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New textile finds from Dios and Xeron, two *praesidia* of the Eastern Desert of Egypt

I. A long term research: textiles from the *praesidia* of the Eastern Desert of Egypt

In *ATN 50*, I described a long term program of systematic excavations in the Eastern Desert of Egypt that has provided large quantities of textile fragments, contributing to new insight into the textile technology in the ancient world during the three first centuries CE (Cardon, Bülow-Jacobsen and Cuvigny 2010). The excavations focus on small Roman fortresses (*praesidia*) built during the 1st century CE. They are scattered at a regular distance of approximately 30 km along two caravan roads leading from Koptos (now Quft) on the Nile, respectively to Myos Hormos (Quseir), and to Berenike, two important harbours on the Red Sea Coast at the beginning of the Christian era (Fig. 1). These military sites had a double function: to keep the roads safe from the desert Bedouin and to provide travellers, particularly caravans, with an adequate supply of water (Cuvigny 2003; Cuvigny forthcoming). Because of their mixed population of soldiers from different parts of the Roman Empire, accompanied by civilians from Egypt - native or of Greek origin - and also because of the extensive use of recycled textiles in these sites (Cardon, Granger-Taylor and Nowik, forthcoming), their huge rubbish heaps provide exceptionally diverse examples of textile products, some of which had been considered very rare or had been unknown until these recent discoveries.

II. Work in progress on textiles from Dios and Xeron

I now report on this year's work on textiles from the rubbish heaps of the two most recently excavated *praesidia*, both situated along the road from Koptos to Berenike: Dios, excavated by our team between 2005 and 2008; and Xeron, in which the first campaign started in december 2009, ending in January 2010.

The second campaign, started in december 2010, ended at the end of January 2011. I could not be present on the site but arrived in Egypt on January 25th with Danielle Nadal (Association Materia Viva, Toulouse) who has been cleaning and conserving textiles from the *praesidia* since 1997. We worked together on textiles from Dios and Xeron in the Store of the Supreme Council of Antiquities in Quft, in Upper Egypt, until our work was interrupted for security reasons during the first week of February and we had to hurriedly fly back to France. During that brief period of work, however, the totality of textile fragments preserved in the second of two big metal boxes containing the textiles found in Dios were sorted. They had not been examined previously. There were 63 bags containing textiles in the box. Each bag examined contained between one and fifteen different textiles. After being cleaned of earth and dust, they were placed in new bags and grouped by categories in big transparent envelopes for future study. As sorting and cleaning progressed, some particularly interesting textiles were selected and fully studied to allow a quick publication. In addition, the totality of textiles discovered in the rubbish heap and in the fort at Xeron during the second excavation campaign were examined. The contents of the 72 bags full of textiles were sorted, cleaned of earth and dust, placed in new bags and grouped by categories in big transparent envelopes for future study. As sorting and cleaning progressed, some particularly interesting textiles from Xeron were also selected to be fully studied immediately. The few days of intense work we could spend on these textiles lead us to reconsider our previous impression that, from the point of view of both the quantity and state of preservation of the textiles, these sites - and particularly Xeron - were less fruitful than the other *praesidia* already excavated by our team in the Eastern Desert.

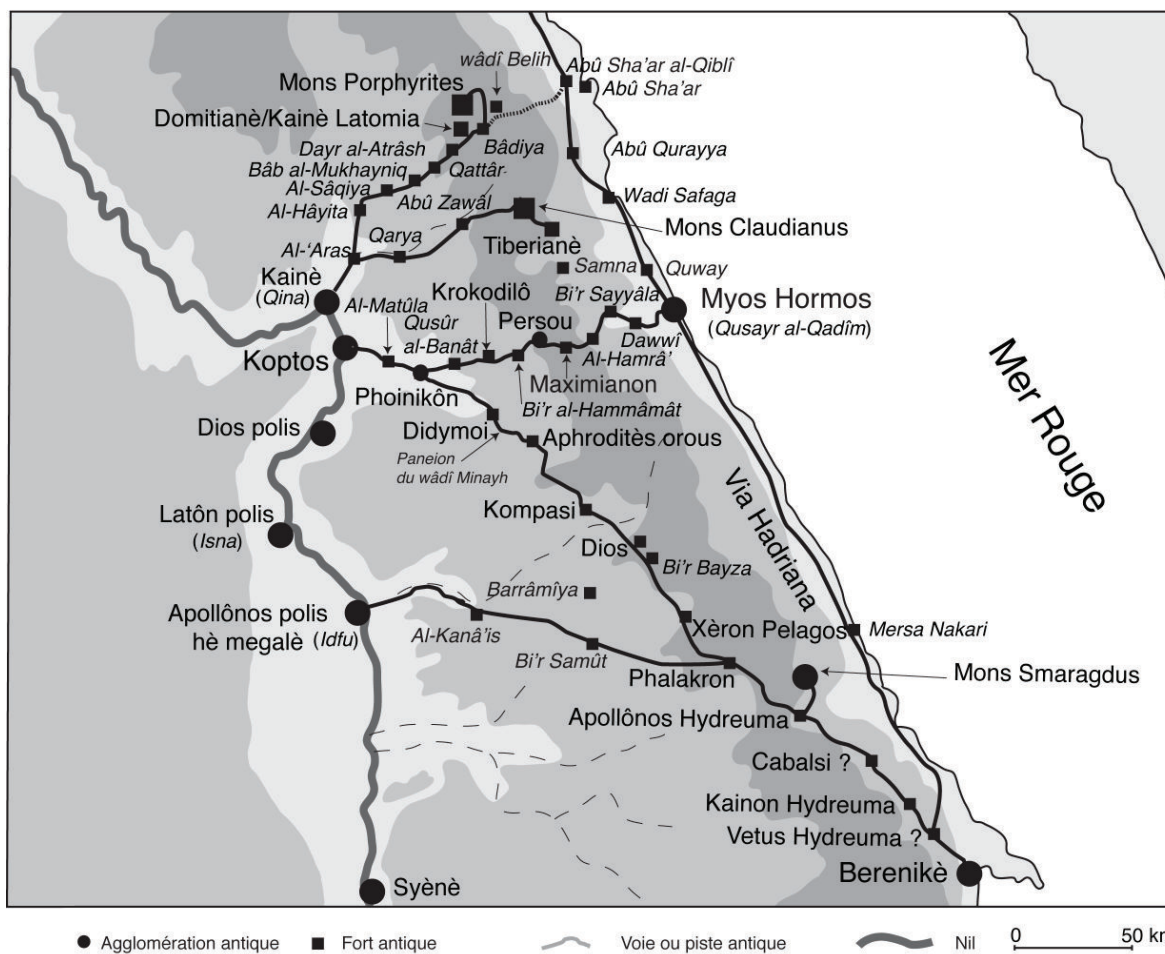
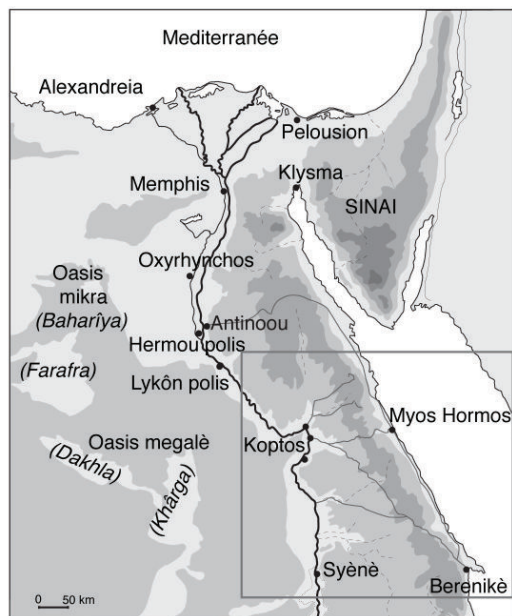


Fig. 1. Map of Egypt with locations of praesidia mentioned in the text
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Fig. 2. The fort of Xeron at the end of the second excavation campaign
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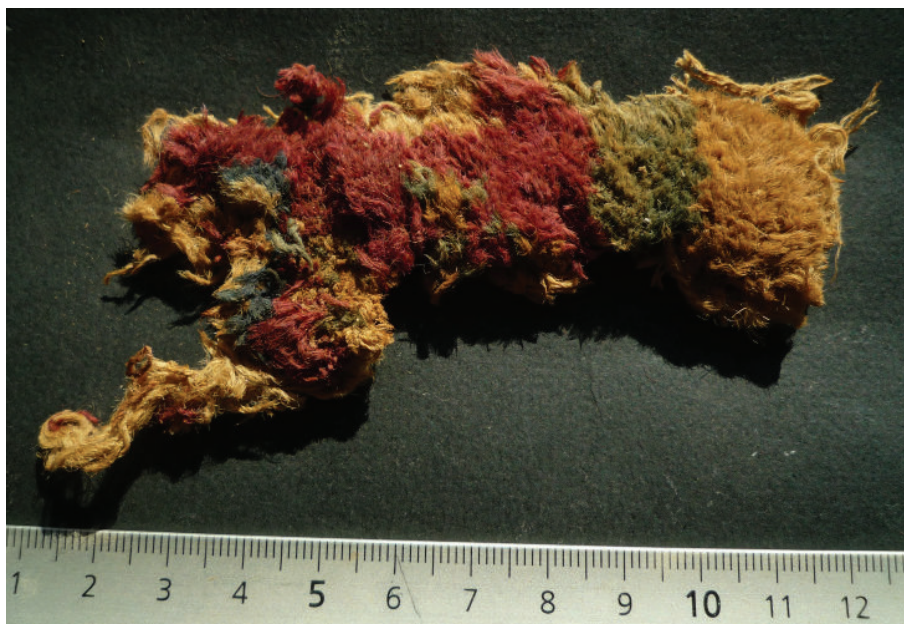


Fig. 3. X.506.22.1. Fragment of textile with pile (carpet?) from the rubbish heap in Xeron, with multicoloured pile wefts exceptionally well preserved
(© D. Cardon).



It is true that the humidity of the desert at Xeron has not generally allowed as good a preservation of wool textiles as in Didymoi, for instance. In Xeron, they usually are very squashed, crumpled, and coated with hardened mud due to being pressed between thick, heavy layers of rotten straw, ashes, and gravel from the important building work that took place in the fort (Fig. 2). But it looks as if in some parts of the rubbish heap, lenses or pockets of textiles had been kept isolated from the mass of debris and protected from decay, since some fragments come out of the ground looking as if they were new (Fig. 3). The great bulk of preserved textiles, nevertheless, consists of coarse, torn, soft furnishing and animal equipment, woven mostly from black-brown goat hair. Some rather small pieces of plain, undyed felt are also found, nearly completely encrusted with mud. Very few linen textiles have been preserved, mostly brown and hardened, like polymerized. But, in spite of the less favourable environmental conditions that prevailed in the rubbish heaps of Dios and Xeron, as compared to Didymoi, the quantity of material deposited was such that among masses of terribly worn and discoloured rags, some extraordinary discoveries have been made this year, once again (Fig. 3). The selection of textiles from Dios and Xeron that have been cleaned and fully studied during this mission demonstrates that both sites are greatly completing and enriching our knowledge of the textile production and clothing fashion in Roman Egypt during the three first centuries CE.

Most textiles from both sites appear to be remains of items of clothing, mostly woven in a range of twills and damasks which are more hardwearing than fine tabbies. They belonged to wool cloaks and mantles and several fragments are decorated with purple tapestry ornaments (Fig. 4 and p. in the present *ATN* issue). Some textiles, possibly coming from *kentrones* (swatches of assorted rags collected for recycling) are of such outstanding quality that I should not be surprised if true purple was identified among the selection that has been entrusted to Witold Nowik, from the Research Laboratory of Historical Monuments in Champs-sur-Marne, near Paris, for dye-analyses. The publication and discussion of fragments of diamond twills and damasks decorated with contrasting bands or tapestry ornaments that have been found in several *praesidia* is in preparation. Small fragments of black-blue cloaks in ribbed or block damasks, similar to those described in a section of our chapter on textiles from Didymoi (Cardon, Granger-Taylor and Nowik, forthcoming), were also found in Xeron, none, however, including a portion of curved selvedge as in several examples from



Fig. 4. Dios.5426.1. Fragment of extremely fine wool textile in diamond twill weave with thin purple notched band in tapestry (© D. Cardon).



Fig. 5. X.607.35.2. Fragment of tunic with greyish-purple clavus from Xeron (© D. Cardon).



Fig. 6. X.11808.1. Fragment of shaded band from Xeron (© D. Cardon).

Didymoi. Tunic fragments and fine wool tabbies in general, are much rarer, smaller and less well preserved in Dios and even less so in Xeron, than in other *praesidia* but they do occur in a range of colour combinations and qualities, including some fine shaded bands (Figs 5 and 6).

Some interesting soft-furnishing textiles have been found in the two sites: two fragments of *taquetés* from Dios, two more from Xeron (Fig. 7); several fragments of textiles with multicoloured pile, including a very well preserved example from Xeron (Fig. 3). Other interesting findings are small but well preserved fragments of multicoloured tapestries, one with geometrical motifs from Dios, three more with leaf motifs from Xeron - the first examples of curvilinear tapestries since our first discovery of such type of tapestry in Didymoi (Fig. 8). Also for the first time since our former studies of the textiles from Maximianon and Didymoi (Cardon 1998), a fragment of wool tabby in a red and yellow decorative pattern obtained by resist-dyeing was discovered in Xeron this year (fig. 9). It was found included in a *kentron*. A fragment of tubular twill weave with multicoloured stripes, of a type that had only been known so far through examples from Maximianon (Cardon 2003), Krokodilô and Didymoi, has been found in Xeron this year.

To conclude, the range of textiles found at these two sites confirms and completes our understanding of the textile products from similar sites previously excavated. Each new corpus studied brings new information, providing more examples of high

quality textiles that testify to the astounding virtuosity of the spinners, weavers and dyers who produced them. More importantly perhaps, finds from each new site allow to gradually build up a catalogue of textile types that were found in Egypt during the three first centuries CE and to define the range of technical variations that could exist within each type. The ultimate aim of our research is, by the patient study of the textiles from the rubbish heaps of the *praesidia*, to provide sound clues on such difficult



Fig. 7. Dios.14703.1. Big fragment of taqueté with geometrical design in blue and white included in a kentron (© D. Cardon).



Fig. 8. X. 808.13.1. Fragment of tapestry with curvilinear motifs from Xeron (© D. Cardon).



Fig. 9. X.807.21.1. Fragment of resist-dyed wool tabby from a kentron, with floral decoration in yellow on red ground (© D. Cardon).

questions as locating centres of production, defining characteristic technical specificities and recognising influences between different textile traditions, within the Roman Empire and beyond.

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