

The craft of the non-mechanically reproducible: targeting centres of faience figurine production in 1800–1650 bc Egypt

Gianluca Miniaci

Published in: Jiménez-Serrano, A. & Morales, A.J. (eds.), *Middle Kingdom Palace Culture and Its Echoes in the Provinces : Regional Perspectives and Realities*, Leiden : Brill, 2021

Abstract

This paper discusses a group of fourteen faience figurines that entered the collection of the British Museum in 1891. Although the figurines were purchased through the antiquities market, they formed a homogenous group that can be typologically and stylistically dated to the late Middle Kingdom (1800–1650 b.c.). Similarities in manufacturing techniques, shape, decoration, raw materials, and other aspects of the technologies employed to create them indicate a common provenance, and by extension, place of production. The site of Lahun is tentatively proposed here as that place of production, based on the date the pieces were purchased as well as the comparative studies. The second part of the article takes a more theoretical and methodological approach to establish the degree to which faience figurine production was centralised and/or dispersed to local centres during the Middle Kingdom, taking four key variables. The dissonant evidence provided by the study of these four different variables, which yielded some conflicting information, demonstrated that faience production was an ‘ambiguous’ process using a medium that could not be fully controlled during all the steps of production. The only degree of control that could be exercised was related to the individual craftsmanship of the artisans. Since faience figurines of the late Middle Kingdom were not produced in moulds, and were therefore not mechanically reproducible, only skilled makers with access to the necessary knowledge about the chemical processes involved could have generated such artefacts.

1. Introduction

Faience figurines of the Middle Kingdom included representations of a broad range of animals. Representations of wild fauna included animals living in the marshes and swamps of the Nile river and in the desert, such as hippopotami, lions, baboons, crocodiles, wild cats, servals, hedgehogs, jerboas, frogs, and snakes. Animals from the domestic sphere, distinguished by their generally harmless behaviour, included dogs, rabbits, pigeons, goats, bovines, and sheep. The group also includes a limited number of human figurines, principally representing grotesque creatures,¹ with

exaggerated or caricatured features, including a large head, prominent stomach, short arms and legs. The group also includes so-called “fertility figurines”² and truncated-leg female figurines³ represented without the lowest parts of the legs.⁴ Composite figures representing hybrid beings such as Aha/Bes⁵ or Ipi/Taweret⁶ are rather rare for this period. Other vegetal and inanimate objects were also reproduced in faience, such as fruits, vegetables, serving dishes, cylinder jars, cups, bowls, and balls.⁷ Some of the figurines have been considered to be “period signatures”; diagnostic items characteristic of the funerary contexts of the late Middle Kingdom. They came into widespread use when some other early Middle Kingdom categories of artefacts, such as wooden models, fell out of use. Other characteristic types also appeared, such as ivory birth-tusks, cubit rods, and shabti “prototypes”. All of these disappeared with the introduction of a range of new burial equipment in the early New Kingdom, including large pieces of furniture and excerpts of the Book of the Dead.⁸

2. Questions Concerning the 1891 Lot of Faience Figurines in the British Museum

In the collection of the Department of Ancient Egypt and Sudan in the British Museum are 61 faience figurines⁹ that can be stylistically and typologically dated to the Middle Kingdom.¹⁰ Around 80% of them have no secure provenance and come from purchases on the antiquities market. Among the purchased figurines is a group of fourteen figurines that were all acquired in the same year, 1891. The acquisitions were made by Sir Ernest Alfred Thompson Wallis Budge and Rev. Chauncey Murch.¹¹

Figurines from Sir Ernest Alfred Thompson Wallis Budge (1891)

No. 1 (ea 22873): hedgehog standing on an elongated oval base, whose edge is painted in black. The black dashes over the body may indicate the quilled coat of the animal. Details outlined in black-blue pigment under the glaze (fig. 11.1).

Colour: turquoise blue; *Core:* white-brownish; *Dimensions:* 5.9 × 3.7 × 3.4 cm; *Place of purchase:* N/A; *Bibliography:* Ross, *The Art of Egypt Through the Ages*, 150, no. 1; von Droste zu Hülshoff, *Der Igel im alten Ägypten*, 137, no. 109, pl. 12; Andrews, *Egyptian Treasures from the British Museum*, 238–239; qtd. Kemp and Merrillees, *Minoan Pottery*, 140, under no. 416.A.07.93.

No. 2 (ea 22876): rampant lion attacking a smaller quadruped (probably a calf), resting on a rectangular base, whose edge is painted in black. The black dashes over the body, the tail, and the face of the animal may indicate the fur. Details outlined in black-blue pigment under the glaze (fig. 11.2).

Colour: deep turquoise blue; *Core:* brownish; *Dimensions:* 4.4 × 7.1 × 2.6 cm;

Place of purchase: Luxor/Thebes; *Bibliography:* unpublished.

No. 3 (ea 22877): walking dog with curly tail and short ears, standing on a rectangular base, whose edge is painted in black. Details outlined in black-blue pigment under the glaze (fig. 11.3).

Colour: turquoise green-blue; *Core*: brownish; *Dimensions*: 3.7 × 5.7 × 2.5 cm; *Place of purchase*: N/A; *Bibliography*: unpublished; qtd. Kemp and Merrillees, *Minoan Pottery*, 141, under no. 416.A.07.98.

No. 4 (ea 22880): recumbent hippopotamus, originally decorated with painted lotus-flower motifs, now faded. Details outlined in black-blue pigment under the glaze (fig. 11.4).

Colour: turquoise blue; *Core*: white-brownish; *Dimensions*: 2.0 × 4.6 × 2.5 cm; *Place of purchase*: N/A; *Bibliography*: pm i2, 2, 614; Behrmann, *Das Nilpferd* i, Doc. 142 f. 34; L. Keimer, “Nouvelles recherches au sujet du *Potamogeton lucens*”, 222, no. 24; qtd. Evers, *Staat aus dem Stein* ii, 127, § 765; Hall, “Three hippopotamus-figures of the Middle Kingdom”, 57.

No. 5 (ea 22881): squatting man with elongated skull and flat-topped head, holding a jar in his hands. Details outlined in black-blue pigment under the glaze; the pigment is faded (fig. 11.5).

Colour: turquoise green; *Core*: brownish; *Dimensions*: 5.8 × 2.8 × 3.0 cm; *Place of purchase*: N/A; *Bibliography*: Ross, *The Art of Egypt*, 150, fig. 1.

No. 6 (ea 22882): pregnant (?) grotesque human being in a squatting position with bald head and pronounced scrotum (a hermaphrodite?). The feet rest on a short base, whose edge is painted in black. Details outlined in black-blue pigment under the glaze (fig. 11.6).

Colour: deep turquoise blue; *Core*: brownish; *Dimensions*: 6.8 × 2.7 × 3.6 cm; *Place of purchase*: N/A; *Bibliography*: Ross, *The Art of Egypt*, 151, fig. 1 (third from left); Dasen, *Dwarfs*, 285, cat. no. d 194.

No. 7 (ea 22883): Standing hybrid human-lion figure, often identified as Aha/ Bes; the arms ending with leonine paws are lying in front of the body and resting over the belly; the legs (now partially missing) should have been slightly bent, and the tail is attached to the back of the figure. The face has a rather unusual shape, almost deformed, with an uncommon necklace ending with a shell(?) -shaped amulet (oval sign). Right arm, left ear, both legs, and much of the tail are now missing. Details outlined in black-blue pigment under the glaze (fig. 11.7).

Colour: turquoise green-blue; *Core*: brownish; *Dimensions*: 10.0 × 5.8 × 3.9 cm; *Place of purchase*: N/A; *Bibliography*: unpublished.

No. 8 (ea 22884): vessel model in tripartite form, decorated with the design of alternating plain and spotted water-lily petals on the lowest level and with a zigzag water design in the middle register. The upper part of the vessel is broken off but originally was probably made of a tip painted in black. Details outlined in black-blue

pigment under the glaze (fig. 11.8).

Colour: pale turquoise blue; *Core*: brown-whitish; *Dimensions*: 6.0 × 3.1 (diam. max.) cm; *Place of purchase*: N/A; *Bibliography*: unpublished.

No. 9 (ea 22885): vessel model in quadripartite form, decorated with the design of spotted water-lily petals on the lowest level and with vertical stroke pattern on the upper level. Details outlined in black-blue pigment under the glaze (fig. 11.9).

Colour: turquoise green; *Core*: brownish; *Dimensions*: 4.5 × 2.7 (diam. max.) cm; *Place of purchase*: N/A; *Bibliography*: unpublished.

Figurines from Rev. Chauncey Murch (1891)

No. 10 (ea 24403): model in the form of a fruit or gourd (fig. 11.10).

Colour: pale turquoise blue; *Dimensions*: 4.1 × 7.0 × 4.2 cm; *Place of purchase*: N/A; *Bibliography*: unpublished.

No. 11 (ea 24404): vessel model in tripartite form, decorated with the design of water-lily petals on the lowest levels. The upper part of the vessel is made of a tip painted in black. Details outlined in black-blue pigment under the glaze (fig. 11.11).

Colour: deep turquoise blue; *Core*: brown-whitish; *Dimensions*: 7.1 × 3.5 (diam. max.) cm; *Place of purchase*: Qurna (Luxor/Thebes); *Bibliography*: unpublished.

No. 12 (ea 24405): crouching cat resting on an oval base, whose edge is painted in black. The tail is curled around the right leg. The black dashes over the body and the tail of the animal may indicate the fur. Details outlined in black-blue pigment under the glaze (fig. 11.12).

Colour: turquoise blue; *Core*: brown-whitish; *Dimensions*: 3.7 × 6.1 × 2.9 cm; *Place of purchase*: Qurna (Luxor/Thebes); *Bibliography*: unpublished.

No. 13 (ea 24406): walking lion or cheetah (wild cat?). The black dashes over the body, the tail, and the face of the animal may indicate the fur. Details outlined in black-blue pigment under the glaze (fig. 11.13).

Colour: turquoise green; *Core*: brown; *Dimensions*: 3.1 × 7.5 × 1.9 cm; *Place of purchase*: Qurna (Luxor/Thebes); *Bibliography*: unpublished.

No. 14 (ea 24409): kneeling man, drinking from a conical jar, resting on a base edged in black paint. Details outlined in black-blue pigment under the glaze (fig. 11.14).

Colour: pale turquoise green; *Dimensions*: 4.8 × 2.4 × 2.9 cm; *Place of purchase*: Qurna (Luxor/Thebes); *Bibliography*: unpublished.



Figure 11.1. Hedgehog figurine, BM EA 22873
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.2. Lion figurine, BM EA 22876
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.3. Dog figurine, BM EA 22877

© Trustees of the British Museum; photos of Gianluca Miniaci

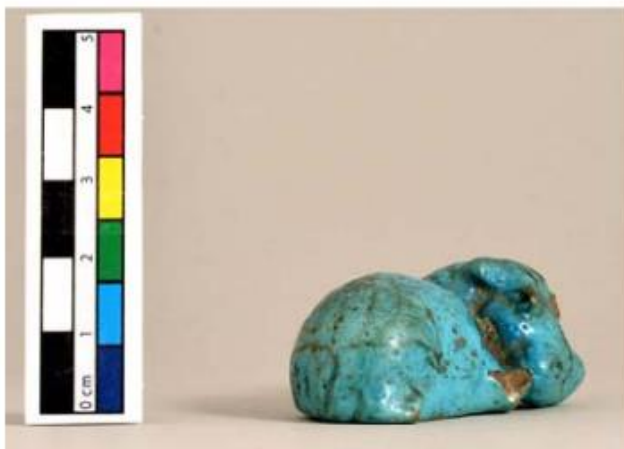


Figure 11.4. Hippopotamos figurine, BM EA 22880
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.5. Man figurine, BM EA 22881
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.6. Pregnant (?) dwarf figurine, BM EA 22882
© Trustees of the British Museum; photos of Gianluca Miniaci

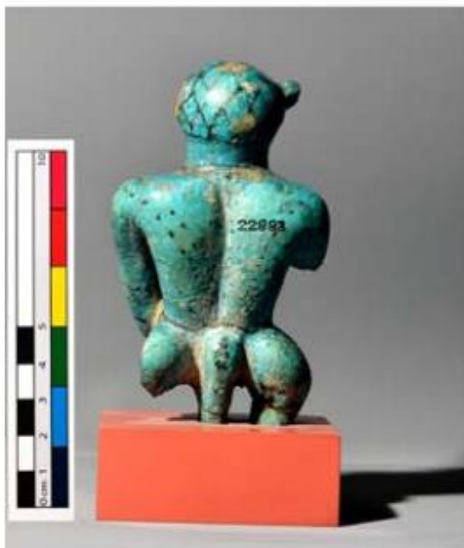


Figure 11.7. Hybrid human-lion figure, BM EA 22883
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.8. Vessel model, BM EA 22884
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.9. Vessel model, BM EA 22885
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.10. Model in the form of a fruit or gourd, BM EA 24403
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.11. Vessel model, BM EA 24404
© Trustees of the British Museum; photos of Gianluca Miniaci

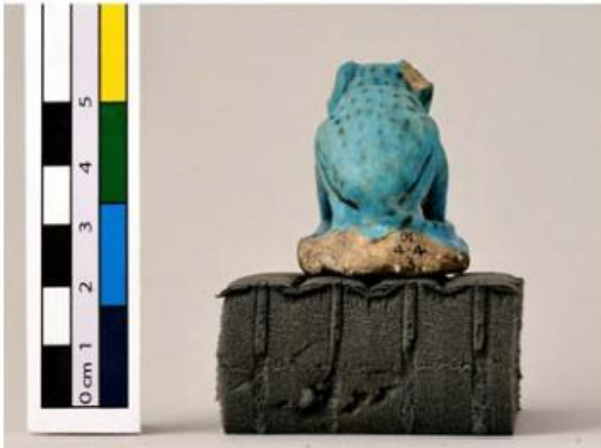
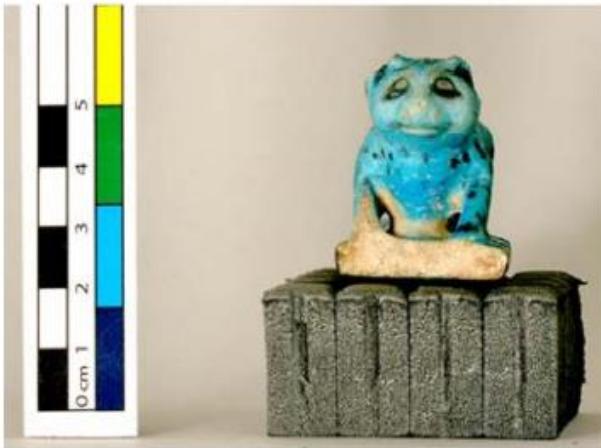


Figure 11.12. Cat figurine, BM EA 24405
© Trustees of the British Museum; photos of Gianluca Miniaci



Figure 11.13. Lion or cheetah figurine, BM EA 24406
© Trustees of the British Museum; photos of Gianluca Miniaci

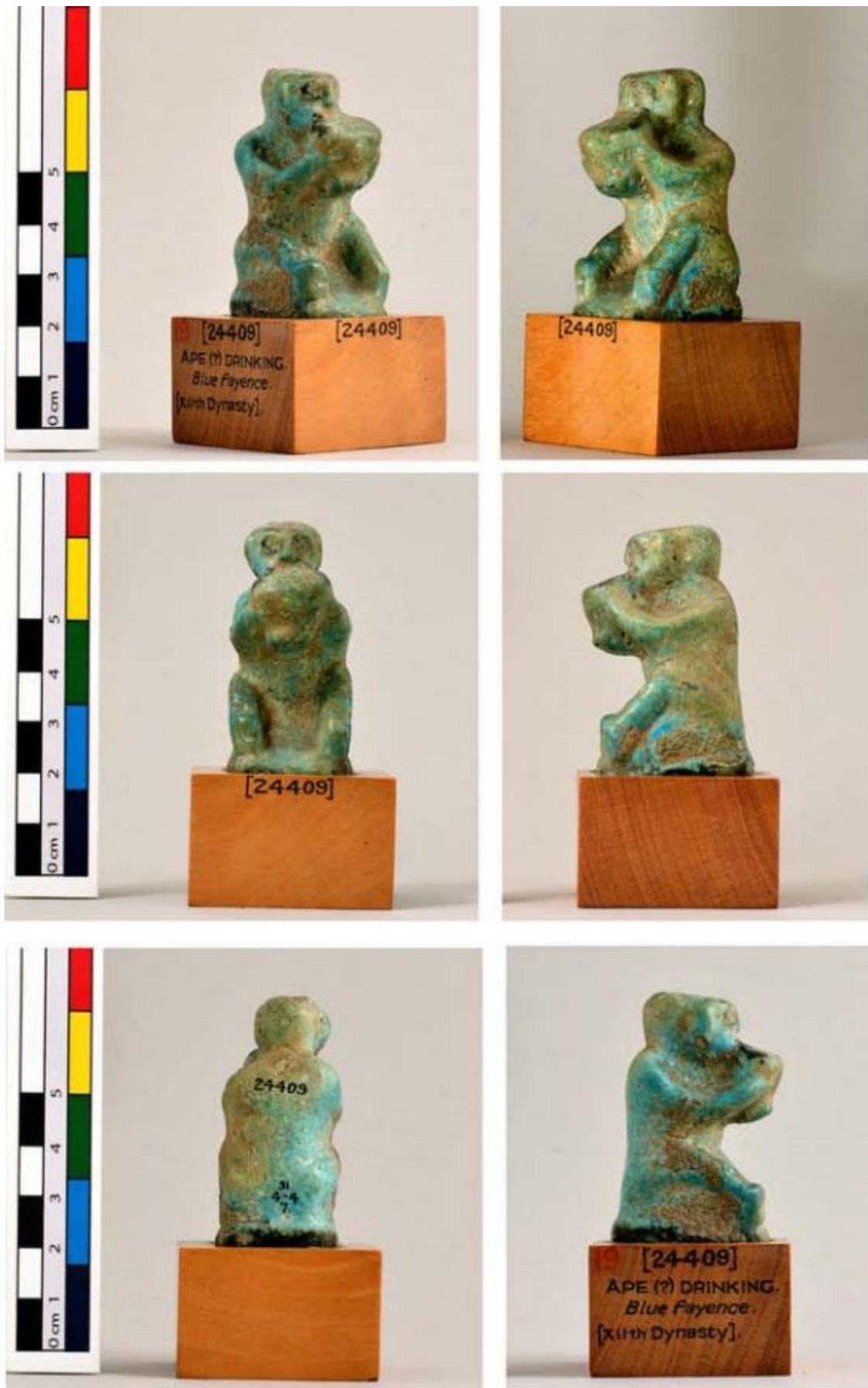


Figure 11.14. Man figurine, BM EA 24409

© Trustees of the British Museum; photos of Gianluca Miniaci

All these fourteen figurines come from market purchases and it is not possible to make any secure statements about their provenances. In addition, when Luxor/Thebes is indicated as place of purchase (five times, nos. 2, 11–14), it does not add useful information with respect to the archaeological provenance, since Luxor was one of the major centres for the antiquities trade in the 19th century. Together with Cairo, it was often used as a “generic purchase place” when illicit sales had to be covered up. Purchased pieces often raise questions about their authenticity, as they could have been modern copies imitating desirable items circulating on the market. There are, however, three reasons that might indicate that these two British Museum figurine groups were genuine, even in absence of laboratory analysis. These are A) the date of their purchase, B) the close parallels with other documented faience figurines, and C) their iconography and manufacture.

A: With the exception of hippopotamus models (which were already known before 1891),¹² large batches of faience figurines were first brought to light in the early 20th century excavations by Petrie, Garstang, the Metropolitan Museum of Art Expedition.¹³ The pieces started to circulate on the markets and attracted the attention of collectors.¹⁴ This could have stimulated the manufacture of modern reproductions. As a result, it is clear that modern copies could not have been based on previously known images or drawings, since by 1891 faience figurines had not yet been depicted in any significant or widespread publications.

B: At least nine of these figurines have surprising similarities with other figures from documented excavated contexts. In addition, all those archaeological contexts date later than 1891:

No. 1 = *Hedgehog* from tomb 655 at Beni Hasan: Cambridge, Fitzwilliam Museum E.345.1954;¹⁵

No. 3 = *Dog* from a deposit in the Obelisk Temple in Byblos;¹⁶

No. 4 = *Hippopotamus* from a deposit in the Obelisk Temple in Byblos;¹⁷ two hippopotami from Lisht: mma 15.3.884, associated with no specific find-spot, probably found in the debris,¹⁸ and mma 15.3.185 from pit 475, east of the tomb 493 of Nakht;¹⁹

Nos. 5 and 14 = *Grotesque human beings* from a deposit in the Obelisk Temple in Byblos;²⁰ grotesque human beings from Lisht, from pit 964 in the cemetery south of the Pyramid: mma 22.1.286;²¹

No. 6 = *Two dwarves* from a deposit in the Obelisk Temple in Byblos;²²

No. 7 = Although this hybrid composition is rather unique in its design, some similarities can be drawn with the features of similar figures of *Aha/Bes* found in

tomb 275E at Esna by Garstang: Liverpool, World Museum, 1977.110.2,²³ and another *Aha/Bes* in tomb G62 at Abydos: bm EA37297,²⁴

No. 9 = *Jar* from the radim in Lisht South: mma 33.1.25,²⁵

No. 12 = *Cat* from the deposit in the Obelisk Temple in Byblos.²⁶

C: From an iconographic point of view, the faience figurines of the 1891 batch embrace a wide range of different subjects: hedgehog, lion, cat, cheetah (?), dog, hippopotamus, human-lion hybrid combination, fruit. The motif of a grotesque creature drinking from a cup and a vessel with pointed stopper occurs twice. Although disparate, all these motifs are rather common within the corpus of Middle Kingdom faience figurines.²⁷ Only the lion attacking the calf is unique and no parallels can be drawn. Such a theme is, however, not entirely absent from other late Middle Kingdom iconographic repertoires. An analogous theme can be found in other Middle Kingdom representations such as in a scene from tomb 33 of the governor Baqet at Beni Hasan,²⁸ or on a painted wooden box from Rifeh²⁹ where a hyena is shown grasping a baby animal in its jaws while it is being born. In addition, all the British Museum figurines share a common manufacturing technique. They were all modelled by hand and the poses are accurately rendered. A manganese pigment was applied under the glaze to emphasise contours and to highlight distinctive features such as a nose, head, paws, and fur, and the outer layers are finished with a thick, glossy glaze. In particular, they all share distinctive raw materials. Wherever it can be seen due to breaks in the glaze coat, most of the items show a core colour tending to brownish. This is less usual than the more widespread whitish core, as can be seen in the examples from Lisht.³⁰

Points A–C demonstrate that the British Museum figurines from 1891 purchase were not counterfeit pieces. In addition, point C indicates that all these figurines may have shared a common place of manufacture. Although this would not necessarily imply a common find-spot (see below in the discussion of centralised/widespread production), it is undeniable that objects which share similar manufacturing techniques and artistic designs tend to be associated with a particular geographical area.³¹

3. The British Museum 1891 Group as a Set of Artefacts from Lahun (?)

Material coming from undocumented contexts may, nevertheless, carry hidden information about its provenance. For the current study, the date of purchase (i.e. 1891) can shed light on a possible place of origin. In early 1889, two years before the purchase of the two groups on behalf of the British Museum, Flinders Petrie started clearing the town-site then commonly known under the name of Kahun, and its cemetery near el-Lahun, supported by a trained Fayoumi excavation team. At the

end of that year, Petrie recorded a specific event that took place in Lahun. During the summer, Eugène Grébaut had allowed the dealer Farag³² to excavate in the cemetery of Lahun without Petrie's supervision or presence. Drafted letters reported in his Notebook 49 in 1889 (Petrie Museum, scan 30) show that Petrie complained to Grébaut and Grenfell about what had happened at the site of Lahun:

No very valuable objects have been found here, but the sites have proved of much scientific interest; I hope that you have already at Bulak the finds things that were found here by Farag while working excavating last summer, as he cleared out all that he thought worth working in the two cemeteries of the place [Lahun] during my absence. [...] Still I hope that you may have in the Museum at least the objects that he found here though their positions are not recorded.

[...]

But it is the cemetery of this place [Lahun], where invaluable evidence may have existed, which has been ravaged by old Farag under license during my absence.³³

One of the main concerns of Petrie was that a portion of the finds coming from Farag's excavations would have not have reached the museum and would instead have been dispersed on the antiquity market. Due to the proximity of the two dates, 1889 (when the late Middle Kingdom cemetery of Lahun was exploited by Farag) and 1891 (when a large group of stylistically homogenous faience figurines appeared on the antiquities market), it is reasonable to suppose that (only?) the fourteen artefacts of the British Museum could have come from Lahun. Despite the fact that Lahun is a key-site for late Middle Kingdom material, the number of faience figurines from there is relatively low (22 items).³⁴ When this situation is compared to the situation for other key late Middle Kingdom sites such as Lisht (201 items), Abydos (57 items), and Harageh (32 items)³⁵ it is tempting to conclude that other faience figurines could have been found at Lahun. A comparative analysis indicates that some of the faience figurines known to have come from Lahun³⁶ closely match the style and the design of the British Museum group (cf. fig. 11.15, rabbit in Berlin, Ägyptisches Museum und Papyrussammlung W.20568;³⁷ lion in the Manchester Museum 168;³⁸ lion in the Petrie Museum uc 16679).³⁹ Lahun can, therefore, be considered one of the most likely possible provenance sites for the British Museum faience figurines, however, it remains only one of several possibilities.

It must be borne in mind that i) the lower number of faience figurines coming from Lahun could also be the result of the site's particular social and geographical context, ii) at the end of the 19th century, "non-supervised/illicit" excavations were under way at several other sites in Egypt, as Petrie lamented in 1888 (on Farag clearing 'sites' in the Fayum area, see Petrie Journals 24.10.1988; Quirke, *Hidden Hands*, 69), iii) uniform manufacturing techniques and common stylistic features do not necessarily

imply that the objects were gathered together in a single find-spot. They do, however, indicate a common place of production rather than a common place of use and disposal/deposit. Distribution and use may also have followed systematic patterns as items circulated across the country.⁴⁰

Point iii raises the question of systems of production and distribution of faience figurines in Middle Kingdom Egypt. Was there centralised manufacturing, controlled by an elite, and with targeted distribution to particular social groups or status levels, or were the figurines produced locally, autonomously commissioned, yet distributed on a regional scale?



Figure 11.15. Group of figurines from Lahun. Left: lion Manchester Museum 168; middle: lion Petrie Museum UC16679; right: rabbit, Berlin Ägyptisches Museum und Papyrussammlung W.20568

Left: courtesy of the Manchester Museum; middle: courtesy of the Petrie Museum, photo of Gianluca Miniaci; right: from Claude Vandersleyen (ed.), *Das alte Ägypten*, 1975, pl. 364b

4. Identifying Patterns of Centralised and Autonomous Craft Production

Edward Schortman and Patricia Urban attempted to synthesize the general interpretative trends in scholarship regarding specialized craftworking in ancient political economies, and they identified a binary model that highlighted the differences between two opposing modes of production: one centralised, connected with the strategies and actions of an elite, and the other autonomous, linked with the involvement of private individuals/commoners in specialized manufacturing. Their main goal was to examine how the manufacture, distribution, and use of crafted goods were related to processes of political centralisation, social differentiation, and inequality. In order to synthesize the high number of often conflicting theories, as well as models and case studies, Schortman and Urban identified two main processes: Manufacture, and Consumption/Distribution. Twelve variables that changed noticeably with respect to the binary opposition were used to describe the level of elite vs. commoner control over craft manufacturing.⁴¹ For each variable, they identified at least two opposing conditions that described the state of the variable at

the maximum extents of the binary opposition. The processes of production, consumption, and distribution were examined as they switched from a centralised, elite-controlled condition, to an autonomous condition, not supervised or sponsored by a centralized entity.

Clearly, their table oversimplifies complex ancient realities and creates a dichotomy that did not necessarily exist in the real world. Craft production is never a uniform phenomenon and economies are always multicentric and multiscalar, however, it is useful to provide a theoretical framework against which the chaotic archaeological material can be evaluated and interpreted.

The main objective of a centralized mode of production controlled by an elite is to monopolize and maintain exclusive control over a) the raw materials, b) labour and the development of skilled artisans, possibly on a full-time basis, and for them to be attached to elite patrons, and c) distribution of the finished products. As a consequence, this type of production tends to produce symbolically 'rich' items, often showing exaggerated qualities through which symbolic power can be expressed and rationalized.⁴² The aim of producing the items is to display qualities that are difficult to replicate, due to both by the high levels of artisanal skill required to produce them as well as the use of rare or difficult to obtain raw materials. At the same time, the items should have physical qualities that are naturally striking (such as a visual brilliance) and communicate the desired message through complex symbolic vocabularies, implying a control over the intellectual resources. The final aim of the exercise of production is to create something that cannot easily be reproduced, so that the elite system cannot be usurped. This exclusivity would prevent another segment of society from rewriting social relationships through the reproduction or alteration of these artefact types.

For pragmatic reasons, the autonomous mode of production often carried out by commoners, private individuals, or independent specialists, uses more easily accessible and widely available raw materials, often extracted from their natural context by means of relatively simple technologies and at lower costs. The provenance of the raw materials is typically much closer to the settlements where the artisans are working from, and the objects are targeted at a wide range of potential consumers, who can provide something of value in exchange.⁴³ The artisanal skills could have been learned rapidly and did not require constant practice to be maintained. The items produced are often aimed at displaying a simpler shape and level of decoration, and the design is based more on functional considerations including "shipping" and "using", rather than as a medium for conveying messages/information. The logic of this local type of manufacturing process is primarily dictated by economic factors. This mode of production is supported by a broad demand for easily decoded yet physically distinctive items.

Building on Piotr Steinkeller's research,⁴⁴ Mario Liverani has proposed four main parameters that influenced the degree of centralization or diffusion of material production, and can be observable directly through study of objects.⁴⁵ Faced with a scarcity of textual information and the paucity of the archaeological evidence, including tools, factory buildings or rooms for material production, finished objects represent the best archaeological evidence that scholars can use to reconstruct the organisation of material production in ancient Egypt. The parameters for consideration are:

1. Value and provenance of the raw materials
2. Size of the work-force required to make item
3. Technical skill required to make item
4. Destination of the finished products: widespread or centralised

He also provided some useful examples:

Pottery making requires a ubiquitous raw material (clay) and low technical skill, and has a variety of 'customers' (both central agency and families). It therefore tends to be widespread. Jewelry [...] is aimed at more selective market, requires higher level of technical skill, and the necessary raw materials are expensive and mostly exotic; it is therefore produced more efficiently in centralized workshops.⁴⁶

By determining the values of these four parameters in relation to the faience figurines of the late Middle Kingdom, it should be possible to obtain essential information about the production of this category of objects, and as a consequence, assess its role/value inside Egyptian society. Mass-produced commodities, conceived to be used in daily life, have a completely different value within society from 'prestige' goods conceived for carrying explicit social and cultural messages.⁴⁷

5. Parameter 1—Value and Provenance of Raw Materials

The production of faience involves common and inexpensive material components, such as quartz, obtained from sand, flint or crushed pebbles, water, lime, and alkali. It also requires a proportion of copper, which is the most expensive chemical ingredient used to achieve the brilliant blue colour. This could probably have been obtained as scraps from local metal-working workshops. In addition, the technology involved in the production of faience did not require highly sophisticated methods. Silica/quartz forms the bulk of the body, and the addition of lime and alkali flux or soda helps to cement the quartz grains together. The copper oxide in the mix produced the greenish-blue colour. Once the figure was formed and dried it was fired in a kiln. Faience objects frequently present two distinct body layers: a coarse, often discoloured, core, covered by a brilliant white layer over which the glaze was applied

in three stages: application, cementation, and efflorescence. After the application of the decoration, sometimes using a commonly available ink mixed from manganese and iron oxide, the figure was fired again.⁴⁸ The kiln had to reach a temperature between 800–1000° C, an operation that was not so hard to achieve with fairly rudimentary firing technology.⁴⁹ During the Amarna period, for example, faience production was combined with other crafts such as metallurgy, pottery making, and also bread making,⁵⁰ to economise on resource use including manpower and fuel.⁵¹ Finally, the demand for faience seems to have been generated in response to a market need for artificial stone, as it was an inexpensive material substitute for more expensive raw materials such as turquoise and lapis lazuli.⁵²

6. Parameter 2—Size of the Work-Force

The earliest evidence for a faience workshop dates to the Old Kingdom.⁵³ The remains of shallow circular pits containing broken bricks and pottery sherds, all reddened by fire, have been discovered in a settlement close to the Khentiamentiu temple at Abydos. The structures have been identified as kilns, and the layers of pink ash seem to indicate faience production in that area.⁵⁴ For the Middle Kingdom, however, only two faience workshops have been tentatively identified so far:

1. Lisht. At the late Middle Kingdom settlement of Lisht (Fayum), Arthur Mace identified areas A1.2 and A1.3, inside the building A1, as glaze factories.⁵⁵ Three main factors supported the identification of area A1.2 as a faience workshop: a) the high quantity of debris from faience production found there (mostly beads and many hundreds of small marl clay balls),⁵⁶ b) the discovery of a semicircular structure built in the corner of a room filled with ash deposits. This was re-cleared by Felix Arnold, who confirmed this structure to be a kiln,⁵⁷ and c) the discovery in the same area of a shaft-tomb no. 879, located under the northern extension of the house A1.3. This tomb contained the remains of the burial equipment of the *imy-r tḥn.tyw*, “overseer of glaze-workers”, who was called Debeni.⁵⁸ It is likely that A1.3 was the workshop or even the home of the chief faience craftworker (see hybrid households documented at Abydos in the same period),⁵⁹ of faience, Debeni.⁶⁰ In addition, a primary or secondary glass production zone dating to the New Kingdom was discovered in the area; evidence of a continuity of manufacturing at the site.⁶¹

2. Kerma. At Kerma in layers dating to the era of great royal tumuli building known as the Classic Kerma phase (tumuli K iv and iii, c. 1750–1580 bce), Reisner found what he thought might be the remains of faience kilns. He also found extensive quantities of glazed quartz pebbles and wasters in the area. He did not, however, provide further information because the supposed kilns were “too damaged to be drawn”.⁶² Although some traces of local production can be identified in the Kerma faience,⁶³ no kilns have been identified with certainty at the site.⁶⁴ Some scholars who

have debated the existence of local faience production in Nubia for this period have suggested that the production of faience at Kerma was based on the reuse of imported faience pieces from Egypt, which were employed as raw materials.⁶⁵

Despite the vast quantities of faience items recovered from ancient Egypt, there is little evidence for its production. There is little in the way of explicit evidence of the act of faience production or of the vocabulary used during that process in the written and artistic records. Remarkably, scenes of faience production are virtually absent from tomb representations, which usually show a wide range of crafts and expertise at work.⁶⁶ Paul Nicholson has tentatively identified a possible scene of faience production in a twenty-sixth dynasty tomb at Thebes (tt 36) belonging to Ibi,⁶⁷ but doubts remain about this hypothesis. Similarly, specific mention of faience production is missing from literary textual evidence. The Teaching of Duau Khety, also known as the Satire of Trades,⁶⁸ takes into consideration a vast array of manual professions, but unexpectedly excludes all mention of faience-workers.⁶⁹ As a result, it is not currently possible to extract detailed information about the size of the workforces required, however, based on the physical structure and types of objects produced, it can be proposed that a handful of craftworkers were probably enough to regulate the whole manufacturing process, from securing the fuel supply for the kiln to the procurement of raw artisanal materials. In fact, a single artisan could potentially have created the materials and shaped and finished this type of object. The application of the inked decoration could have been carried out by the same person who had shaped the paste, and the manufacturing process did not require the support of additional specialised workshops (e.g. of scribes for creating the inscriptions or engravers for adding stone inlays, etc.).

7. Parameter 3—Technical Skill Required: The Manufacture of the Non-mechanically Reproducible

For the whole Middle Kingdom, only three titles referring to the production of faience are attested. These are *imy-r wꜥ r.t n tꜥn.tyw* “section overseer of glazeworkers”, attested in the stele of Kebw purchased in 1859,⁷⁰ *imy-r tꜥn.tyw* “over-seer of glaze-workers”, attested on a gilded (?) wooden coffin fragment belonging to Debeheni found in shaft-tomb 879 at Lisht,⁷¹ and *tꜥn.ty (?)* “glaze-worker”, attested on a greywacke statuette belonging to Sehetepibra. This was set in a limestone offering table found in shaft-tomb 883 at Lisht.⁷² Although scarce, this textual evidence indicates that, already by the time of the Middle Kingdom (and perhaps earlier as well),⁷³ the production of faience required devoted specialists to supervise the work. Evidently, supervisors were needed to oversee the work of craftworkers and artisans. The presence of specialised overseers may also imply also the existence of specialised makers.

The written sources then are scarce, but the life and work of the faience producer is also attested through the artefacts that they manufactured. The workers were mainly using two techniques: moulding and hand working. The degree of skill required to craft faience by those already in possession of moulds is relatively simple and can be carried out by less skilled craftsmen/workers. That type of manufacture involves simpler mechanical and physical actions such as pressing the paste into the mould.⁷⁴ The relatively basic technological knowledge required can be acquired through empirical experience, and only an elementary knowledge of firing processes is required, since faience-making is in fact a “cold technology”.⁷⁵

The faience figurines in the current study were produced using hand work technique, which required a particularly high degree of craftworking skill. The hand modelling of the paste demanded a high degree of accuracy and attention to detail. Forming fine details in faience by hand was a difficult task. The body material is too coarse and not very malleable and it tends to slump and deform under its own weight once shaping is complete.⁷⁶ When shaping is too rapid, the material cracks or splits, and although the addition of water can help, the finished objects may crumble once they dry.⁷⁷ Faience figurines of the Middle Kingdom featured a lustrous and intensely blue faience, comprising a thin, fine, surface layer of glossy bi-chrome glaze over a distinctively coarse core.⁷⁸ They were skilfully manufactured with a high degree of accuracy, and finely modelled by hand into elaborate and meaningful compositions. Despite its overall coarseness, the core material was of high quality. The degree of coarseness or fineness of the grains could be varied, as could the hue of the surface colour. It required special skills to control the proportion of the ingredients. A lower proportion of silica, for example, would probably not have produced a crystalline material. Expert knowledge was required to select the raw materials and to control the technologies and this required constant practice.

In conclusion, none of the faience figurines of the late Middle Kingdom was mechanically reproduced and reproducible.⁷⁹ Only the skilled hands of an expert could have created the artefacts, and given the similarities in manufacturing methods, shapes, and decoration, it seems likely that the artisans were trained and worked as a group in shared workshops.

8. Parameter 4—Destination of the Finished Products: Widespread or Concentrated?

Faience figurines are attested throughout the whole of ancient Egypt, from the Delta to its southernmost limits, including at Kom el-Hisn, Tell el-Dab‘a, Memphis, Abusir, Dahshur, Lisht, Tarkhan, Riqqeh, Hawara, Lahun,⁸⁰ Sedment, Harageh, Beni Hasan, Deir el-Bersha, Meir, Asyut, Rifeh, Matmar, Mostagedda, Badari, el-Mahasna, Abydos, Hu, Dendera, Thebes, Esna, el-Kab, Edfu, and Elephantine.⁸¹

Such a picture, which shows widespread distribution across the whole country, may seem to indicate that local production and regional distribution was the norm, however, the actual ratio of faience figurine diffusion appears rather more unbalanced. High concentrations are noticeable in key diagnostic late Middle Kingdom sites in Egypt such at Lisht (198 items), Abydos (65 items), Harageh (32 items), Thebes (25 items),⁸² and Lahun (22 items + the 14 items from the British Museum purchase?). For the rest of Egypt, only sporadic cases with one, two or, occasionally a handful of specimens have been recorded.⁸³ Three of the locations where these figurines were concentrated are notable late Middle Kingdom power centres. These are Lisht, Lahun, and Harageh (fig. 11.16). Additionally, Thebes and Abydos, although not diagnostic sites for the specific time-span covered here, were occupied continuously over the centuries and played key roles in religious, ideological, and cultural matters during the late Middle Kingdom. It is clear then that these figurines were not equally accessible in all the parts of Egypt, but were concentrated primarily in more important late Middle Kingdom sites.

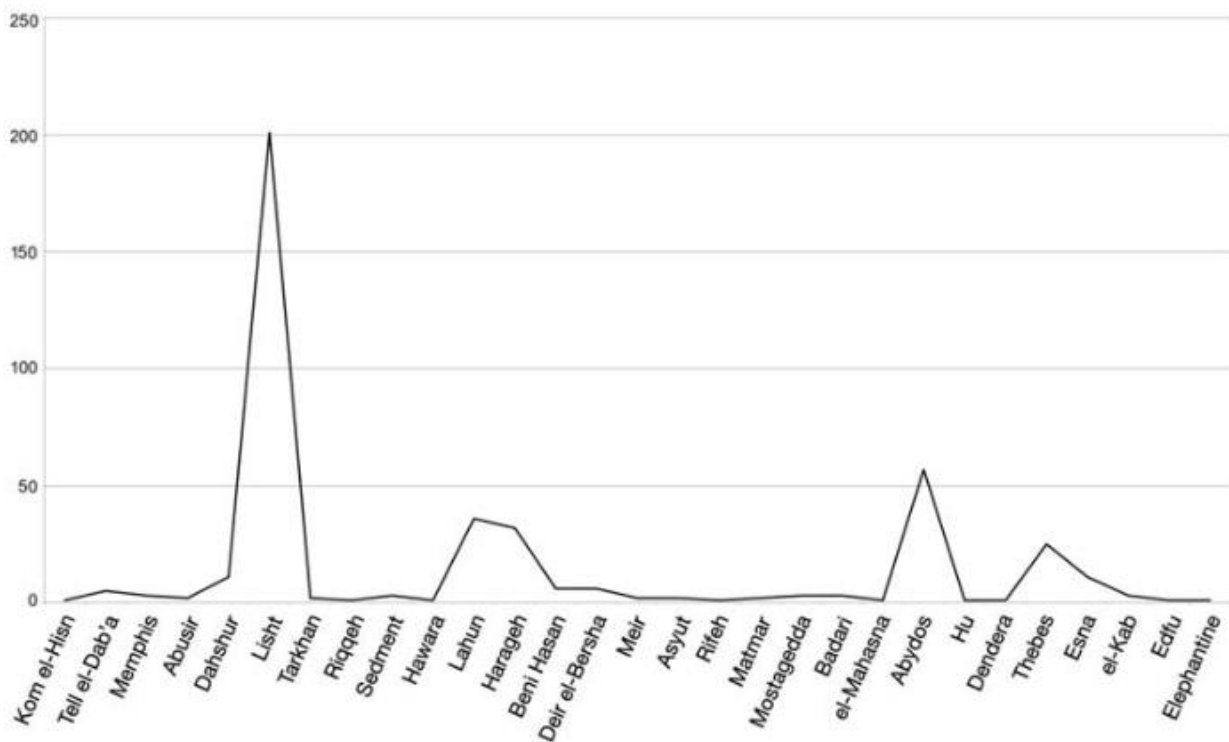


Figure 11.16. Table of the spatial distribution of faience figurines

At another level of analysis, a comparison between faience figurines found close to power/cultural centres with those found in marginal or peripheral areas shows that the two groups shared unexpected homogeneities. The mode of production, the artistic themes selected, and the shapes of the objects are often similar (cf. grotesque human creature miniatures from tomb 55 of Harageh⁸⁴ and tomb 4909 from Qau;⁸⁵ frog

miniatures from Dahshur shaft-tomb 10686 and Rifeh Petrie Museum uc 38854;⁸⁷ hippopotamus miniatures from Thebes Cairo je 6156⁸⁸ and Meir, tomb of Senbi (B3), mma 17.9.1).⁸⁹ This homogeneity in iconography and style was found at sites far away from each other and seems to indicate a centralised production location with consistent intellectual control over both the manufacturing method used and the choice of iconographic repertoire. The wide range of subjects, which seemed to indicate extensive ‘variety’ and ‘autonomy’, turn out to belong to a rather exclusive group of distinctive designs, since they frequently recurred and were often close copies of existing designs (see the bm examples analysed above). This consistency implies collective practice and a sense of shared identity.⁹⁰ They used a common yet complex vocabulary, dictated by a narrow segment of society that exercised intellectual control over the production of artefacts. The genesis of faience figurines was a creative and systematic process that gave birth to a material manifestation of the ideas involved in that process. This process is not a neutral operation and it aimed to encapsulate and convey a message⁹¹ using physical qualities that are naturally striking such as the visual brilliance of the glazed surfaces. These engage the senses of the viewer and attract attention to the intrinsic symbolic vocabulary. The themes chosen were usually related to rebirth, regeneration, childhood/youth, and protection.

In the case of production in more peripheral areas, such as at Serabit el-Khadim on the Sinai Peninsula, a high level of intellectual control over the modes of production and the choice of iconographic motifs can be documented alongside traces of local and regionalised production. The rock-cut sanctuary at the eastern end of the plateau of Serabit el-Khadim includes a temple dedicated to Hathor, lady of Mefkat, that was founded by representatives of the centralized state. The finds recovered in the area show that it was used from the twelfth dynasty onwards,⁹² although the temple’s most intense period of use was during the New Kingdom. In 1904, Flinders Petrie, assisted by Charles Currelly, Lina Eckenstein, and Raymond Weill, conducted a full-scale excavation of the temple of Hathor. Petrie found small votive offerings scattered all over the floor of the portico and the sanctuary of the temple:

The greater part of the offerings were of glazed ware—vases, bowls, and cups; beside lesser quantities of plaques, menats, bracelets, wands, sistra, animals etc. These objects had all broken up, so that not a single whole thing was found. The fragments formed a layer, two or three inches thick, over all the sanctuary and the portico, and extending outside of the sanctuary on the north for a distance of some feet.⁹³

Petrie thought that their condition and distribution across the area was due to “the Bedawyn [who] revenged themselves on the Egyptians by overthrowing and smashing all the offerings that had accumulated here during many centuries”.⁹⁴ The archaeological context documented by Petrie could, however, be the result of an intentional and periodic removal of the offerings from their original location, to place

new ones inside the “Hathor cave”. In addition, the state of the artefacts could have been due to clearing of the offering area during one or more phases of restoration during the Ramesside period, or even due to the actions of ancient looters. These factors could explain the unusual level of scattering across the floor.⁹⁵

For the date of manufacture of the figurines, Petrie suggested the mideighteenth dynasty, mainly on the basis of their similarity to some cat plaques inscribed with the cartouches of Hatshepsut and Thutmose III.⁹⁶ Geraldine Pinch compared some of the figurines from Serabit el-Khadim with “more elaborately marked” Middle Kingdom examples from tombs and sanctuaries, such as the Temple of Obelisks in Byblos, and she preferred to date these figurines from the eighteenth dynasty to the Ramesside period on stylistic grounds (mainly due to the rather careless level of craft working observed).⁹⁷ It is important to note, however, that at least three of the Serabit el-Khadim models find very close parallels with the Middle Kingdom faience figurine corpus:

Faience figurines found inside the Hathor sanctuary that can certainly (on stylistic and comparative ground) be dated to the late Middle Kingdom-Second Intermediate Period:

- Dog, Manchester 910 [Petrie, *Researches in Sinai*, pl. 153, fig. 13] (see fig. 11.17);
- Dog, Manchester 911 [Petrie, *Researches in Sinai*, pl. 153, fig. 12; Hornemann, *Types of Ancient Egyptian Statuary* vi, 1626; qtd. Kemp and Merrillees, *Minoan Pottery*, 142, under no. 416.A.07.98];
- Wild cat, Manchester 927 [Petrie, *Researches in Sinai*, pl. 153, fig. 7].

A precise date range could not be established with certainty for the other faience figurines from the sanctuary as their period of production may have extended over a very long time (from the late Middle Kingdom to the Ramesside period). Listed below are only those artefacts whose dating to the late Middle Kingdom-Second Intermediate Period cannot be excluded on stylistic and comparative grounds.

Faience figurines found inside the Hathor sanctuary that can possibly be dated to the late Middle Kingdom-Second Intermediate Period:

- Fish, Manchester 909 [Petrie, *Researches in Sinai*, pl. 153, fig. 15];
- Cow or calf, Manchester 913 [Petrie, *Researches in Sinai*, pl. 153, fig. 9];
- Spotted cat or cheetah, Manchester 916 [unpublished];
- Spotted cat or cheetah, Manchester 917 [Petrie, *Researches in Sinai*, pl. 153, fig. 10];
- Spotted cat or cheetah, Manchester 918 [Petrie, *Researches in Sinai*, pl. 153, fig. 6];
- Spotted cat or cheetah, Manchester 919 [unpublished];

- Wild cat, Manchester 920 [unpublished];
- Cheetah, Manchester 921 [Petrie, *Researches in Sinai*, pl. 153, fig. 8];
- Cat, Manchester 923 [unpublished];
- Cat, Manchester 925 [unpublished];
- Cheetah, Manchester 926 [unpublished];
- Cat (only feet on a base), Manchester 931 [unpublished];
- Cat (only feet on a base), Manchester 932 [unpublished];
- Cat (only feet on a base), Manchester 933 [unpublished].

These pieces show some similarities with the corpus of Middle Kingdom faience figurines produced in key centres such as Lisht, Lahun, and Harageh, above all in the choice of iconographic motifs (dogs, cheetahs, fishes,⁹⁸ and wild cats), in the minute attention to detail, in the elegant black ink decoration used, and in the type of hand shaped manufacturing. A degree of central control over the intellectual choices of iconographic repertoire and the technological skills used in the craftwork is undeniable. They show some peculiarities, however, which identify them as regional products:

A. The most common themes used at Serabit el-Khadim mainly focused on wild cats and/or cheetahs. These two motifs are less common at other production centres in Egypt and this may have been due to the proximity of the desert landscape to the site, where these types of animals typically lived.⁹⁹

B. The body materials show an intense reddish colouring, which may indicate the use of local raw materials in the production of the faience. Crushed quartz pebbles from river beds produced a white/whitish body,¹⁰⁰ while quartz sand obtained in loco, probably in the eastern desert, could have generated this unusual reddish core.¹⁰¹ The relatively careless craftwork observable in some Serabit el-Khadim figurines could be attributable to the different environment, rather than to a different production period as suggested by Pinch. Serabit el-Khadim is in a peripheral area with different availabilities of raw materials and human resources.

The information gathered from Serabit el-Khadim does not conflict with a model of faience figurine production that was mainly centralised, but it does indicate that the ancient Egyptian economic system left space for regional production that closely copied the models produced by the central production workshops. At the same time, items from the periphery could include some variations on the centralised themes and show differences in the materials employed and the techniques of production.



Figure 11.17. Dog figurine, Manchester Museum 910
Courtesy of the Manchester Museum; photo of Gianluca Miniaci

9. Targeting Centres and Periphery of Faience Figurine Production

If the analysis of the faience figurine production (fpp in the table) is set out in a similar way to the table created by Schortman and Urban, it can be seen that the variables fluctuate from centralised to autonomous and back to centralised.

According to Liverani's parameters field 3 ("Technical skill required") and field 4 ("Destination of the finished products"), faience figurine production seems to indicate a high degree of centralisation, as the resulting variables would be more likely to be regulated by a craftsmanship supported by the elite.¹⁰² The assumption of centralised production, however, produces conflicts with respect to Liverani's two other parameters (1 and 2). Parameter 1 ("Value and provenance of the raw materials") indicates that the raw materials were easily accessible and widely dispersed across the country. Parameter 2 ("Size of work-force") indicates that production did not require a large investment in terms of human resources.

The Middle Kingdom faience figurines display qualities that are difficult to replicate due to the high level of skills and even the mastery of the artisans who made them.¹⁰³ As shown in the case-study of Serabit el-Khadim, the raw materials could have been obtained and produced locally so that faience production did not depend on specific locations for raw materials, or on particular places where special tools or makers were located.¹⁰⁴ Faience production could not, therefore, be easily controlled through all the steps of the chaîne opératoire, and as something that could not be fully controlled, it could also escape the control of the elite. This is precisely what makes

faience an ambiguous media that straddles the fence between being categorised as a prestigious material or a commonly available material. It was used for making items and goods of daily use that could be produced for and used by both the elite and the non-elite.¹⁰⁵ The only segment in the chaîne opératoire that could really have been controlled to a significant extent was the knowledge about the manufacture of the objects and control over the technical skills of the artisans. The labour of the skilled artisan could convert common objects into prestige goods. The archaeological evidence¹⁰⁶ currently available, although scarce, seems to support this scenario, since faience figurines were not only used by the lower levels of society. The faience figurines were connected with and commissioned by those around the palace and other places of power, as can be seen from the high number of items found at Lisht. That was probably the closest cemetery to the capital Itj-tawy. The high concentration at key power sites (economic and cultural), also shows that objects had only a limited circulation across the country. Moreover, the sudden disappearance of this category of objects from burial customs coincides with the fall of the dynasty reigning from the north in the middle of the Second Intermediate Period.¹⁰⁷ In conclusion, it can be stated that late Middle Kingdom faience figurine production was concentrated at a few key sites, and the industry was intellectually controlled by the elite. The production, circulation, use, and final disposal of faience into the archaeological record was a process reserved for a narrow segment of society, although probably not one belonging to the uppermost tiers.

Acknowledgement

I would like to thank Alejandro Jiménez-Serrano for his kind invitation to take part in the conference, which gave rise to such productive and enjoyable daily discussions. Similarly, I would like to thank Alejandro and Antonio J. Morales for their hard work in assembling such an inspiring volume based on the conference. I am grateful to Wolfram Grajetzki who gave me some useful suggestions that significantly improved the article and to Stephen Quirke and Campbell Price for permission to publish the photos from the Petrie Museum and the Manchester Museum. In addition, I am deeply indebted to Marcel Marée and Neal Spencer for their constant support in the study and publication of the British Museum faience figurines, in the framework of the aes fellowship of 2014.

Notes

- 1 Miniaci, “Populating Middle Kingdom Fauna”, 75–76; cf. Dasen, *Dwarfs*, 279–285.
- 2 Pinch, *Votive Offerings*, 198–234.
- 3 See Tooley, “Notes on Type 1 Truncated Figurines: the Ramesseum Ladies”, 421–456.
- 4 For the interpretation of these figurines as regeneration figures connected with the khener-dancers of Hathor, see Morris, “Paddle Dolls and Performance”, 101–103; and idem, “Middle Kingdom Clappers, Fancers, Birth Magic, and the Reinvention of Ritual”, 285–335.
- 5 Volokhine, “Dieux, masques et hommes: à propos de la formation de l’iconographie de Bès”, 81–95; Romano, “The Origin of the Bes-Image”, 39–56.
- 6 See Ceruti, “The Hippopotamus Goddess Carrying a Crocodile on her Back,” 93–123. See also comments on items no. 1.3 and 1.4 in Miniaci, “The Late Middle Kingdom Burial Assemblage from the Tomb G62 at Abydos (bm ea 37286–37320)”, 175–176.
- 7 For a more complete overview of these iconographic categories, see Miniaci, *Between Different Worlds*, forthcoming. Several examples can be also found in Bourriau, *Pharaohs and Mortals*, 112–121.
- 8 Bourriau, “Patterns of Change in Burial Customs during Middle Kingdom”, 11; Miniaci, “Burial Equipment of Rishi Coffins and the Osmosis of the ‘Rebirth Machine’ at the End of the Middle Kingdom”, 247–274; Quirke, *Going out in Daylight*, x–xii.
- 9 The number of artefacts that can be attributed to the Middle Kingdom is much higher, but several items cannot be dated with certainty.
- 10 Among the 61 items, 12 come from documented archaeological contexts and all the rest come from purchases.
- 11 Another two faience models could be added to the 1891 list: bm ea 24407 (drop-shaped vase with rounded base) and ea 24408 (flask with lenticular body). Both were acquired by Rev. Chauncey Murch in Luxor in 1891, but they have not been included in the above lot because they have not been examined by the author. Two years earlier, in 1889, Rev. Walter L. Lawson also bought a faience figurine of a recumbent lion on the antiquarian market in Luxor, which is registered now at the British Museum under the inventory number ea 22797. This figurine can be grouped stylistically together with the lot of figurines acquired by Sir Ernest Alfred Thompson Wallis Budge and Rev. Chauncey Murch in 1891.
- 12 See for instance Maspero, *L’archéologie égyptienne*, 253, fig. 224.
- 13 Miniaci, *Miniature Forms as Transformative Thresholds*, forthcoming.
- 14 E.g. group of Matariya, Keimer, “Sur quelques petits fruits en faïence émaillée datant du Moyen Empire”, 49; Miniaci, “The Historical and Archaeological Reliability of the Middle Kingdom ‘Tomb-group’ from el-Matariya (Heliopolis)”, 75–99.
- 15 Garstang, *The Burial Customs of Ancient Egypt*, 141–142, 234, fig. 140; Vassilika, *Egyptian Art*, 40, no. 16; von Droste zu Hülshoff, *Der Igel im alten Ägypten*, 136–137, no. 107, pl. 12; Bourriau, *Pharaohs and Mortals*, 118, cat. no. 110; Morföisse and Andreu-Lanoë, eds. *Sésostris iii*, 292, cat. no. 291.
- 16 Dunand, *Fouilles de Byblos ii*, cat. no. 15240.

- 17 Dunand, *Fouilles de Byblos* ii, cat. no. 15142.
- 18 Unpublished, mma excavation 1906–1907.
- 19 Hornemann, *Types of Ancient Egyptian Statuary* vi, no. 1698; Behrmann, *Das Nilpferd* i, Doc. 142.f.54. A similar hippopotamus figurine can be found in the *Ägyptisches Museum und Papyrussammlung* of Berlin, W.13892: pm i2, 2, 783; Hornemann, *Types of Ancient Egyptian Statuary* vi, no. 1700; Kaiser, *Ägyptisches Museum Berlin*, no. 464; Evers, *Staat aus dem Stein* ii, fig. 75, § 765; Hall, “Three Hippopotamus-Figures of the Middle Kingdom”, 58; Behrmann, *Das Nilpferd* i, Doc. 142.f.7; Schoske, Kreissl, and Germer, eds. ‘Anch’ *Blumen für das Leben*, 73, cat. no. 5.
- 20 Dunand, *Fouilles de Byblos* ii, cat. no. 15316.
- 21 Hornemann, *Types of Ancient Egyptian Statuary* iv, no. 919; Dasen, *Dwarfs*, 280, cat. no. 131, pl. 32.3; Hayes, *Scepter of Egypt* i, 222; qtd. Kemp and Merrillees, *Minoan Pottery in Second Millennium Egypt*, 138, under no. 416.A.07.87; from mma excavations 1921–1922.
- 22 Dunand, *Fouilles de Byblos* ii, cat. nos. 15311–15312.
- 23 Downes, *The Excavations at Esna*, 52, fig. 90; Bourriau, *Pharaohs and Mortals*, 112–113, cat. no. 99.
- 24 Miniaci, “The Late Middle Kingdom Burial Assemblage from the Tomb G62 at Abydos”, 176, item no. 1.4.
- 25 Unpublished; mma excavations 1932–1933.
- 26 Dunand, *Fouilles de Byblos* ii, cat. no. 15253.
- 27 Miniaci, *Miniature Forms as Transformative Thresholds*.
- 28 Newberry, *Beni Hasan*. Part i, pl. 35.
- 29 Cambridge, *Fitzwilliam Museum E.15.1907*, Petrie, *Gizeh and Rifeh*, 20, pl. 24.
- 30 Cf., for instance, mma 22.1.180 (nude female figurine).
- 31 Di Paolo, “The Historiography of the Concept of “Workshop” in Ancient Near Eastern Archaeology”, 117–118; cf. for ivory production in Near East, Winter, “Establishing Group Boundaries: Toward Methodological Refinement in the Determination of Sets as a Prior Condition to the Analysis of Cultural Contact and/or Innovation in First Millennium bce Ivory Carving”, 23–42.
- 32 Drower, *Flinders Petrie*, 143, and *passim*.
- 33 Quirke, *Hidden hands*, 123–124. I would like to thank Stephen Quirke for suggesting Lahun to me as one of the possible find-spots and in relation to Farag’s 1889 excavations of the site.
- 34 Miniaci, “Unbroken Stories”, 266–267, corrected in Miniaci, *Miniature Forms as Transformative*, forthcoming.
- 35 Miniaci, “Unbroken Stories”, 258; lists with bibliography at pages 241–257, corrected in Miniaci, *Miniature Forms as Transformative*, forthcoming.

- 36 Not all the faience figurines recorded as coming from Lahun show a similar manufacture and type of iconography; see, for instance, Petrie Museum uc 2423 or uc 2424. This could be due to different use/deposit contexts, as some are from a cemetery and other from the town.
- 37 Petrie, Kahun, Gurob and Hawara, 31, pl. 8.2.
- 38 Petrie, Kahun, Gurob and Hawara, 31, pl. 8.1; Griffith, *Catalogue of Egyptian Antiquities*, 24.
- 39 Morfousse and Andreu-Lanoë, eds., *Sésostris iii*, 292, cat. no. 289; qtd. Kemp and Merrillees, *Minoan Pottery*, 141, under no. 416.A.07.99.
- 40 Cf. Zaccagnini, “Aspects of Ceremonial Exchange in the Near East During the Late Second Millennium bc”, 60–61.
- 41 Schortman and Urban, “Modelling the Roles of Craft Production”, 185–226.
- 42 Schortman and Urban, “Modelling the Roles of Craft Production”, 194.
- 43 Elyachar, *Markets of Dispossession*.
- 44 Steinkeller, “The Organization of Crafts in the Third Millennium Babylonia: The Case of Potters”, 232–253.
- 45 Liverani, “The Near East: The Bronze Age”, 55–56.
- 46 Liverani, “The Near East: The Bronze Age”, 56.
- 47 Ekholm, *Power and Prestige*; Earle, “Specialization and the Production of Wealth”, 67–75; cf. Wengrow, “Prehistories of Commodity Branding”, 7–34.
- 48 Nicholson and Peltenburg, “Egyptian Faience”, 186–187.
- 49 Nicholson, “Materials and Technology”, 51; Vandiver, “A Review and Proposal of New Criteria for Production Technologies of Egyptian Faience”, 124.
- 50 Eccleston, “Replicating Faience in a Bread Oven at Amarna”, 33–35.
- 51 Friedman, “Faience: the Brilliance of Eternity”, 17; Vanthuyne, “Amarna Factories, Workshops, Faience Moulds and their Produce”, 400.
- 52 Vandiver and Kingery “Egyptian Faience: The First High-Tech Ceramic”, 32.
- 53 For the possible existence of a faience workshop or teams of workers, as deduced from the tiles of the Old Kingdom funerary complex of Netjerykhet, see Kuraszkiewicz, “Marks on the Faience Tiles from the ‘Blue Chambers’ of Netjerykhet’s Funerary Complex”, 41–48.
- 54 Adams, *Community and Society in Egypt in the First Intermediate Period*, 129; Nicholson, “Materials and Technology,” 56–57; Moeller, *The Archaeology of Urbanism in Ancient Egypt*, 239.
- 55 Mace, “The Egyptian Expedition 1920–1921: i. Excavations at Lisht”, 17.
- 56 Nicholson and Peltenburg, “Egyptian Faience”, 181.
- 57 Arnold, “Settlement Remains at Lisht-North”, 15.
- 58 Bourriau, “The Dolphin Vase from Lisht”, 220–225.
- 59 Cf. Picardo, “Hybrid Households: Institutional Affiliations and Household Identity in the Town of Wah-sut (South Abydos)”, 243–287.

- 60 Arnold, "Settlement Remains at Lisht-North", 15, fig. 4.
- 61 Keller, "Problems in Dating Glass Industries of the Egyptian New Kingdom", 19–28.
- 62 Reisner, *Excavations at Kerma. Parts iv–v*, 134–135.
- 63 Wilde, *Innovation und Tradition*, 124.
- 64 Lacovara, "Nubian Faience", 48–49.
- 65 Lacovara, "Nubian Faience", 49.
- 66 Cf. van Walsem, *Iconography of Old Kingdom Elite Tombs*; Hartwig, *Tomb Painting and Identity in Ancient Thebes*.
- 67 Nicholson, "Materials and Technology", 56, fig. 31.
- 68 Vernus, *Sagesses de l'Égypte pharaonique*, 239–264; Roccati, "Réflexions sur la Satire des Métiers", 5–17.
- 69 Quirke, *Egyptian Literature 1800 bc*, 121.
- 70 *bm ea 844, Hieroglyphic Texts from Egyptian Stelae etc. The British Museum. Vol. v. pl. 13*; Quirke, "'Art' and the 'Artist' in Late Middle Kingdom Administration", 86.
- 71 Bourriau, "The Dolphin Vase from Lisht", 110–111.
- 72 *mma 22.1.107a, b*; Hölzl, "Offering Table with Statuette of Sehetepib", 229–230, cat. no. 167; Quirke, *Birth Tusks*, 170.
- 73 Cf. Kuraszkiewicz, "Marks on the Faience Tiles", esp. 47.
- 74 Tite, Shortland, Kaczmarczyk, and Vandiver "Faience Production in Egypt," 58–59. Cf. Quirke and Tajeddin, "Mechanical Reproduction in the Age of the Artwork? Faience and 5000 Moulds from 14th-Century bc Egypt", 341–361; Vanthuyne, "Amarna Factories", 395–429.
- 75 Peltenburg, "Early Faience: Recent Studies, Origins and Relationships with Glass", 20.
- 76 Vandiver and Kingery, "Egyptian Faience", 32. *Lavenex Verges, Bleus égyptiens*.
- 77 Nicholson and Peltenburg, "Egyptian Faience", 187.
- 78 The techniques in use were most probably the same as those practiced during the Old Kingdom. For the process of efflorescence, application and cementation, see Tite, Shortland, Kaczmarczyk, and Vandiver "Faience Production in Egypt", 59; Nicholson, "Materials and Technology", 58; Vandiver and Kingery, "Egyptian Faience", 19–33.
- 79 Benjamin, "Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit", 40–66.
- 80 In order to avoid any confusion, I use here the name Lahun to designate the town site, whose modern toponym was translated by Petrie as Kahun.
- 81 They have also been attested in peripheral areas such as Serabit el-Khadim, Gebel Zeit, Tell el-Ajjul, Byblos, Aniba, Faras, Mirgissa, and Kerma, although they are not discussed here. See Miniaci, *Between Different Worlds*.
- 82 The number of faience figurines coming from Thebes should be higher, but I tended to exclude all the items whose provenance was not confirmed by any evidence.

- 83 For a complete bibliographic reference see Miniaci, “Unbroken Stories” and Miniaci, *Miniature Forms as Transformative Thresholds*.
- 84 Petrie Museum, uc 18745, Engelbach, Harageh, 12, pls. 14.9, 58.55 (tomb register); Miniaci, “The Collapse of Faience Figurine Production at the End of the Middle Kingdom”, fig. 3.
- 85 Brunton, Qau and Badari i, 41, pl. 29.15.
- 86 Baba and Yazawa, “Burial Assemblages of the Late Middle Kingdom”, 20, fig. 23.5, pl. 11.
- 87 Morfoisse and Andreu-Lanoë, Sésostriis iii, 292, cat. no. 293.
- 88 pm i2, 2, 604; Miniaci and Quirke, “Reconceiving the Tomb in the Late Middle Kingdom”, 346–348, 370.
- 89 Oppenheim, Arnold, Arnold, and Yamamoto, eds. *Ancient Egypt Transformed*, 216–217, cat. no. 156 with bibliography.
- 90 DeMarrais, “Figuring the Group,” 165–186; Whitehouse, “Ritual, Cognition, and Evolution”, 265–284.
- 91 See Miniaci, *Miniature Forms as Transformative Thresholds*.
- 92 Petrie, *Researches in Sinai*, 75.
- 93 Petrie, *Researches in Sinai*, 138.
- 94 Petrie, *Researches in Sinai*, 138.
- 95 Pinch, *Votive Offerings*, 56.
- 96 Petrie, *Researches in Sinai*, 148.
- 97 Pinch, *Votive Offerings*, 185.
- 98 On fish models (also in other materials than faience) in the late Middle Kingdom, see Miniaci, “The Late Middle Kingdom Burial Assemblage from the Tomb G62 at Abydos”, 178–180, item no. 1.7.
- 99 Cf. Quack, “The Animals of the Desert and the Return of the Goddess”, 341–361.
- 100 Lucas and Harris, *Ancient Egyptian Materials and Industries*, 158; Turner, “Studies in Ancient Glasses and Glass Making Process”, 277–300.
- 101 Vandiver and Kingery suggested that, due to the increase in the scale of faience production, a switch from crushed quartz pebbles to quartz sand occurred in the Middle Kingdom (“Egyptian Faience,” 25).
- 102 Miniaci, “Faience Craftsmanship in the Middle Kingdom”, 139–158.
- 103 See table 1 in Schortman and Urban, “Modelling the Roles of Craft Production”.
- 104 Miniaci, “Faience Craftsmanship in the Middle Kingdom”, 139–158.
- 105 Cf. Xia, *Ancient Egyptian Beads*, 103. In the Middle Kingdom, 83% of beads were made in glazed composition, including also for lower strata of society. See also Wilde, *Innovation und Tradition*, 121–123.

106 In most of the archaeologically documented cases, the context for these faience figurines is far from clear. This can be poorly documented, still unpublished, or disturbed (both in modern and ancient times).

107 Miniaci, “The Collapse of Faience Figurine Production”, 109–142.

Table 11.1. Summary of variables identified by Schortman and Urban for two opposing modes of production: one centralised and the other autonomous (from Schortman and Urban, “Modelling the Roles of Craft Production”)

Parameter	Variable states	
	Autonomous production	Centralized production
<i>Manufacturing processes</i>		
Raw material sources	Local	External
Acquisition strategies	Simple, easily mastered, require little coordinated effort	Complex, hard to learn, need the coordinated work of many individuals
Physical setting (level of concentration)	Dispersed	Aggregated near elite compounds and administrative centres
Production skills	Easily learned and used	Hard to learn, need considerable practice to maintain
Scale of production	Few people, limited steps, little energy investment	Numerous artisans, complexly organized production steps, major energy expenditures
Time devoted to craft production	Part-time	Full-time
Institutional setting (context)	Independent of direct elite control	Attached to, and supported by, elite patrons
Primary identity of the artisan	Not tied to craft production	As an artisan participating in a specific craft
<i>Consumption and distribution processes</i>		
Restrictions on the distribution and use of particular good	None, decentralised	Significant, determined by elites
Demand	Low and intermittent	High and constant
Purposes to which goods are put	Daily maintenance chores	Political domination and resistance to same
Relationship between producers and consumer	Equal	Unequal

Table 11.2 Faience figurines variables (ffp) placed against the table summarising the parameters provided by Schortman and Urban for two opposing modes of production: one centralised and the other autonomous (from Schortman and Urban, “Modelling the Roles of Craft Production”)

Parameter	Variable states			
	Autonomous production (commoner)	FFP	Centralised production (controlled by elite)	FFP
<i>Manufacturing processes</i>				
Raw material sources	Local	x	External	
Acquisition strategies	Simple, easily mastered, require little coordinated effort	x	Complex, hard to learn, need the coordinated work of many individuals	
Physical setting (level of concentration)	Dispersed	?	Aggregated near elite compounds and administrative centres	
Production skills	Easily learned and used		Hard to learn, need considerable practice to maintain	x
Scale of production	Few people, limited steps, little energy investment	x	Numerous artisans, complexly organized production steps, major energy expenditures	
Time devoted to craft production	Part-time	-	Full-time	-
Institutional setting (context)	Independent of direct elite control		Attached to, and supported by, elite patrons	x?
Primary identity of the artisan	Not tied to craft production		As an artisan participating in a specific craft	x
<i>Consumption and distribution processes</i>				
Restrictions on the distribution and use of particular good	None, decentralised		Significant, determined by elites	x
Demand	Low and intermittent	x?	High and constant	
Purposes to which goods are put	Daily maintenance chores		Political domination and resistance to same	x?
Relationship between producers and consumer	Equal	-	Unequal	-

Bibliography

- Adams, M.D. *Community and society in Egypt in the First Intermediate Period: an archaeological investigation of the Abydos settlement site*. Ann Arbor: umi Dissertation Services, 2005.
- Andrews, C.A.R. *Egyptian Treasures from the British Museum*. London: The Bowers Museum of Cultural Art, 2000.
- Arnold, F. "Settlement remains at Lisht-North." In *Haus und Palast im Alten Ägypten/ House and palace in ancient Egypt*, M. Bietak, ed., 13–21. *uzk 14; dgöaw 14*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1996.
- Baba, M. and K. Yazawa. "Burial Assemblages of the Late Middle Kingdom. Shaft-tombs in Dahshur North." In *The World of Middle Kingdom Egypt (2000–1550bc): Contributions on Archaeology, Art, Religion, and Written Sources*, vol. i, G. Miniaci and W. Grajetzki, eds., 1–24. *mks 1*. London: ghp, 2015.
- Behrmann, A. *Das Nilpferd in der Vorstellungswelt der Alten Ägypter*. Vol. i: Katalog; Vol. ii: Textband. *Europäische Hochschulschriften 38/62*. Frankfurt am Main: Peter Lang, 1996.
- Benjamin, W. "Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit." *Zeitschrift für Sozialforschung* 5 (1936): 40–66.
- Bourriau, J. *Pharaohs and Mortals: Egyptian Art in the Middle Kingdom: Exhibition organised by the Fitzwilliam Museum, Cambridge, 19 April to 26 June, Liverpool 18 July to 4 September 1988*. Cambridge: Cambridge University Press, 1988.
- Bourriau, J. "Patterns of Change in Burial Customs during Middle Kingdom." In *Middle Kingdom Studies*, S. Quirke, ed., 3–20. New Malden: sia, 1991.
- Bourriau, J. "The Dolphin Vase from Lisht." In *Studies in Honor of William Kelly Simpson*, P. Der Manuelian, ed., Vol. i, 101–116. Boston: Museum of Fine Arts, 1996.
- Brunton, G. *Qau and Badari*. Vols. i–iii. *bsae 44–45, 50*. London: eff, 1927–1928, 1930.
- Ceruti, S. "The hippopotamus goddess carrying a crocodile on her back: an iconographical motif distinctive of the late Middle Kingdom." In *Company of Images: Modelling the Imaginary World of Middle Kingdom Egypt (2000–1500bc)*. *Proceedings of the International Conference of the epochs Project held 18th–20th September 2014 at ucl, London*, G. Miniaci, M. Betrò, and S. Quirke, eds., 93–123. *ola 262*. Leuven: Peeters, 2017.
- Dasen, V. *Dwarfs in Ancient Egypt and Greece*. Oxford: Oxford University Press, 1993.

- DeMarrais, E. "Figuring the group." *Cambridge Archaeological Journal* 21/2 (2011): 165–186.
- Di Paolo, S. "The Historiography of the Concept of "Workshop" in Ancient Near Eastern Archaeology: Descriptive Models and Theoretical Approaches (Anthropology vs. Art History)." In *Critical Approaches to Ancient Near Eastern Art*, B.A. Brown and M.H. Feldman, eds., 111–132. Boston-Berlin: De Gruyter, 2014.
- Downes, D. *The Excavations at Esna, 1905–1906*. Warminster: Aris&Phillips, 1974.
- Droste zu Hülshoff, V. von. *Der Igel im alten Ägypten*. h. 11. Hildesheim: Gerstenberg, 1980.
- Drower, M.S. *Flinders Petrie: A life in archaeology*. London: Victor Gollancz, 1985.
- Dunand, M. *Fouilles de Byblos*. Tome ii: 1933–1938. Paris: P. Geuthner, 1950–1958.
- Earle, T.K. "Specialization and the production of wealth: Hawaiian chiefdoms and the Inka." In *Specialization, Exchange and Complex Societies*, E.M. Brumfiel and T.K. Earle, eds., 67–75. Cambridge: Cambridge University Press, 1987.
- Eccleston, M. "Replicating faience in a bread oven at Amarna." *ea* 32 (2008): 33–35.
- Ekholm, F.K. *Power and Prestige: The Rise and Fall of the Kongo Kingdom*. Uppsala: Skriv Service ab, 1972.
- Elyachar, J. *Markets of Dispossession. ngos, Economic Development, and the State in Cairo*. Durham. NC: Duke University Press Book, 2005.
- Engelbach, R. *Harageh*. bsae 28. London: eef, 1923.
- Evers, H.G. *Staat aus dem Stein: Denkmäler, Geschichte und Bedeutung der ägyptischen Plastik während des Mittleren Reichs*. Vol. i/1: Die Denkmäler. Vol. i/2: Geschichte und Bedeutung der ägyptischen Plastik während des Mittleren Reiches. Vol. ii: Die Vorarbeiten. München: Bruckmann, 1929.
- Friedman, F.D. "Faience: the brilliance of eternity." In *Gifts of the Nile: Ancient Egyptian faience*, F.D. Friedman, G. Borromeo, and M. Leveque, eds., 15–31. London-New York: Thames and Hudson, 1998.
- Garstang, J. *The Burial Customs of Ancient Egypt as illustrated by Tombs of the Middle Kingdom: Being a Report of Excavations made in the Necropolis of Beni Hassan during 1902–3–4*. London: Constable, 1907.
- Griffith, A.S. *Catalogue of Egyptian Antiquities of the xii and xviii Dynasties from Kahun, Illahun and Gurob*. Manchester: Sherrat & Hughes, 1910.
- Hall, H.R. "Three hippopotamus-figures of the Middle Kingdom." *jea* 13 (1927): 57–58.

- Hartwig, M.K. Tomb painting and identity in ancient Thebes, 1419–1372bce. Série Imago 2. Monumenta aegyptiaca 10. Brussels-Turnhout: Brepols, 2004.
- Hayes, W.C. Scepter of Egypt: A background for the study of the Egyptian antiquities in the Metropolitan Museum of Art. New York: mma, 1959.
- Hieroglyphic Texts from Egyptian Stelae etc. The British Museum. Vol. v. London: British Museum Publications, 1914.
- Hölzl, R. “Offering Table with Statuette of Sehetepib.” In *Ancient Egypt Transformed: The Middle Kingdom*, A. Oppenheim, Do. Arnold, D. Arnold, and K. Yamamoto, eds., 229–230. New York: mma, 2015.
- Hornemann, B. Types of Ancient Egyptian Statuary. Vols. i–vii. Copenhagen: Munksgaard, 1951–1969.
- Kaiser, W. *Ägyptisches Museum Berlin: Östlicher Stülerbau am Schloss Charlottenburg*. Staatliche Museen Preussischer Kulturbesitz. Berlin: Staatliche Museen Berlin, 1967.
- Keimer, L. “Nouvelles recherches au sujet du Potamogeton lucens L. dans l’Égypte ancienne et remarques sur l’ornementation des hippopotames en faïence du Moyen Empire.” *rea* 2 (1929): 210–253.
- Keimer, L. “Sur quelques petits fruits en faïence émaillée datant du Moyen Empire.” *bifao* 28 (1929): 49–97.
- Keller, C.A. “Problems in dating glass industries of the Egyptian New Kingdom: examples from Malkata and Lisht.” *Journal of Glass Studies* 25 (1983): 19–28.
- Kemp, B.J. and R.S. Merrillees. *Minoan Pottery in Second Millennium Egypt*. Mainz am Rhein: Zabern, 1980.
- Kuraszkiewicz, K.O. “Marks on the faïence tiles from the ‘Blue Chambers’ of Netjerykhet’s funerary complex.” In *Non-textual marking systems in ancient Egypt (and elsewhere)*, J. Budka, F.F. Kammerzell, and S. Rzepka, eds., 41–48. *Lingua Aegyptia, Studia Monographica* 16. Hamburg: Widmaier, 2015.
- Lacovara, P. “Nubian faïence.” In *Gifts of the Nile: Ancient Egyptian faïence*, F.D. Friedman, G. Borromeo, and M. Leveque, eds., 46–49. London-New York: Thames and Hudson, 1998.
- Lavenex Verges, F. *Bleus égyptiens: de la pâte auto-émaillée au pigment bleu synthétique*. Louvain: Peeters, 1992.
- Liverani, M. “The Near East: The Bronze Age.” In *The Ancient Economy: Evidence and Models*, J.G. Manning and I. Morris, eds., 47–57. *Social Science History*. Stanford: Stanford University Press, 2005.

- Lucas, A. and J.R. Harris. *Ancient Egyptian Materials and Industries*. London: Arnold, 1962.
- Mace, A.C. "The Egyptian Expedition 1920–1921: i. Excavations at Lisht." *bmma* 11/2 (1927): 5–19.
- Maspero, G. *L'archéologie égyptienne*. Paris: Quantin, 1887.
- Miniaci, G. "Burial equipment of rishi coffins and the osmosis of the 'rebirth machine' at the end of the Middle Kingdom." In *Ancient Egyptian Coffins: Craft Traditions and Functionality: Proceedings of the Annual Egyptology Colloquium at the British Museum, 28 July–29 July 2014*, J.H. Taylor and M. Vandenbeusch, eds., 247–274. *bmpes* 4. London: Peeters.
- Miniaci, G. "The Late Middle Kingdom Burial Assemblage from the Tomb G62 at Abydos (bm ea 37286–37320)." In *Abydos: The Sacred Land at the Western Horizon: Proceedings of the Annual Egyptology Colloquium at the British Museum, 9–10 July 2015*, I. Regulski, ed., 171–214. *bmpes* 5, Leuven: Peeters.
- Miniaci, G. "The Collapse of Faience Figurine Production at the End of the Middle Kingdom: Reading the History of an Epoch between Postmodernism and Grand Narrative." *JEGH* 7/1 (2014): 109–142.
- Miniaci, G. "Unbroken stories: Middle Kingdom faience figurines in their archaeological context." In *Company of Images: Modelling the Imaginary World of Middle Kingdom Egypt (2000–1500bc)*. Proceedings of the International Conference of the epochs Project held 18th–20th September 2014 at ucl, London, G. Miniaci, M. Betrò, and S. Quirke, eds., 235–284. *ola* 262. Leuven: Peeters, 2017.
- Miniaci, G. "Faience craftsmanship in the Middle Kingdom. A market paradox: inexpensive material for prestige goods?" In *The Arts of Making in Ancient Egypt: voices, images, artefacts of material producers 2000–1550bc*, G. Miniaci, J.C. Moreno García, S. Quirke, and A. Stauder, eds., 139–158. Leiden: Sidestone, 2018.
- Miniaci, G. "The historical and archaeological reliability of the Middle Kingdom 'tomb-group' from el-Matariya (Heliopolis)". *evo* 41 (2018): 75–99.
- Miniaci, G., "Populating Middle Kingdom fauna: inclusion and seclusion of zoological iconographic motifs in the material culture." In *Art-facts and Artefacts: Visualising the Material World in Middle Kingdom Egypt*, L. Hudáková, P. Jánosi, C. Jurman, U. Siffert, eds., 63–84. *mks* 8, London, 2018.
- Miniaci, G. *Miniature Forms as Transformative Thresholds: Faience Figurines in Middle Bronze Age Egypt (1800bc–1650bc)*. *bmpes* 7/ola. Leuven: Peeters, forthcoming.

- Miniaci, G. and S. Quirke. "Reconceiving the Tomb in the Late Middle Kingdom. The Burial of the Accountant of the Main Enclosure Neferhotep at Dra Abu al-Naga." *bifao* 109 (2009): 339–383.
- Moeller, N. *The archaeology of urbanism in ancient Egypt: From the Predynastic period to the end of the Middle Kingdom*. New York: Cambridge University Press, 2016.
- Morfoisse, F. and G. Andreu-Lanoë, eds. *Sésostris iii: Pharaon de légende*. *Ida Horssérie* 27. Dijon: Snoeck, 2014.
- Morris, E.F. "Paddle Dolls and Performance." *jarce* 47 (2011): 101–103.
- Morris, E.F. "Middle Kingdom clappers, dancers, birth magic, and the reinvention of ritual." In *Company of Images: Modelling the Imaginary World of Middle Kingdom Egypt (2000–1500bc)*. Proceedings of the International Conference of the epochs Project held 18th–20th September 2014 at ucl, London, G. Miniaci, M. Betrò, and S. Quirke, eds., 285–335. *ola* 262. Leuven: Peeters, 2017.
- Newberry, P.E. *Beni Hasan. Part i. Archaeological Survey of Egypt. Memoirs* 1. London: eef, 1893.
- Nicholson, P.T. "Materials and technology." In *Gifts of the Nile: Ancient Egyptian faience*, F.D. Friedman, G. Borromeo, and M. Leveque, eds., 50–64. London-New York: Thames and Hudson, 1998.
- Nicholson, P.T. and E. Peltenburg. "Egyptian faience." In *Ancient Egyptian materials and technology*, P.T. Nicholson and I. Shaw, eds., 177–194. Cambridge: Cambridge University Press, 2000.
- Oppenheim, A., Do. Arnold, D. Arnold, and K. Yamamoto. Eds. *Ancient Egypt Transformed: The Middle Kingdom*. New York: mma, 2015.
- Peltenburg, E. "Early faience: recent studies, origins and relationships with glass." In *Early vitreous materials*, I.C. Freestone and M. Bimson, eds., 5–29. *bm OccasionalPaper* 56. London: British Museum Press, 1987.
- Petrie, W.M.F. *Kahun, Gurob and Hawara*. London: eef, 1890.
- Petrie, W.M.F. *Researches in Sinai*. London: eef, 1906.
- Petrie, W.M.F. *Gizeh and Rifeh*. *bsae* 13. London: eef, 1907.
- Picardo, N. "Hybrid households: institutional affiliations and household identity in the town of Wah-sut (South Abydos)." In *Household studies in complex societies: (micro) archaeological and textual approaches*, M. Müller, ed., 243–287. *ois* 10. Chicago: Oriental Institute, University of Chicago, 2015.
- Pinch, G. *Votive Offerings to Hathor*. Oxford: Griffith Institute, Oxford, 1993.

- Quack, J.F. “The animals of the desert and the return of the goddess.” In *Desert animals in the eastern Sahara: status, economic significance, and cultural reflection in antiquity*. Proceedings of an interdisciplinary acacia workshop held at the University of Cologne, December 14–15, 2007, H. Riemer, F. Förster, M. Herb, and N. Pöllath, eds., 341–361. Köln: Heinrich-Barth-Institut, 2009.
- Quirke, S. “‘Art’ and the ‘artist’ in late Middle Kingdom administration.” In *Discovering Egypt from the Neva: the Egyptological legacy of Oleg D. Berlev*, S. Quirke, ed., 85–106. Berlin: Achet-Verlag, 2003.
- Quirke, S. *Egyptian literature 1800bc: questions and readings*. Golden House Publications Egyptology 2. London: ghp, 2004.
- Quirke, S. *Hidden hands: Egyptian workforces in Petrie excavation archives 1880–1924*. Duckworth Egyptology. London: Duckworth, 2010.
- Quirke, S. *Going out in Daylight—prt m hrw: The ancient Egyptian Book of the Dead; translation, sources, meaning*. ghp Egyptology 20. London: ghp, 2013.
- Quirke, S. *Birth tusks: The armoury of health in context—Egypt 1800 bc*. Including publication of Petrie Museum examples photographed by Gianluca Miniaci, and drawn from the photographs by Andrew Boyce. mks 3. London: ghp, 2016.
- Quirke, S. and Z. Tajeddin. “Mechanical reproduction in the age of the artwork? Faience and 5000 moulds from 14th-century bc Egypt.” *Visual Communication* 9/3 (2010): 341–361.
- Reisner, G.A. *Excavations at Kerma. Parts iv–v*. Harvard African Studies 6. Cambridge–MA: Peabody Museum of Harvard University, 1923.
- Roccati, A. “Réflexions sur la Satire des Métiers.” *bsfe* 148 (2000): 5–17.
- Romano, J.F. “The origin of the Bes-Image.” *bes* 2 (1980): 39–56.
- Ross, E.D. *The art of Egypt through the Ages*. London: The Studio, 1931.
- Schortman, E. and P. Urban. “Modelling the Roles of Craft Production in Ancient Political Economies.” *Journal of Archaeological Research* 12/2 (2004): 185–226.
- Schoske, S., B. Kreissl, and R. Germer. Eds. ‘Anch’ Blumen für das Leben: Pflanzen im alten Ägypten: Sonderausstellung im Deutsches Medizinhistorisches Museum, Ingolstadt, 6.8.1992–4.10.1993, und im Kestner Museum, Hamburg, 25.10.1992–31.1.1993. *Schriften aus der Ägyptischen Sammlung* 6. München: Staatliche Sammlung Ägyptischer Kunst, 1992.
- Steinkeller, P. “The Organization of Crafts in the Third Millennium Babylonia: The Case of Potters.” *Altorientalische Forschungen* 23 (1996): 232–253.

- Tite, M.S., A.J. Shortland, A. Kaczmarczyk and P.B. Vandiver. "Faience production in Egypt." In *Production Technology of Faience and related Early Vitreous Materials*, M.S. Tite and A.J. Shortland, eds., 58–59. Oxford: Oxford University, School of Archaeology, 2008.
- Tooley, A.M.J. "Notes on Type 1 truncated figurines: the Ramesseum ladies." In *Company of Images: Modelling the Imaginary World of Middle Kingdom Egypt (2000–1500bc)*. Proceedings of the International Conference of the epochs Project held 18th–20th September 2014 at ucl, London, G. Miniaci, M. Betrò, and S. Quirke, eds., 421–456. OLA 262. Leuven: Peeters, 2017.
- Turner, W.E.S. "Studies in ancient glasses and glass making process. Part v. Raw materials and melting processes." *Journal of the Society of Glass Technology* 40 (1956): 277–300.
- Vandiver, P.B. "A review and proposal of new criteria for production technologies of Egyptian faience." In *La couleur dans la peinture et l'émaillage de l'Égypte ancienne: actes de la Table Ronde, Ravello, 20–22 mars 1997*, S. Colinart and M. Menu, eds., 121–139. Bari: Edipuglia, 1998.
- Vandiver, P.B. and W.D. Kingery. "Egyptian Faience: The First High-Tech Ceramic." In *High-technology Ceramics: Past, Present, and Future. The Nature of Innovation and Change in Ceramic Technology*, W.D. Kingery, ed., 19–33. *Ceramics and Civilisation 3*. Columbus: American Ceramic Society, 1987.
- Vanthuyne, B. "Amarna factories, workshops, faience moulds and their produce." *Ä&L* 22–23 (2012–2013): 395–429.
- Vassilika, E. *Egyptian Art*. Fitzwilliam Museum Handbooks. Cambridge: Cambridge University Press, 1995.
- Vernus, P. *Sagesses de l'Égypte pharaonique*. La Salamandre. Paris: Impr. Nationale, 2001.
- Volokhine, Y. "Dieux, masques et hommes: à propos de la formation de l'iconographie de Bès." *bseg* 18 (1994): 81–95.
- Walsem, R. van. *Iconography of Old Kingdom elite tombs: Analysis & interpretation, theoretical and methodological aspects*. mveol 35. Dudley, ma: Peeters, 2005.
- Wengrow, D. "Prehistories of Commodity Branding." *Current Anthropology* 49/1 (2008): 7–34.
- Whitehouse, H. "Ritual, cognition, and evolution." In *Grounding the Social Sciences in the Cognitive Sciences*, R. Sun, ed., 265–284. Cambridge–MA: mit Press, 2012.

Wilde, H. Innovation und Tradition: Zur Herstellung und Verwendung von Prestigegütern im pharaonischen Ägypten. göf 4. Reihe: Ägypten 49. Wiesbaden: Harrassowitz, 2011.

Winter, I. "Establishing Group Boundaries: Toward Methodological Refinement in the Determination of Sets as a Prior Condition to the Analysis of Cultural Contact and/or Innovation in First Millennium bce Ivory Carving." In *Crafts and Images in Contact: Studies on Eastern Mediterranean Art of the First Millennium bce*, C.E. Suter and C. Uehlinger, eds., 23–42. Fribourg: University Press, 2005.

Xia, N. *Ancient Egyptian Beads*. Berlin-Heidelberg: Springer, 2014.

Zaccagnini, C. "Aspects of ceremonial exchange in the Near East during the late second millennium bc." In *Centre and periphery in the ancient world*, M.J. Rowlands, M. Larsen, and K. Kristiansen, eds., 57–65. Cambridge: Cambridge University Press, 1987.