

## 2.4 TEXTUAL SOURCES FOR SANDSTONE FROM SAI

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### 2.4.1 References

The toponym  $\check{S}^c.t$ , i.e. Sai Island,<sup>247</sup> is mentioned five times in the inscriptions of the 18<sup>th</sup> Dynasty temple of Kumma (Semna East) as a source of building material for the temple:

No. 1: Hall C, jamb 37;<sup>248</sup> dedication text of Thutmose III in favour of Khnum-Ra, regarding a  $hw.t-ntr m jnr h\check{d} nfr n \check{S}^c.t$  “temple in fine white stone from Sai”.

Nos. 2–5: Room F, jambs 59, 61, 63, 65;<sup>249</sup> dedication texts of Amenhotep II in favour of Khnum-Ra, regarding a  $hw.t-ntr m jnr h\check{d} nfr n \check{S}^c.t$  “temple in fine white stone from Sai”.

In all five occurrences  $\check{S}^c.t$  is written with the foreign land determinative (Gardiner sign-list N 25) and text no. 1 has in addition the club sign (Gardiner sign-list T 14).

Another inscription in the temple of Kumma mentions  $T3-Stj$  “Land of the bowmen/Nubia” as a source of stone:

Hall C, hieroglyphic frieze 25;<sup>250</sup> dedication text of Thutmose III in favour of Khnum, regarding a  $hw.t-ntr m jnr h\check{d} nfr n T3-Stj$  “temple in fine white stone from Nubia”.

All other dedication texts in the temple of Kumma do not mention a source for the building material used.<sup>251</sup>

In the literature several other references for  $\check{S}^c.t$  as a source of stone for the building of temples have been discussed: A much damaged inscription at the façade of the 18<sup>th</sup> Dynasty temple at Semna (West) opposite of Kumma reports a decree of Thutmose III to Nehy, his viceroy of Nubia, regarding the transportation of stone by ships most probably in connection with the rebuilding of a temple.<sup>252</sup> Kurt Sethe, *Urk. IV*, 986.6 restored  $\check{S}^c.t$  as the provenience of the shipped stone.<sup>253</sup> But since the crucial part of the text had already been completely effaced at the time of Sethe, this reconstruction is in fact nothing more than a mere possibility. Unfortunately, several authors have adopted the restoration

<sup>246</sup> Cf. Harrell 2016, 21: “When iron oxides are absent, the rock has a light grayish to nearly white color which is the natural hue of the quartz sand grains.”

<sup>247</sup> For the identification of the toponym  $\check{S}^c.t$  with Sai, see first Vercoutter 1956, 73; Vercoutter 1958, 147; Posener 1958, 57–60. For lists with references, see Zibelius 1972, 154–155 and most recently Devauchelle and Doyen 2009, 33–37. For Sai in Meroitic texts, see Rilley 2007 (see also above, Chapter 1.1, fn 13).

<sup>248</sup> Caminos 1998b, 50–51, pl. 41 right.

<sup>249</sup> Caminos 1998b, 74, pl. 58 right; 75, pl. 58 left; 76, pl. 60 right; 77, pl. 60 left.

<sup>250</sup> Caminos 1998b, 36, pl. 30.

<sup>251</sup> See in general the temple inscriptions published by Caminos 1998b and especially the building texts in Grallert 2001, 158–160.

<sup>252</sup> Caminos 1998a, 38–40, pl. 22. See also Spencer et al. 2017, 32.

<sup>253</sup> Sethe 1909, 986.6.

by Sethe without indicating that it is a conjecture and not a proven fact. Silke Grallert states with reference to the inscription mentioned above “*Nhis* Angaben belegen, daß für den Neubau Steine aus Sai herbeigeht wurden, um einen alten Ziegeltempel zu ersetzen”.<sup>254</sup> And Ingeborg Müller writes “Kalkstein (sic!) von der Insel Sai ist lediglich als Baumaterial für die Tempel in Semna, Kumma und Buhen erwähnt”.<sup>255</sup>

Like in Kumma, there is an inscription in the temple of Semna which mentions *T3-Stj* “Land of the bowmen/Nubia” as a source of stone:

Exterior face of the west wall, scene 22;<sup>256</sup> in the context of a coronation scene with Thutmose III there is a dedication text of this king in favour of Dedwen and king Senwosret III, regarding a *ḥw.t-ntr m jnr ḥd nfr n T3-Stj* “temple in fine white stone from Nubia”.

The other dedication texts in the temple of Semna do not mention a source for the building material used.<sup>257</sup>

Three inscriptions in the south temple of Buhen name *T3-Stj* “Land of the bowmen/Nubia” as a source of stone used in the temple:

Courtyard, pilaster 3, north face;<sup>258</sup> only partly preserved dedication text of Thutmose III, mentioning *m jnr ḥd nfr n T3-Stj* “in fine white stone from Nubia”.

Entrance to vestibule, west face of south and north jambs 41 and 42;<sup>259</sup> only partly preserved dedication text of Hatshepsut, later altered for Thutmose II, mentioning *m jnr ḥd nfr n T3-Stj* “in fine white stone from Nubia”.<sup>260</sup>

No other location in Nubia shows up in the dedication texts of the south temple of Buhen as a source for building material.<sup>261</sup>

Grallert presumes that stone from *Š3ꜥ.t* was mentioned in the inscription of year 25 of Thutmose III on a pillar found at Sai Island (S.1).<sup>262</sup> The only partly preserved text talks about the construction of a temple at Sai under the responsibility of the viceroy Nehy, but the translation of the crucial part by Grallert as “... eine *ḥw.t-ntr* zu bauen von [Neuem?] [aus Stein der] Festung von Sai”<sup>263</sup> is a mere conjecture and does not fill in adequately the destroyed space indicated by Jean Vercoutter.<sup>264</sup> That is not to say that the temple erected by Thutmose III at Sai (so-called Temple A) was not built from local sandstone (see Chapter 2.3), but just to indicate that no inscripational evidence for it exists in the text of pillar S.1.

To sum up: The five dedication inscriptions in the temple of Kumma by Thutmose III and Amenhotep II are to date the only proven references for *Š3ꜥ.t* as a source of stone for the building of temples.

<sup>254</sup> Grallert 2001, 156.

<sup>255</sup> Müller 2013, 79, 292, 356. For the temple of Buhen, where *Š3ꜥ.t* as a source of stones is in fact not mentioned, and also for the identification of the stone from Sai as sandstone and not limestone, see below.

<sup>256</sup> Caminos 1998a, 73–79, esp. 78, pl. 38, text column 22–23.

<sup>257</sup> See in general the temple inscriptions published by Caminos 1998a and especially the building texts in Grallert 2001, 155–158.

<sup>258</sup> Caminos 1974a, 20, pl. 19 left.

<sup>259</sup> Caminos 1974b, 40–42, pl. 42.

<sup>260</sup> The text on the north jamb 42 does not preserve the *T3-Stj* anymore, but since the inscriptions on the south and north jamb run parallel, it can be safely restored.

<sup>261</sup> For stone from *nw* (Tura) in the Buhen inscriptions, see below.

<sup>262</sup> For the pillar and the text in question, see Vercoutter 1956, 74–75; PM VII, 165; Minault-Gout 2007, 279 (S.1); Davies 2014a, 7–9 (see also this volume, Chapter 6, Doc. 5).

<sup>263</sup> Grallert 2001, 154.

<sup>264</sup> See also the new translation by Davies 2014a, 8: in the phrase quoted above (lines 2–3) “sandstone” might be reconstructed, but remains speculative; in line 6, only “stone” (*jn*) is mentioned.

### 2.4.2 Stone from location NN

Egyptian building inscriptions regularly indicate the type of material used in construction – most often *jnr ḥd nfr/jnr ḥd nfr n rwd.t* “fine white stone/fine white hard stone” – but only rarely mention a special location as source for it.<sup>265</sup> With one exception: *ꜥnw* “Tura” is used more commonly in order to refer to the limestone quarries at Tura-Ma’asara, a few kilometres south of Cairo, which had been exploited at least since the early Old Kingdom.<sup>266</sup> But *ꜥnw* became such a popular source for fine white stone, i.e. stone of high quality in the perception of the Egyptians, that it was sometimes used as an expression for stone of good quality and not necessarily as its source.<sup>267</sup> An example for this kind of use of *ꜥnw* can be found in the south temple of Buhen:

Southern room, north wall, jambs 70 and 71;<sup>268</sup> only partly preserved dedication texts of Hatshepsut, later altered for one of the Thutmoseid kings, mentioning [*m jnr*] *ḥd nfr n ꜥnw* “[in] fine white [stone] from Tura”.<sup>269</sup>

Both texts – like all the other building inscriptions in the temple – undoubtedly refer to the south temple at Buhen. The only stone used in the temple building is so-called Nubian sandstone, of which the exact provenance is unknown.<sup>270</sup> It certainly was not brought from the limestone quarries at Tura far away in the northern part of the Nile valley. “Fine white stone from Tura” here simply denotes a very light-coloured local sandstone.<sup>271</sup>

Nevertheless, some confusion does exist in the literature about the identification of the stone used in the temples at the Second Cataract: John Raymond Harris states that “a small limestone temple at Semneh is said to be of *jnr ḥd nfr n t3-sty*, which in all probability refers to limestone from the neighbourhood of Aswan”.<sup>272</sup> And Müller thought that limestone from *Š3ꜥ.t* “Sai” and/or from *T3-Stj* “Nubia” had been used as building material for the temples in Semna, Kumma and Buhen (for the citation, see above) and – in all likelihood influenced by Harris – that the limestone from *T3-Stj* probably came from the area of Aswan.<sup>273</sup> We have seen above that “fine white stone from Sai” is only proven as a source for building material in the temple of Kumma, whereas “fine white stone from Nubia” is mentioned in Kumma, Semna, and Buhen. As a matter of fact, all three temples in question were not built from limestone but from sandstone.<sup>274</sup> The speculation about limestone quarries near Aswan is neither supported by the archaeological record nor the geology of the First Cataract area.<sup>275</sup>

A comparison between the Egyptian designations for the various stones used in construction or sculpting and the actual material employed shows very clearly that for the Egyptian terminology quite often the visual qualities of the stones were more important than the geological identification. Thus, the expression *jnr ḥd nfr* was used by the Egyptians to denote a light-coloured stone of good quality, regardless whether it was limestone or sandstone.

<sup>265</sup> For a convenient overview of Egyptian building inscriptions, see Grallert 2001.

<sup>266</sup> Grallert 2001, 706–707 (index). See also Sethe 1933, 868–873; Harris 1961, 69–71; Klemm and Klemm 2008, 51–55. The toponym *R3-šwy* can be used for the Tura quarries as well; see Sethe 1933, 867–868 and Harris 1961, 69–70.

<sup>267</sup> Sethe 1933, 872–873; Harris 1961, 71; Karlshausen and de Putter 2017. The same might be true for other place names as well, like e.g. Hatnub as a source of calcite alabaster, which might sometimes denote calcite alabaster from some other quarry, but of a special high quality like the one from Hatnub, see Sethe 1933, 884 and Klemm and Klemm 2008, 161.

<sup>268</sup> Caminos 1974b, 75–76, pl. 63 lower right and left.

<sup>269</sup> The text on jamb 71 only preserves *ꜥnw*.

<sup>270</sup> Caminos 1974a, 12; for Egyptian sandstones and its quarries, see Klemm and Klemm 2008, 167–213 and lately Harrell 2016.

<sup>271</sup> See also Caminos 1974b, 75 fn. 2; Grallert 2001, 162.

<sup>272</sup> Harris 1961, 69.

<sup>273</sup> Müller 2013, 79, 356.

<sup>274</sup> For Buhen, see Caminos 1974a, 12; for Kumma: Caminos 1998b, 3; for Semna: Caminos 1998a, 9, 12.

<sup>275</sup> Klemm and Klemm 2008, 23–145.

A dedication text of Taharqa in the Temple of Mut (B 300) at the Gebel Barkal indicates that this temple, which consisted entirely of sandstone, had been built *m jnr ʿnw ḥd nfr rwd* “in fine white hard Tura-stone”.<sup>276</sup> Here again, ʿnw specifies a good quality local (sand)stone, but not the source of the stone.

Apart from the special case of ʿnw, it seems that the source of the stone was only indicated within building texts when the material in itself was in some way or the other special or when the location where it came from was an unusual one or when we have a combination of both. Thus, the texts regularly mention *Hwt-nbw* “Hatnub” as a source of calcite alabaster<sup>277</sup> and *Dw dšr* “Roter Berg = Gebel el-Ahmar” is named twice as a place from where red coloured quartzite comes from.<sup>278</sup> Occasionally *ʒbw* “Elephantine” is cited as a location for stone, esp. *jnr km* “black stone – black granite/granodiorite” or *mʒt* “(rose) granite”, but also just *jnr* “stone”.<sup>279</sup> When looking at the ancient Egyptian quarrying area at Aswan, which extends about 20km<sup>2</sup>,<sup>280</sup> it is clear that *ʒbw* in the building inscriptions not just means the island of Elephantine, but the broader area within the First Cataract where the different quarry sites are to be found. The dedication text on one of the obelisks of Hatshepsut at Karnak states that two obelisks were made *m mʒt rwd.t n.t ʿ-rsy* “in hard granite from the southern district”.<sup>281</sup> Undoubtedly ʿ-*rsy* “southern district” is used here as an alternative designation for the quarrying area at Aswan. The dedication text on a door jamb, found at Balat in Dakhla oasis and most probably from the late 6<sup>th</sup> Dynasty, specifies the material used for it as *jnr ḥd nfr n T3-whʒ.t* “fine white stone from the oasis”.<sup>282</sup>

The only Nubian toponyms used to indicate the source of stone within Egyptian building texts are *Šʒt* “Sai” and *T3-Stj* “Nubia”. As seen above, *Šʒt* in this context is only known from inscriptions in the temple of Kumma, which date to the time of Thutmose III and Amenhotep II and *T3-Stj* is mentioned in building texts in the temples of Kumma, Semna, and Buhen, which come from the reigns of Hatshepsut and Thutmose III. Thus, it seems that the use of *Šʒt* and *T3-Stj* as a source of building material of temples was very much limited in time and space. The most plausible explanation for this is in my point of view that during the first half of the 18<sup>th</sup> Dynasty the construction of temples in the area of the Second Cataract using mainly local Nubian sandstone was something new and unusual. Something which had not happened before in this way and that, therefore, was worth to be especially mentioned within the building texts of the temples in question.

#### 2.4.3 Fine white stone from Sai

The textual evidence for stone from Sai used in the construction of the temple at Kumma can be linked to the geoarchaeological results of the AcrossBorders project. Several variants of Nubian sandstone were identified on Sai Island as well as seven sandstone quarries in the vicinity of its New Kingdom town (see Chapter 2.3 and Pl. 20). Back in the 1950s Vercoutter had already observed sandstone quarries at various locations on Sai Island, some of them very close to the river.<sup>283</sup> Somewhat misleading is his statement “that Lepsius when visiting the sandstone temples at Semna associated them with Sai.”<sup>284</sup> Carl Richard Lepsius wrote in one of his letters to Christian Gottfried Ehrenberg and August Böckh from the island of Philae in September 1844 about the temples at Semna and Kumma:<sup>285</sup> “In both fortresses the highest and best position is occupied by a temple, built of huge blocks of sandstone, of two kinds,

<sup>276</sup> Robisek 1989, 10–11, 114; Grallert 2001, 147.

<sup>277</sup> Grallert 2001, 212–213 (18<sup>th</sup> Dynasty, private), 249 (Amenhotep I), 270–271 (Thutmose III), 278 (Thutmose III), 284 (Thutmose III), 285 (Thutmose III), 406 (18<sup>th</sup> Dynasty, private), 498 (12<sup>th</sup> Dynasty, private), 500 (Hatshepsut), 515 (6<sup>th</sup> Dynasty, private); Klemm and Klemm 2008, 161–163.

<sup>278</sup> Grallert 2001, 255 (Hatshepsut), 271–272 (Thutmose III); Klemm and Klemm 2008, 216–219.

<sup>279</sup> Grallert 2001, 215 (Thutmose III), 263 (Thutmose III), 311 (Horemhab), 526–527 (Ramesses III), 559–560 (26<sup>th</sup> Dynasty, private); Klemm and Klemm 2008, 233–267.

<sup>280</sup> Klemm and Klemm 2008, 233–245, esp. fig. 355.

<sup>281</sup> Sethe 1906, 362.11; Grallert 2001, 252.

<sup>282</sup> Osing et al. 1982, 36–37 (no. 38), pl. 8; Grallert 2001, 560.

<sup>283</sup> Vercoutter 1956, 73; Vercoutter 1958, 147–148 with fns. 24–26; Vercoutter 1986, 10.

<sup>284</sup> Vercoutter 1958, 148, fn. 24; his abbreviated quotation of Lepsius changes somewhat the meaning of the original text.

<sup>285</sup> Lepsius 1853, 508.

which must have been brought from a great distance through the rapids; for, southward no sandstone is found nearer than Gebel Abir, in the neighbourhood of Amara and the island of Sai (between 80 and 90 English miles), and northward, there is none nearer than the great division of the district at Wadi Halfa (30 miles distant).<sup>286</sup> Thus, Lepsius thought of the Gebel Abir, i.e. Gebel Abri, as a possible source of sandstone, but not of Sai itself.

Gebel Abri is a widely visible “Inselberg” located close to Sai on the eastern mainland, about 4.5km from the Nile with abundant sandstone outcrops that must have caught the attention of the Lepsius expedition (see Chapter 2.1). But since during the investigation of the area by the AcrossBorders team in 2016 no quarry sites from Pharaonic times were identified (see Chapter 2.2), it seems highly unlikely that the Gebel Abri was used as a source of building material in the New Kingdom. Instead, the quarries identified on Sai Island, which show clear evidence of Pharaonic quarrying activities, must be considered as sources of sandstone used on Sai Island itself and possibly also for temples in the region of the Second Cataract.

Georges Posener picked up the observation of Jean Vercoutter when writing about the identity of the toponym  $\check{S}3^c.t$  with Sai Island, supposing that the stone extracted from the quarries at Sai had been transported by river northward to Kumma in order to be used in erecting the temple there.<sup>287</sup> Caminos consented to this suggestion in his publication of the temple of Kumma: “the source of the sandstone was the ancient quarries in the island now called Sai, some 112km upstream from Kumma fort”.<sup>288</sup> But more recently Didier Devauchelle and Florence Doyen expressed doubts about Sai Island as a source of building material used in Kumma, by referring to the great distance of 112km and the fact that navigating through the Dal Cataract and the region of the Batn el-Haggar was by no means an easy undertaking.<sup>289</sup> Furthermore, they point out that at least in later times (Napatan and Meroitic) and south of the Third Cataract quarries were usually located in the vicinity of the monuments they supplied with stone material.<sup>290</sup> Since one building inscription in Kumma mentions  $T3-Stj$  “Nubia” instead of  $\check{S}3^c.t$  “Sai” as the source of the stone used (see above), they propose to consider both toponyms – at least in this context – as being comparable and essentially metaphoric, referring to a large, imprecisely defined region.<sup>291</sup>

This conclusion is by no means mandatory: alternatively,  $\check{S}3^c.t$  in the Kumma texts may very well denote a much more restricted area, which is part of the larger region  $T3-Stj$ . This interpretation definitely conforms better to the overall use of these toponyms during the New Kingdom, which shows that  $T3-Stj$  should be understood as “Nubia” in a very broad sense,<sup>292</sup> whereas there is clear evidence that the toponym  $\check{S}3^c.t$  in the 18<sup>th</sup> Dynasty designated the settlement which the Egyptians had established on the island of Sai at the very beginning of the 18<sup>th</sup> Dynasty.<sup>293</sup> But in comparison with other place names in Nubia, such as Miam, we may assume that at the same time it also referred to the larger surroundings of the town.<sup>294</sup> We know of several governors ( $h3ty-^c$ ) of  $\check{S}3^c.t$  in the 18<sup>th</sup> Dynasty<sup>295</sup> who were most likely responsible for a larger district that encompassed riverine areas on the eastern and western mainland. This at least can be deduced from what we know about the range of duties of governors in the New

<sup>286</sup> Lepsius 1853, 509.

<sup>287</sup> Posener 1958, 57.

<sup>288</sup> Caminos 1998b, 3. Caminos suggested that parallel to Kumma the sandstone used in Semna also came from Sai (Caminos 1998a, 12).

<sup>289</sup> Devauchelle and Doyen 2009, 36.

<sup>290</sup> Devauchelle and Doyen 2009, 36 with fn. 21.

<sup>291</sup> Devauchelle and Doyen 2009, 36.

<sup>292</sup>  $\check{S}3^c.t$ : Posener 1958, 57–60; Zibelius 1972, 154–155;  $T3-Stj$ : Gauthier 1929, 31–32; Thesaurus Linguae Aegyptiae, Lemma no. 169280 (<http://aaew.bbaw.de/tla/index.html>). See also the use of  $T3-Stj$  in epithets of various Egyptian gods, especially as  $nb/nb.t T3-Stj$  or  $hntj T3-Stj$  during the New Kingdom (Leitz 2003).

<sup>293</sup> For the Egyptian presence on Sai, see Budka 2015a; Budka 2017c and this volume, Chapters 7 and 8.

<sup>294</sup> Müller 2013, 47. See also Steindorff 1935, 21; Posener 1958, 58–59; Simpson 1963, 27; Caminos 1968, 7.

<sup>295</sup> Posener 1958, 58; Devauchelle and Doyen 2009, 34–35; Minault-Gout and Thill 2012, 180–183; Müller 2013, 47, 209; Cressent and Raimon 2016, 28–34. Apart from Sai, we have evidence for  $h3ty-^c$ s in Nubia in connection with Aniba (Miam), Buhen, Faras, Soleb and Kawa, see Müller 2013, 47. See also Auenmüller 2018b and this volume, Chapter 6.

Kingdom.<sup>296</sup> These duties included the administration of state-owned agricultural land, pasture grounds for cattle and vineyards.<sup>297</sup> The Nauri decree also explicitly forbids the governors in Nubia to let personnel of the temple of Seti I at Abydos work in other districts (*w*).<sup>298</sup> Even though we cannot determine the precise geographical extent of the district  $\check{S}^c.t$  in the 18<sup>th</sup> Dynasty, we may safely assume that it encompassed only a small part of all of *T3-Stj*.

When we try to identify the source of the sandstone used in Kumma, we certainly also need to look at the geology and landscape of the Second Cataract and the Batn el-Haggar region immediately southwards. This is not a topic that can be dealt with here in any depth, but a few general remarks may nevertheless be helpful. Over a distance of about 160km from Wadi Halfa in the north to the Dal Cataract in the south the Nile flowed through a barren region mainly consisting of granite and gneiss.<sup>299</sup> The Second Cataract was characterised by a labyrinth of granite rocks and hundreds of small islands, which diverted the Nile into numerous small channels and rapids. In the Batn el-Haggar the bed of the Nile was very narrow and its course was broken by several rapids. Navigation, particularly upstream, was difficult and dangerous and impossible during the low water season. No sandstone formation is known in this part of the Nile valley.<sup>300</sup> Therefore, the sandstone used in the first half of the 18<sup>th</sup> Dynasty in the temples of Kumma and Semna, which are located at the southern end of the Second Cataract, must have been transported over a sizeable distance despite all difficulties, either from the region of Wadi Halfa in the north or from the south, where the nearest sandstone quarries known for being in use during the 18<sup>th</sup> Dynasty are the ones on Sai Island.<sup>301</sup> Since navigation upstream, that is from the sandstone area at Wadi Halfa through all of the Second Cataract to Kumma and Semna, was much more difficult than transportation northward, i.e. with the current, we should assume that, despite the longer distance, the stones were taken from the quarries at Sai. Alternatively, transportation could have gone overland, but regarding the heavy weight and the sizeable distance (from both directions), this seems highly unlikely. In this respect the inscription at Semna, reporting a decree of Thutmose III to Nehy, his viceroy of Nubia, is of interest, because it mentions – albeit in a much damaged context – the transportation of stone by ships (see above).

We have seen that the Egyptian building texts differentiate between fine white stone from  $\check{S}^c.t$  “Sai” and *T3-Stj* “Nubia”.  $\check{S}^c.t$  in this context is only known from inscriptions in the temple of Kumma (Thutmose III and Amenhotep II) and *T3-Stj* is mentioned in building texts in the temples of Kumma, Semna and Buhen (Hatshepsut and Thutmose III). Since  $\check{S}^c.t$  is part of *T3-Stj* (see above), all the references could in principal pertain to stone from Sai. But in the case of the temple at Buhen this is highly unlikely because Buhen was located at the northern end of the Second Cataract, not far away from sandstone formations; therefore, there was no need to transport stone to be used in Buhen from quarries as far away as from Sai Island. In all probability, the toponym *T3-Stj* in the building texts at Buhen refers to local quarries north of the Second Cataract.<sup>302</sup>

In the case of the temples at Semna and Kumma, where, as we have seen, the sandstone came with all probability from Sai Island, the question arises: Why did the Egyptians use two different toponyms to indicate the same source of the stone material at the same time (Thutmose III/Amenhotep II)? Several solutions are possible: Whereas  $\check{S}^c.t$  indicated the precise location of the quarries, the broader term *T3-Stj* was used just as an imprecise but nevertheless correct variation. Alternatively, other Pharaonic

<sup>296</sup> Müller-Wollermann 1991, 48–54; Müller 2013, 46–49.

<sup>297</sup> Müller-Wollermann 1991, 50; Müller 2013, 48.

<sup>298</sup> Kitchen 1975, 52.15

<sup>299</sup> See the description of the region by travellers in the 19<sup>th</sup> and early 20<sup>th</sup> century and in Adams 1977, 26–28. For the geology, the Geological Map of the Sudan, compiled and published in 2004 by the Geological Research Authority of the Sudan, was consulted. I wish to thank Dietrich and Rosemarie Klemm who drew my attention to this source and who generously provided me with a copy.

<sup>300</sup> The Geological Map of the Sudan indicates two small sandstone areas to the north of Sai, close to the Dal Cataract, eastwards of the Nile. But we know nothing about any quarrying activity in this area in Pharaonic times.

<sup>301</sup> For an – albeit incomplete – overview of ancient Egyptian sandstone quarries, see Harrell 2016, 31–34.

<sup>302</sup> For possible sandstone quarries close to Buhen, see Harrell 2016, 33.

sandstone quarries than the ones on Sai Island might have existed not far from the southern end of the Batn el-Haggat, still unknown to us.<sup>303</sup> Those quarries might have been denoted with the more general toponym *T3-Stj* because there was no settlement of any importance nearby like on Sai.

An observation made by the Lepsius expedition in the temple at Kumma back in the early 1840s gives a hint that two different variants of sandstone were used: “Von gelbem Sandstein sind die Eingangspfeiler und Säulen und Pfeiler des Vorhofes, die erste folgende lange Wand, von der nächsten langen die eingebauten Pfeiler und der Architrav darüber, sowie die Tür rechts von der Pfeilerwand; ferner der Architrav über der einzelnen Säule und die Deckplatten darauf, ferner die übrigen großen Deckplatten. Alles übrige ist von grauem Sandstein; jener, der weiße oder gelbe, aus dem auch der alte Teil des Semnetempels gebaut ist, heißt von *T3-Stj*, der graue von *Š3ꜥ.t*.”<sup>304</sup> Thus, Lepsius had combined the archaeological observation of two different variants of sandstone in the temple building with the inscriptions that mention *Š3ꜥ.t* once in hall C (Thutmose III) and four times in room F (Amenhotep II) and *T3-Stj* once at another wall in hall C (Thutmose III). Since the building history of the early 18<sup>th</sup> Dynasty temple at Kumma is a very complex one,<sup>305</sup> it might very well be the case that the stones used were extracted from different sites, i.e. from a quarry located in *T3-Stj* as well as from a quarry on Sai Island.

The petrographic investigation of samples to be taken from various parts of the temple at Kumma and from the one at Semna and their comparative analysis with samples from the quarries on Sai Island (see Chapter 2.3) might help in acquiring more information about the use of the “fine white stone from Sai” in the future.

<sup>303</sup> The sandstone quarries of the 18<sup>th</sup> Dynasty detected nearby Sesebi in recent years (Spence et al. 2009, 44) are located too far southward in my opinion and the same applies to sandstone from the area of Soleb, which was used in the temple there in the reign of Amenhotep III.

<sup>304</sup> Lepsius 1913, 217.

<sup>305</sup> Caminos 1998b, 1–4; Azim and Carlotti 2012, 44.

<sup>306</sup> Based on the reports by Erich Draganits, Sayantani Neogi and Sean Taylor, see also above, Chapter 2.2.

<sup>307</sup> Cf. Budka 2015b with further references.

<sup>308</sup> See, however, the work on Middle Kingdom Nubian fortresses including the question of the harbour at Kerma by Manzo 2017.

<sup>309</sup> Vogel 2004, 151.

<sup>310</sup> Best illustrated by the example of Aniba, see Vogel 2004, 220–221 (“Phase III Hafan”). For the fortress of Mirgissa, see Azim and Gratien 2016.

<sup>311</sup> Vogel 2004, 220–221.