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## CARIAN QUARRY MARKINGS ON ELEPHANTINE ISLAND

The temple of Khnum on Elephantine Island is fronted by an impressive terrace which was excavated, and studied in recent years under the direction of the Deutsches Archäologisches Institut of Cairo. The recent reports of this work in the *Archäologische Veröffentlichungen* series have provided considerable data for the study of building methods in Upper Egypt during the Hellenistic and Roman periods. In the third volume of these field reports, Herwig Maehler and Karl-Theodor Zauzich have provided a discussion of the quarry markings found on the Khnum temple terrace, in addition to the Greek and Demotic inscriptions.<sup>1</sup> Contrary to the view that these signs are a mixture of Greek letters, religious symbols, and other metaphorical representations, this present paper proposes a new interpretation for these signs on the basis of their close resemblance to letters of the Carian alphabet.

Our understanding of the Carian people, their language, and even the vocalization of their script is still quite limited, although one recent effort has gone so far as to outline a preliminary grammar for this Anatolian language.<sup>2</sup> For many years, it has been known that the Carian script, which somewhat resembles Greek, was alphabetic in nature; but a standardized sign-list was devised only recently.<sup>3</sup> From this list, many of the regional signary variations have been identified. These signs are remarkably similar to those found as quarry markings at Elephantine and other sites near the first Nile cataract.

While our understanding of the Carian language is still a matter for intensive philological debate, the presence of Carians in Egypt, and even as far South as Elephantine, long before the Hellenistic and Roman

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<sup>1</sup> Von Horst Jaritz, et al., *Elephantine III: Die Terrassen vor den Tempeln des Chnum und der Satet*, 1980 (hereafter Jaritz), 85–94.

<sup>2</sup> J. D. Ray, *An Outline of Carian Grammar*, *Kadmos* 29, 1990, 54–83.

<sup>3</sup> Olivier Masson, *Carian Inscriptions from North Saqqâra and Buhen*, 1978, 10, fig. 1.

periods, is well attested.<sup>4</sup> As early as 664 B. C., Psammetichus I of Sais hired mercenary troops, particularly Carians and Ionian Greeks, to form the cutting-edge of his army, and Elephantine was a major military outpost.<sup>5</sup>

Interestingly, the Khnum temple at Elephantine (the terrace of which provides much data for this present study) was the site of a major controversy in 410 B. C. Here hostilities between priests of Khnum and the Jewish mercenaries became so intense that the Persian commanding officer ordered the destruction of the Yahweh temple. By contrast, Carian immigrants from Asia Minor and their descendants showed a marked capacity for assimilation in Egyptian society.<sup>6</sup> It is easy to see how Carian participation in building the Khnum temple terrace would have been compatible with their readiness to accept Egyptian culture and religious practices, as attested elsewhere.

Ninety-four per cent of the signs carved as quarry markings at Elephantine may be identified with signs of the Carian alphabet. There are only seven different markings which do not have known parallels in Carian: these are represented by twenty-three examples which make up only six per cent of the total number of markings found on blocks used to construct the terrace.

The solitary signs found on the Khnum temple terrace were identified as stone quarry markings, 'Steinbruchmarken', at an early date.<sup>7</sup> Such marks are also found on the walls of other Egyptian temples (Kalabasha, Philae, Deir esh-Shelwit, Kom Ombo, Edfu, Dendera, and North Karnak) and at quarry sites (such as east and west Gebel Silsile). Most of these sites date to building-phases of the Early Roman period,<sup>8</sup> the

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<sup>4</sup> For a discussion of this ethnic group's presence in Egypt refer to O. Masson and J. Yoyotte, *Objets pharaoniques à inscription carienne*, 1956; O. Masson, "Les Cariens en Égypte", *Bull. Soc. français Égyptol.* 56, 1969, 25–36; Lloyd, "Introduction", *Herodotus Book II*, 1975.

<sup>5</sup> Alan B. Lloyd, *Ancient Egypt: A Social History*, 1983, 284.

<sup>6</sup> According to Lloyd, *op. cit.* 317, "One important corollary of these Egyptian attitudes is that foreigners could become Egyptians simply by accepting Egypt as their home and by adopting Egyptian culture in all its aspects." Concerning the Carian situation, Lloyd noted use of Egyptian names and participation in Egyptian religious practices. Also refer to Lloyd, "Two figured ostraca from North Saqqara", *JEA* 64, 1978, 107–112. In a personal communication, John Ray has pointed out to me that Carians were "famous as stone-cutters".

<sup>7</sup> Jaritz, *op. cit.* 85, n. 644–649.

<sup>8</sup> Wildung, *LAe* I, 1034 ff.; Zivie, *BIFAO* 77, 1977, 154; Preisigke-Spiegelberg, *Ägyptische und griechische Inschriften und Graffiti aus den Steinbrüchen des Gebel Silsile (Oberägypten)*, 1915, 3 ff.; Jaritz, *op. cit.* 42, 43, 85.

significance of which is yet to be understood. The following discussion employs the Masson numbering-system for the Carian signs.

There are seven examples of Carian sign 1 (Fig. 1) at the Khnum temple.<sup>9</sup> In the Carian alphabet this sign has been identified as the letter a.<sup>10</sup> However, the Greek letter Alpha and the Egyptian hieroglyph *mr* (Gardiner U7) have both been suggested.<sup>11</sup>

The Carian sign 2,  $\mathbb{A}$ , has not been fully recognized as a distinctive sign, and may have been a variant of sign 24,  $\Delta\Delta$ . At Elephantine, there are two similar signs,  $\beta$  (A1) and  $\Delta\Delta$  (C10). The latter is closer to Carian sign 2 and occurred twenty-eight times<sup>12</sup>; it has been identified tentatively as a type of horned offering table.<sup>13</sup>

There are fourteen examples of the Carian sign 3, C<sup>14</sup> transcribed as g.

In the Carian alphabet, sign 4, d (dr ?)<sup>15</sup>, is distinguished from the signs 29 and 30, both read as k<sup>16</sup> (see Fig. 1). In the case of a quarry marking it was not possible to control the orientation of a sign, so the underline found on sign 30 would be necessary to distinguish the letter d from the letter k. At the Khnum terrace, there were eight examples of sign 4 and twenty-one of sign 30 (and/or 29).<sup>17</sup>

There are seventeen examples of the Carian sign 5<sup>18</sup>, which is very similar to sign 32, the only difference being directional (Fig. 1). None of the Elephantine examples of sign 5 were carved in a distinctive form.<sup>19</sup> There were, however, ten examples of a similar sign,  $\Psi$ , which

<sup>9</sup> Jaritz, op. cit. 86, fig. 30; 4 'Oberbau', 1 'Spolien', and 2 'Mittelbau'.

<sup>10</sup> Unless otherwise noted, the references for the Carian transliterations are to O. Masson, Carian Inscriptions from North Saqqâra and Buhen, 10, fig. 1; J. D. Ray, An Outline of Carian Grammar, Kadmos 29, 1990, 55.

<sup>11</sup> Jaritz, op. cit., p. 88, n. 677, fig. 31 (A5).

<sup>12</sup> Jaritz, op. cit., p. 86, fig. 30; 4 'Oberbau', 3 'Mittelbau', and 21 'Unterbau'.

<sup>13</sup> Jaritz, op. cit., p. 92.

<sup>14</sup> Jaritz, op. cit., p. 86, fig. 30; 13 'Mittelbau', and 1 'Unterbau'; this sign was mentioned as a "griechischer Buchstabe", p. 88.

<sup>15</sup> O. Masson, op. cit., p. 10, fig. 1; J. D. Ray, Kadmos 29, 1990, 55; J. D. Ray, An Approach to the Carian Script, Kadmos 20, 1981, 152, 153.

<sup>16</sup> J. D. Ray, The Carian Coins from Aphrodisias, Kadmos 24, 1985, 86–88; J. D. Ray, Kadmos 29, 1990, 55 (signs 29 and 30).

<sup>17</sup> Jaritz, op. cit., p. 86, fig. 30; Carian sign 44 'Oberbau', 4 'Mittelbau' and Carian sign 30 (and/or 29) 21 'Mittelbau'. Concerning sign 4 it was identified as the Greek letter Delta or the Egyptian conical offering loaf, 'bmbn', p. 91; sign 30 was identified as a 'Lotosblüte', p. 91 or as a 'Vulva', p. 94.

<sup>18</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Oberbau', and 15 'Mittelbau'; this sign was mentioned as a 'griechischer Buchstabe', p. 88 (A3).

<sup>19</sup> A variant of Carian sign 5, which is found elsewhere (Saqqara and Buhen), clearly was different from sign 32. Refer to O. Masson, op. cit., p. 12, fig. 2. This variation of sign 5 is not attested among the Elephantine quarry markings.

Carian	Quarry Mark	Phon.	Carian	Quarry Mark	Phon.
1 A		a	23	none	
2/2 4		p	25		's
3		g	26		e
4		d	27		j
5		é	28		ju
6		r	29		k
7		Id (II)	30		k
8		ae?	31		l
9		t(h)	32		ue
10		l	33		z (ss)
11	none	m	34	none	
12		o	35		
13		p/b	36		
14		q	37		
15		r/^s	38	none	
16		r?	39	none	
17		s	40	none	
18		t	41	none	
19		u	42	none	
20	none	i	43/44		
21		h	45	none	
22		k'			

Fig. 1. The quarry markings on Elephantine (column 3) compared with the standard Carian sign-list; phonetic values after Ray

may be identified as Carian sign 32.<sup>20</sup> Carian sign 5 has been interpreted as é and sign 32 as ue.

Carian sign 6,  $\sqsubset$ , may be identified with thirty-five examples of the K mark found at the Khnum terrace.<sup>21</sup> In the Carian alphabet this sign has been recognized as the letter r.

There is only one example of sign 7.<sup>22</sup> In the Carian alphabet this sign has been identified as ld (ll).<sup>23</sup> There are eight examples of the Carian sign 8,<sup>24</sup> tentatively identified as ae.<sup>25</sup>

Carian sign 9,  $\oplus$ , t(h), may be identified with six examples of the rectangular  $\boxtimes$  mark at the Khnum terrace,<sup>26</sup> varied to avoid confusion with the Egyptian 'city' hieroglyph (Gardiner O49).

There are twenty-two examples of the Carian sign 10<sup>27</sup>, which may have signified l<sup>28</sup>, but sign 11 was not listed at Elephantine.

There are six examples of the Carian sign 12,<sup>29</sup> identified as the vowel o.

Five examples are noticed of the Carian sign 13,<sup>30</sup> identified as Carian p(?)<sup>31</sup> or b.<sup>32</sup> This sign is also similar to the Greek letter pi.<sup>33</sup>

<sup>20</sup> Jaritz, op. cit., p. 86, fig. 30; 4 'Oberbau', 2 'Spolien', and 4 'Mittelbau'; this sign was identified as 'eine figürliche Darstellung in abstrahierter Form' and perhaps also as a symbolic attribute of the god Amun-Serapis, p. 93. There is a similar variant of this sign attested at Saqqara; O. Masson, op. cit., p. 13, fig. 3.

<sup>21</sup> Jaritz, op. cit., p. 86, fig. 30; 23 'Oberbau', 1 'Spolien', 10 'Mittelbau', and 1 'Unterbau'; identified as the Greek letter Kappa, p. 88 (A11).

<sup>22</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau'; identified as the Greek letter Eta, p. 89.

<sup>23</sup> O. Masson, op. cit., p. 10, fig. 1; J. D. Ray, Kadmos 20, 1981, 152, 154 n. 7; J. D. Ray, Kadmos 29, 1990, 55.

<sup>24</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Spolien' and 7 'Mittelbau'; tentatively identified with A10 as the Greek letter Eta, p. 89.

<sup>25</sup> J. D. Ray, Kadmos 29, 1990, 55.

<sup>26</sup> Jaritz, op. cit., p. 86, fig. 30; 3 'Oberbau', 1 'Spolien', and 2 'Unterbau'; categorized as a 'Symbol religiösen Inhalts' and identified as an offering table, p. 90.

<sup>27</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Oberbau', 1 'Spolien', 19 'Mittelbau', and 1 'Unterbau'; identified with the 'griechische Buchstaben', p. 88 (A2).

<sup>28</sup> O. Masson, op. cit., p. 10, fig. 1.

<sup>29</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Oberbau', 1 'Spolien', 2 'Mittelbau', and 1 'Unterbau'; identified with the 'griechische Buchstaben', p. 88 (A6).

<sup>30</sup> Jaritz, op. cit., p. 86, fig. 30; 5 'Unterbau'; identified in the category of other metaphorical representations, 'andere figürliche Darstellungen', as a variant of a counter mark or a harpoon, p. 88 (D9), p. 93.

<sup>31</sup> O. Masson, op. cit., p. 10, fig. 1.

<sup>32</sup> J. D. Ray, Kadmos 24, 1985, 88; J. D. Ray, Kadmos 29, 1990, 55.

<sup>33</sup> Refer to Jaritz, op. cit., p. 88, n. 679; comparisons found in Roeder, Debd bis Bab Kalabsche II, pl. 68 ff.; Martin, Manuel I, p. 104 ff.

There is only one example of the Carian sign 14,<sup>34</sup> identified as q<sup>35</sup>, but six of sign 15<sup>36</sup>, read as r<sup>37</sup> or š<sup>38</sup>.

The Carian sign 16, P, has not been fully recognized as a distinctive sign, and it may have been a variant of sign 15, P. At Elephantine, there are five similar signs, ♀ (B1), † (B2), ‡ (B3), † (B4), ‡ (B5), the last two of which are most similar to Carian sign 15. In total, these signs occurred in seventy-three recorded cases<sup>39</sup>, and were interpreted as Egyptian *ankb*-signs<sup>40</sup> in a category of religious symbols.

Carian sign 17, M, s,<sup>41</sup> may be identified with four examples of a similar mark with a base line, ₭, found at the Khnum terrace.<sup>42</sup> This variant may have been made to avoid confusion with signs 2 and 24.

There is only one example of the Carian sign 18<sup>43</sup>, identified as t(?),<sup>44</sup> and two of sign 19,<sup>45</sup> u. The Carian sign 20 is not attested.

There are thirty-three examples of Carian sign 21,<sup>46</sup> h, and five of sign 22,<sup>47</sup> possibly a form of k<sup>48</sup>. Sign 23 is probably not attested<sup>49</sup> among the quarry marks of Elephantine.

<sup>34</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Oberbau'; not discussed in analysis of signs, probably identified with a counter mark or a harpoon, p. 88 (D9), p. 93.

<sup>35</sup> J. D. Ray, Kadmos 29, 1990, 55.

<sup>36</sup> Jaritz, op. cit., p. 86, fig. 30; 6 'Mittelbau'; not discussed in analysis of signs, probably identified with a counter mark or a harpoon, p. 88 (D9), p. 93.

<sup>37</sup> O. Masson, op. cit., p. 10, fig. 1.

<sup>38</sup> J. D. Ray, Kadmos 29, 1990, 55.

<sup>39</sup> Jaritz, op. cit., p. 86, fig. 30; 56 'Oberbau', 2 'Spolien', 13 'Mittelbau', and 2 'Unterbau'.

<sup>40</sup> Identified as the 'altägyptische Steinhauertradition' by Jaritz, op. cit., p. 89, n. 686–693 (comparisons).

<sup>41</sup> O. Masson, op. cit., p. 10, fig. 1; J. D. Ray, Kadmos 29, 1990, 55; note also similarity to the Greek Sigma.

<sup>42</sup> Jaritz, op. cit., p. 86, fig. 30; 4 'Mittelbau'; identified with the Greek Sigma, p. 88, pl. 38 a, b and as the religious symbol of a horned altar, 'Typ des würfelförmigen Tischaltars mit Hörneraufsätzen', p. 92.

<sup>43</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau'; identified as the Greek letter Tau, p. 88.

<sup>44</sup> O. Masson, op. cit., p. 10, fig. 1.

<sup>45</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau', and 1 'Unterbau'.

<sup>46</sup> Jaritz, op. cit., p. 86, fig. 30; 21 'Oberbau', 7 'Spolien', 3 'Mittelbau', and 2 'Unterbau'; identified as a Greek letter, p. 88, fig. 31 (A4).

<sup>47</sup> Jaritz, op. cit., p. 86, fig. 30; 5 'Unterbau'; identified as a Greek letter, p. 88, fig. 31 (A7).

<sup>48</sup> O. Masson, op. cit., p. 10, fig. 1; the form of the sign is like that which is found at Buhen, p. 12, fig. 2; also personal communication from J. D. Ray.

<sup>49</sup> One sign may be identified as Carian sign 23, but this is not certain. Refer to Jaritz, op. cit., p. 88, fig. 31 (B4).

There is only one example of the Carian sign 25<sup>50</sup>, ś. Carian sign 26, e, may be identified with two examples of a similar but more elaborate mark found at the Khnum terrace (Fig. 1)<sup>51</sup>. There is only one example of sign 27, j<sup>52</sup>.

Carian sign 28, ju, may be identified with several variants of a rectangular mark found at the Khnum terrace, where there were nineteen examples.<sup>53</sup>

Sign 31, ⤴, t, may be identified with four examples of the ⤴ mark found at the Khnum terrace.<sup>54</sup>

There are six examples of sign 33 at the terrace<sup>55</sup>; in Carian, this sign has been identified as the letter z (ss).<sup>56</sup> Sign 34 (Fig. 1) may be a variant of sign 33; it was not attested at Elephantine.

Carian sign 35, ⤵, may be identified with five examples of the ⤵ mark found at the Khnum terrace.<sup>57</sup> In Carian, the transliteration of this sign has not yet been determined.

Carian sign 36, ḥ, may be identified with twenty-five examples of the ḥ mark found at the Khnum terrace<sup>58</sup>, of undetermined value.

Sign 37, ⤶, resembles three examples of the ⤶ mark found at the Khnum terrace.<sup>59</sup> In the Carian alphabet the transliteration of this sign has not yet been determined. Signs 38, 39, 40, 41, and 42 were not attested.

<sup>50</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau'; identified as a Greek letter, p. 88, fig. 31 (A8); and associated with a harpoon as a symbol of Horus or the 'Sturmgötter', p. 93.

<sup>51</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Spolien' and 1 'Unterbau'; categorized as a metaphorical representation and identified as a 'Boot mit Dreiecksegel', p. 94.

<sup>52</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau'.

<sup>53</sup> Jaritz, op. cit., p. 86, fig. 30; 5 'Oberbau', 2 'Spolien', 11 'Mittelbau', and 1 'Unterbau'; categorized as a 'Symbol religiösen Inhalts' and identified as an offering table, pp. 89–90.

<sup>54</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Oberbau' and 3 'Mittelbau'; categorized as a 'Symbol religiösen Inhalts' and identified as a symbol of respect for the dead, p. 89.

<sup>55</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Spolien', and 4 'Mittelbau'; this sign was mentioned in the category of 'andere figürliche Darstellungen' and identified with the Minoan culture motif of a double-axe, p. 92.

<sup>56</sup> J. D. Ray, *Kadmos* 20, 1981, 152, 154 n. 7; J. D. Ray, *Kadmos* 29, 1990, 55.

<sup>57</sup> Jaritz, op. cit., p. 86, fig. 30; 5 'Unterbau'; categorized with the 'andere figürliche Darstellungen' and identified as a symbol found in the Palace of Knossos, p. 93, n. 818.

<sup>58</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Oberbau', 1 'Spolien', 16 'Mittelbau', and 6 'Unterbau'; categorized as a 'Symbol religiösen Inhalts' and identified as a libation symbol, p. 91.

<sup>59</sup> Jaritz, op. cit., p. 86, fig. 30; 3 'Mittelbau'; categorized as a 'Symbol religiösen Inhalts' and identified as a horned altar with the stand shown, p. 92.

Either Carian sign 43,  $\lambda$ , or 44,  $\lambda$ , may be identified with one example of the  $\Delta$  mark found at the Khnum terrace.<sup>60</sup> The transliteration of this sign has not been determined. Sign 45 was not attested.

Among the quarry markings there were only seven signs which could not be identified with letters of the Carian alphabet. However, our knowledge of the Carian script is still limited, especially with regard to regional variant forms, and their evolution through time.

In the light of this overwhelming evidence in favor of the Carian identity of the majority of quarry markings at Elephantine, one could suggest that the following seven unidentified graffiti were regional variants of Carian signs, or late forms developed in the early Roman period.

Two signs were classed as metaphorical representations; a 'Strahlen-sonne',  $\star$ <sup>61</sup>, and a 'Pentagramm',  $\star$ .<sup>62</sup> Three signs were called religious symbols; a '*nḥm*-Krug',  $\wp$ <sup>63</sup>, a '*bs*-Gefäß',  $\lambda$ <sup>64</sup>, and a 'Gurke',  $\lambda$ .<sup>65</sup> Finally, there were two rare signs not discussed; a straight line, —, and a box-like sign,  $\boxplus$ .

<sup>60</sup> Jaritz, op. cit., p. 86, fig. 30, 1 'Oberbau'; p. 88, fig. 31 (C9); and identified as a 'phrygische Mütze', p. 91, n. 754, plate 40a.

<sup>61</sup> Jaritz, op. cit., p. 86, fig. 30; 5 'Mittelbau', and 3 'Unterbau'; categorized with the 'andere figürliche Darstellungen' and possible divine association (Sun = Amun), p. 92.

<sup>62</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Spolien', 3 'Mittelbau', and 2 'Unterbau'.

<sup>63</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Unterbau'; 'Symbol religiösen Inhalts', having possible association with Khnum, p. 91.

<sup>64</sup> Jaritz, op. cit., p. 86, fig. 30; 2 'Mittelbau'; categorized with the 'Symbole religiösen Inhalts' and having possible association with a libation vessel, p. 91.

<sup>65</sup> Jaritz, op. cit., p. 86, fig. 30; 1 'Mittelbau'; categorized with the 'Symbole religiösen Inhalts' as a cucumber-shaped hieroglyph, p. 91.