Mondhügelzeichen, as symbols of authority (Herrschaftszeichen) (Figure 6). Jänichen interprets the Hauptzeichen as stylized renderings of the ancient Iranian battle standard of the golden rooster mounted on a lance (der Hahn auf der Stange)—*aureum gallum hastae impositum*—and suggests that Type A is the badge of a warrior caste representing the rooster standard surrounded by a fence (eingehetzte Hahnenstandarte), and Type B, the rooster upon the



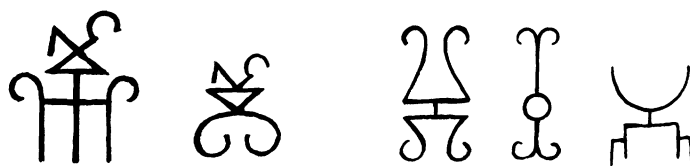
FIGURES 3, 4
Sarmatian graffiti from a tomb chamber, Kerch,
before second century A.D. After Jänichen

FIGURE 5
Sarmatian belt buckles, southern Russia, before
second century A.D. After Jänichen

3. Tadeusz Sulimirski *The Sarmatians* (New York/Washington, 1970) pp. 151–155, fig. 56. Tadeusz Sulimirski, “The Forgotten Sarmatians,” *Vanished Civilizations* (London, 1963) chap. XII.

4. Hans Jänichen, *Die Bildzeichen der königlichen Hoheit bei den iranischen Völkern* (Bonn, 1956) Series: Antiquitas, Reihe 1: Abhandlungen zur alten Geschichte, vol. 3.

FIGURE 6
Sarmatian tamgas: grosses Hauptzeichen, kleines Hauptzeichen, Doppelgabel (two versions), and Mondhügelzeichen. After Jänichen



altar, perhaps the sign of a priestly caste, with possible indications of ranks within the group shown by the circles, triangles, and squares incorporated in the designs (Figure 7).

In a more recent interpretation Helmut Humbach⁵ attempts to decipher the Hauptzeichen Type A as a Greek monogram of Helios— $\text{H}\Lambda\text{I}\text{O}\Sigma$ —and the Type B as that of Dionysos— $\text{D}\text{I}\text{O}\text{N}\Upsilon\Sigma\text{O}\Sigma$.

The Doppelgabel was once considered to be a lightning symbol derived from the thunderbolt design of classical antiquity; Karl Anton Nowotny⁶ suggested that it was an extremely stylized representation of a horse and rider, derived from the combination of the runes M *eo*hwaz (horse) and M *ann*az (man).

The Mondhügelzeichen—moon upon a hill—has been pointed out by Jänichen to be exactly identical

with the symbol of the moon resting upon a hill as widely found in India. It seems once to have been a personal symbol of Chandragupta (d. 286? B.C.), first king of the Maurya dynasty, wherefrom it acquired such importance that it spread through all of India and the neighboring countries. Jänichen suggests that it came to the Sarmatians through contacts in Bactria (Figure 8).

The idea of interpreting the Sarmatian tamgas as monograms is tempting, though the reading of the names of Greek deities in these symbols is not fully convincing. However, when one compares the tamgas not with Greek letters, but with the characters of the earliest Slavic alphabet, Glagolitic, it becomes immediately clear that there is a striking similarity between some of these letters and the elements of the Hauptzeichen. However, in the Greek tradition the Glagolitic letters had numerical values in addition to their phonetic significance. The numerical value of the letters corresponding to elements of the Hauptzeichen

5. Helmut Humbach "Die sogenannte sarmatische Schrift," *Die Welt der Slaven*, 4, no. 3 (1961) p. 225.

6. Karl Anton Nowotny "Runen und Sinnbilder," *Germanien* 11 (1939) pp. 218–225, figs. 1–3.

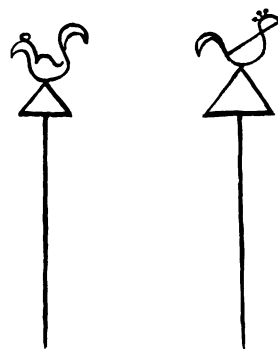
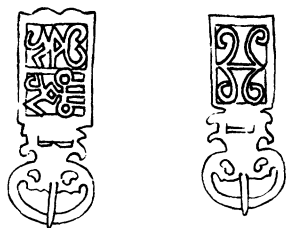
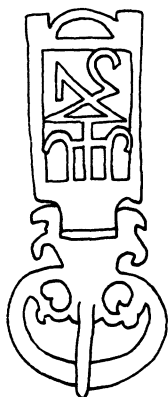


FIGURE 7
Iranian rooster standards. After Jänichen



FIGURE 8
Mondhügelzeichen. Left: badge of Chandragupta; right: Sarmatian tamga

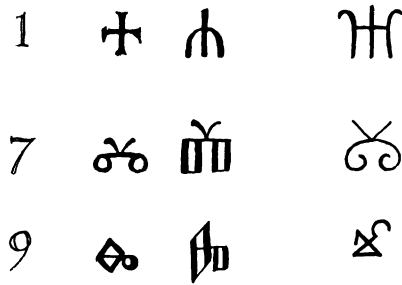


FIGURE 9
Comparison of Glagolitic numerals (at left) with elements of Sarmatian Hauptzeichen

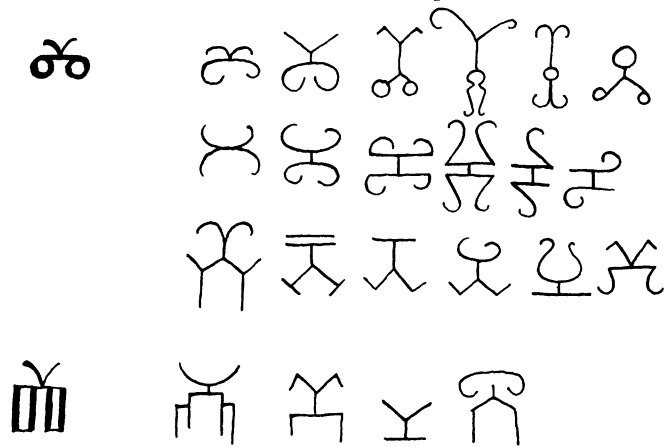


FIGURE 10
Sarmatian tamgas related to Glagolitic numeral 7, "spectacle" and "square" forms

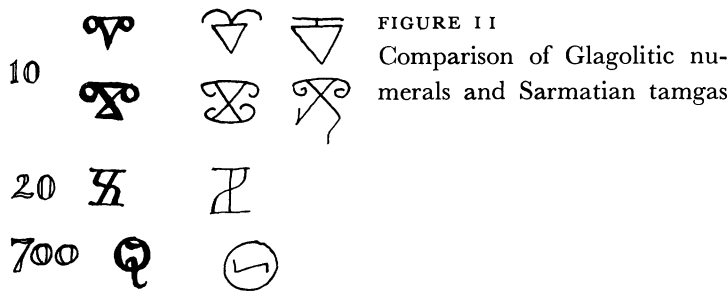


FIGURE 11
Comparison of Glagolitic numerals and Sarmatian tamgas

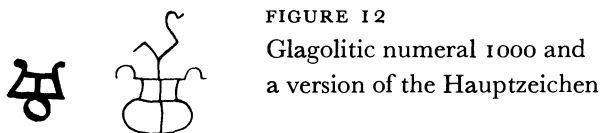


FIGURE 12
Glagolitic numeral 1000 and a version of the Hauptzeichen

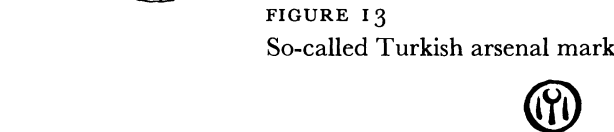


FIGURE 13
So-called Turkish arsenal mark

are 1, 7, and 9 (Figure 9). It is interesting that Type A, grosses Hauptzeichen, contains the number 1 as main element, surmounted by 9, while Type B, kleines Hauptzeichen, is composed of the number 7 surmounted by 9. Checking the other tamga symbols against these Glagolitic numbers, one finds the Mondhügelzeichen revealed as a version of the number 7, as is also the Doppelgabel (Figure 10). Among the graffiti in the grave chambers of Kerch and on the stone lions from Olbia are tamgas resembling the Glagolitic numbers 10, 20, and 700 (Figure 11).

The presence of the number 1 in Hauptzeichen Type A suggests a royal symbol; interestingly enough a variant occurs that employs the Glagolitic number 1000 (Figure 12). It should be pointed out that in Polish heraldry the head of the clan differentiated his arms with a surmounting arrow-shape or a cross, both of which are variants of the Glagolitic number 1.

The final shape of the graphic design of the grosse Hauptzeichen was probably determined by an attempt to incorporate the image of the Iranian rooster standard and the widespread idea of the world-tree with a spirit-bird in its top—the iron larch with nine branches in the mythology of the Eurasian steppe nomads, and the Eddic nine-branched world-ash Yggdrasil with its eagle—into the combination of the magic numbers 1 and 9.

The word *tamga* itself is of Turkish origin, and was used for the ancient tribal marks—cattle brands, cognizances on banners and tents—of the twenty-four Oghuz or original tribes of the nomadic Turks in their Central Asian steppe home. The best known of these symbols is the so-called Turkish arsenal mark that is found on countless pieces of arms and armor of the fifteenth and sixteenth centuries, both European and Near Eastern, that were captured by the Turks and collected in the arsenal of the former church of Saint Irene in Constantinople (Figure 13).⁷ According to the list compiled in the Leiden Manuscript Or. 419 W, this mark is the first of the twenty-four tamgas; it belongs to the prominent Kayi tribe (Figure 14).⁸

The order in which the Turkish tamgas are registered in the Leiden manuscript is not haphazard;

7. Eduard Lenz "Arsenalzeichen oder Beschau?" *Zeitschrift für Historische Waffen- und Kostümkunde*, 6 (1912-14) pp. 299-303.

8. Leo A. Mayer, *Saracenic Heraldry* (Oxford, 1933) pls. L, LI.

FIGURE 15

Comparison between Glagolitic numerals 1-10 and the 24 Turkish tamgas

rather, it is strictly numerical (Figure 15). The Kayi tamga resembles the Glagolitic number 1 clearly enough, and though the second tamga and Glagolitic 2 have only the upward jutting prongs in common, the third is quite close to the number 3 with its basic U-shape and its two uprights. Even the stretched H of the fourth tamga can be recognized as a radically simplified version—for practical reasons (branding cattle)—of the boxlike lower part of the Glagolitic 4, while the five-pointed star of the fifth tamga has its own unmistakable numerical value, though it does not resemble its Glagolitic counterpart. The sixth tamga is the Glagolitic 6 turned sideways (and it consists of six strokes), and in the seventh we meet not only the Glagolitic numeral 7 but the Mondhügelzeichen again. The eighth tamga has a reasonable resemblance to the square form of Glagolitic 8, but at the same time it is clearly a derivation from the fourth tamga, indicating a multiple of 4. The ninth is again extremely simplified, but preserves as its characteristics the crosswise and the diagonal position of the main elements of the figure. A similar simplification takes place in tamga ten. Among the tamgas eleven through nineteen several have a definite resemblance to their equivalents in the first group—1 and 11, 3 and 13, 7 and 17—even if they do not prefer to resemble a more prestigious numeral, of which they are a multiple, such as is the case with 7 and 14. On the other hand, tamgas fifteen and eighteen come rather close to Glagolitic 5 and 8.

Since the Glagolitic alphabet is known only from sources not earlier than the eighth century A.D.—though in all probability is much older—whereas the Sarmatian Hauptzeichen, Doppelgabel and Mondhügelzeichen already existed in the first and second century A.D., and the Turkish tamgas are found in scattered examples soon afterward—it can only be surmised that all these symbols had a common source sometime around the beginning of our era. This could have been a magical system of numbers, presumably

1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Glagolitic numerals

Turkish tamgas

Zodiac signs

Sarmatian Hauptzeichen

1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

FIGURE 16

Glagolitic numerals, Turkish tamgas, signs of the zodiac, and Sarmatian Hauptzeichen

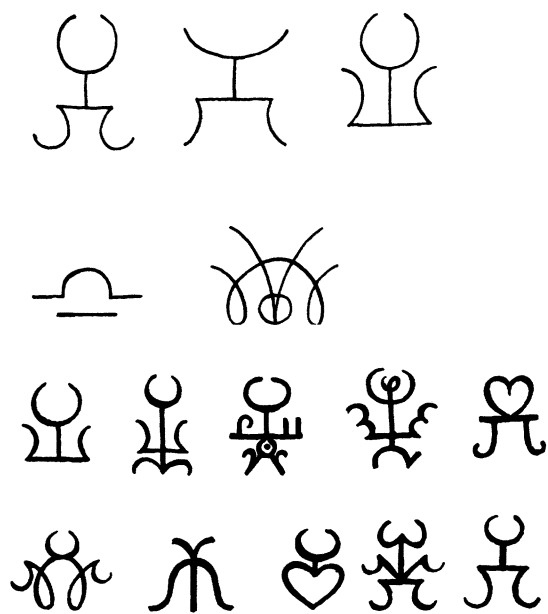


FIGURE 17
Symbols of the Ephthalites, fourth century A.D. (top row), Seljuks, eleventh and twelfth centuries (second row), and Sasanians, third to seventh century A.D. (bottom rows). After Jänichen

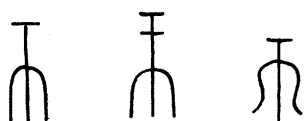


FIGURE 18
Symbols of the dynasty of Elymais, Susa, 150 B.C.-A.D. 50. After Jänichen

of Greek derivation. The Greek origin of the system is made more plausible by comparing the tamgas, Hauptzeichen, and Glagolitic numbers with magical symbols of greatest importance, the signs of the zodiac (Figure 16). The close relationship cannot be overlooked, particularly among the highly powerful numerals 1, 7, 9 (Aries, Libra, Sagittarius). The connections between Gemini, Glagolitic 3, tamgas three and thirteen; Cancer and Glagolitic 4; Leo, Glagolitic 5, and tamga fifteen are also quite striking. It is interesting, though, that the relation between these symbols follows the decimal system; there seem to be no equivalents for the eleventh and twelfth signs of the zodiac, Aquarius and Pisces.

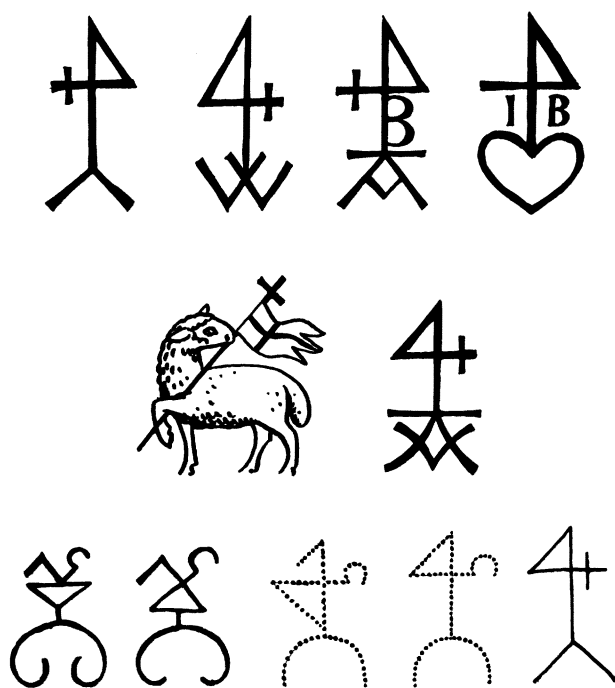


FIGURE 19
English merchant marks (top row), Agnus Dei, and (bottom row) Sarmatian Hauptzeichen (hypothetical forms in dotted line). Top row after Girling

Variants of Hauptzeichen B-Mondhügelzeichen-Fire Altar appear as symbols on coins of the Ephthalites or White Huns as well as on Seljuk coins and Sasanian seals and coins (Figure 17); related signs are found as decorations of horse trappings and as brands. Symbols of the type Hauptzeichen A-Glagolitic 1-tamga Kayi occur on coins of the dynasty of Elymais (Susa, 150 B.C.-A.D. 50) (Figure 18). Presumably these symbols were originally signs of authority that later became linked with numerical magic, though exactly how this happened is not clear.⁹ However, the tenacious consistency with which related graphic symbols occur in fixed numerical positions in systems used by geographically,

9. Interestingly enough, the phonetic values of the three elements that possibly combine to form the grosse Hauptzeichen are a, z, and ž, while among the royal names of the Sarmatians that have come down to us, there is a group Zosines-Tasius-Itaz that contain a syllable that might be transcribed with letters z, a, and ž. Perhaps it was an additional magic of the Hauptzeichen that it spelled a royal name element, similar to the monogram of Christ XP, having at the same time the auspicious numerical value of 700.

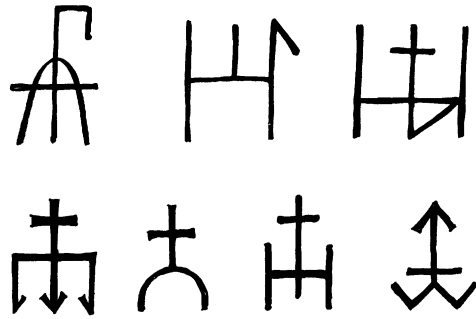


FIGURE 20

Upper row: Marks of the Riga merchants Johannes van der Cappellen, Bernhard Mekelichusen, and Conrad Boningh. After Girling. Lower row: Marks of Passau swordsmiths Emmeran Detterholzer (1491–1532), Family Stantler (1455–1647), Unknown (1560–80), and Hieronymus Frickl (1503–1529). After Schmid

culturally, and ethnically widely separated civilizations indicates an underlying common pattern.

As already mentioned, there is a late survival of the Sarmatian Hauptzeichen and clan symbols in Polish heraldry. On the other hand, the claim has been made that some of these Polish heraldic charges derive from Scandinavian runes, introduced by the Varangians. Particularly, the arrow-shapes that were used as marks of cadency to indicate chieftainship have been said to be the rune *tyr*—↑—and certain wreathlike elements have been thought to derive from the *odal* rune X .¹⁰ Runes are furthermore thought to be the origin of the Hausmarke, the mark of property used in medieval northern Europe by homeowners and merchants (Figure 19).¹¹ A relationship with runes appears clear with many of the Hausmarke that contain an upright shaft fitted with shorter elements set at angles of 45 degrees; however, one of the basic forms, its head shaped like a numeral 4 and usually with a forked foot, does not quite fit into this runic system. The “numeral 4 head” has been explained as being an extreme stylization of the figure of the Agnus Dei, but it could also be—particularly in combination with the split foot—a very

stylized form of the Mondhügelzeichen combined with the upper part of the Hauptzeichen as it appears in Type B.

A connection between the Sarmatian Hauptzeichen and the Hausmarke is definitely indicated by the shape of Hanseatic merchants’ marks from the Steelyard in London (Figure 20),¹² where, characteristically, those “de Polonia” can hardly be described as anything else than versions of the ancient Sarmatian Hauptzeichen. The same can be said for the marks of swordsmiths from Passau at the Danube, the border town between Bavaria and Austria, on the age-old gateway of tribal migrations.

There have been many widely varying explanations given for the origin of the Germanic runes, the most likely and generally accepted idea being that they were derived—with the somewhat hazy Alpengermanen as intermediaries—from an ancient north Italic alphabet, which in turn was a derivative of the Etruscan alphabet that stemmed from the Greek.¹³ One of the puzzling features about runes is that their *futhark* does not follow the established ABC pattern of most other European alphabets. However, in putting the futhark side by side with the Glagolitic numerals, Turkish *tamgas*, astrological zodiac signs, and Sarmatian tamgas (Figure 21), the same strange tendency becomes evident: symbols related to each other by their outward appearance are to be found in the same numerical position within the system, regardless of their phonetic value. Thus the fifth rune *raido*—𐀚—has the same asymmetrical shape with jutting curl that can be found in Glagolitic 5, tamga 15, and the fifth sign of the zodiac, Leo. Similar relationships can be found between the seventh, eighth, and ninth runes of the futhark and their equivalents in the other systems.

Furthermore, it may be more than coincidence that the magic names of the first and second of the runes, *fehu* (livestock) and *uruz* (auerochs), look strangely like the names of the first two signs of the zodiac, Aries and Taurus, and that the *Not-Runen* 𐀞 *hagel* (hailstorm, sleet), 𐀚 *nauthiz* (need, plight), and 𐀛 *is* (ice) correspond to the zodiacal signs of the inclement time of the

10. Ströhl, *Heraldischer Atlas*, section LIV.

11. F. A. Girling, *English Merchant's Marks* (London, 1962, 1964).

12. Girling, *Merchant's Marks*, p. 11, W. M. Schmid, “Passauer Wappenwesen,” *Zeitschrift für Historische Waffenkunde*, 8 (1918–20) pp. 317–342, fig. 7.

13. W. V. Elliott, *Runes* (Manchester, 1959) chap. 1, pp. 1–13.

year, Sagittarius, Capricorn, and Aquarius, while \times *gifu* (gift) is aligned with the powerful numeral seven and the harvest-giving sign Libra.

Runes have always been, and probably were once exclusively, magical symbols; therefore it may well be that their ultimate origin lies in the same ancient system of magic numbers that was the root of all these widely distributed, but strangely related magical symbols: the Sarmatian Hauptzeichen, the Turkish tamgas, and the signs of the zodiac.

ACKNOWLEDGMENTS

I wish to thank my friends and colleagues Prudence Oliver Harper, Vera K. Ostoia, and George Szabo, all of The Metropolitan Museum, for their help, advice, and information for this article.

POSTSCRIPT

After this note was finished, a pertinent article by V. S. Dračuk came to my attention: "Untersuchungen zu den tamgaartigen Zeichen aus dem nordpontischen Randgebiet der Antiken Welt," *Zeitschrift für Archäologie* 6/2 (1972), pp. 190–227. Dračuk reviews critically earlier works on tamgas, rejects N. A. Konstantinov's suggestion (1951, 1957) that these Pontic symbols were the origin of the Glagolitic alphabet, appreciates Jänichen's classifications (1956), but rejects his conclusion that the Hauptzeichen were the main form, even the original form, of the Sarmatian tamgas, and dismisses Humbach's interpretations of the symbols as Greek monograms (1960, 1961). Following E. I. Solomonik, who classified these symbols according to their use (*Sarmatskie znaki Severnovo Prichernomor'ja* [Kiev, 1959]), Dračuk states that the tamgas developed from clan badges to family and personal property marks according to changes in society. Dračuk interprets the grosse Hauptzeichen Type A as the emblem of the Bosphoran rulers as developed from the trident of Poseidon, father of the mythical ancestors of this dynasty. The similarity of the tamga-like symbols in different cultures is considered by Dračuk to be based, not on borrowing, but on independent developments from basic prototypes.

FIGURE 21

Etruscan and north Italic letters, runes, Glagolitic numerals, Sarmatian tamgas, zodiac signs, and Turkish tamgas

Etruscan	North Italic	Runes		Glagolitic		Sarmatian tamgas	Zodiac signs	Turkish tamgas		
				"Spectacle" form	Square form					
𐌁	F	ƿ	1	Ⲁ ⲁ	Ⲃ	𐰇	♈	𐰇 𐰈 𐰉	𐰇	𐰈
𐌂	^	ᚋ	2	ⲃ Ⲅ	ⲅ	𐰊	♉	𐰊 𐰋 𐰌	𐰊	𐰋
	𐌃	ᚏ	3	Ⲇ ⲇ	Ⲉ	𐰍	♊	𐰍 𐰎 𐰏	𐰍	𐰎
A	𐌄	ᚦ	4	ⲉ Ⲋ	ⲋ	𐰐	♋	𐰐 𐰑 𐰒	𐰐	𐰑
𐌅	DP	ᚦ	5	Ⲍ ⲍ	Ⲏ	𐰓	♌	𐰓 𐰔 𐰕	𐰓	𐰔
> 𐌆	< 𐌇	<	6	ⲏ Ⲑ	ⲑ	𐰖	♍	𐰖 𐰗 𐰘	𐰖	𐰗
		𐌘	7	Ⲓ ⲓ	Ⲕ	𐰙	♎	𐰙 𐰚 𐰛	𐰙	𐰚
	𐌈 𐌉	ᚦ	8	ⲕ Ⲍ	ⲍ	𐰜	♏	𐰜 𐰝 𐰞	𐰜	𐰝
𐌊	𐌊	𐌊	9	Ⲏ ⲏ	Ⲑ	𐰟	♐	𐰟 𐰠 𐰡	𐰟	𐰠
𐌋	𐌋	𐌋	10	ⲑ Ⲓ	ⲓ	𐰣	♑	𐰣 𐰤 𐰥	𐰣	𐰤