

The Use and Experience of Painting Materials in Ancient and Modern Nubia

Kate Fulcher

Ancient people used colour in their homes for many of the same reasons as people do today — to lighten walls, to highlight important areas, to signal types of use of spaces, to proclaim status within the community. The painting materials considered here are from the ancient town of Amara West, which is situated between the Second and Third Cataracts of the Nile, and was inhabited from c. 1250 to 800 BC. It was founded by ancient Egyptians in the reign of Seti I as one of a series of temple towns in the region, in order to control local resources.¹ Excavations at Amara West were initiated by the Egypt Exploration Society in 1939, and were revisited by the British Museum from 2008 to 2018. The EES seasons uncovered the temple and two town areas, including a residence bearing inscriptions relating to two holders of the office “Deputy of Kush,” which indicates that the town was an administrative centre of Kush (Upper Nubia).² The British Museum excavations focused on the ancient town and discovered evidence for the preparation and use of paint in white, red, yellow, black, blue, and green colours.

Certain features of the site suggest that it was inhabited by both Egyptians and Nubians; graves at Amara West display a variety of forms, including Nubian and Egyptian, and in some cases, a mix between the two.³ Pottery assemblages from the settlement comprise between 1% and 10% Nubian vessels, typically cooking pots.⁴ Although the town architecture is consistent with that found in contemporary Egyptian settlements, an oval architectural

1 Spencer, “Building on New Ground.”

2 Spencer, *Amara West I: The Architectural Report*.

3 Binder, “The New Kingdom Tombs at Amara West.”

4 Spataro, Millet, and Spencer, “The New Kingdom Settlement of Amara West (Nubia, Sudan).”

Figure 1.
Map of the Nile
Valley showing
locations of places
mentioned in text.



feature at Amara West is more consistent with Nubian architectural tradition.⁵

There are many modern settlements in the area surrounding Amara West, including the town of Abri on the opposite shoreline, and Ernetta Island. The inhabitants of these towns and villages use both modern paint, purchased at the market, and traditional pigments, gathered from the landscape, to decorate their houses.

Ancient evidence

Paints and pigments were found from all areas of the town of Amara West, in the form of lumps of raw pigment (red, yellow, blue), broken pottery used as paint palettes (red, yellow, blue, green, black, and white), paint applied on walls (red, yellow, blue, black, and white) (fig. 2), and residue on grinding stones (red, yellow, green). There were two cemeteries used by the town, both were in use over the course of the town's history. Coffins were very fragmentary due to termite action; painted plaster (white, black, red, yellow, and blue) was found related to coffin fragments in several tombs.

5 Spencer, "Nubian Architecture in an Egyptian Town?"

Scientific analyses identified the pigments and binders used at Amara West.⁶ Yellow and red were both ochres, and could have been sourced locally. Blue pigment was mostly Egyptian blue, manufactured using copper, silica, and flux at a high temperature, which was probably imported, as no evidence for local manufacture has been found. A second blue was identified as riebeckite and was probably sourced from further south, where sources of this rock are known.⁷ Whites were mainly gypsum and calcite, the origin of which is not clear; white pigment used in modern times and collected from the desert was found to be dolomite, which was not found in the ancient town.⁸ Blacks were carbon, easily obtainable by burning organic material, and bitumen, obtained from the Dead Sea.⁹ Greens were chlorite (green earth), probably local, and copper chloride, either a degradation product of malachite or manufactured from copper.¹⁰ Very few contemporary domestic sites are known from Egypt and even fewer from Nubia. From the evidence we have it seems that ochres, Egyptian blue, carbon, and gypsum plaster were commonly used materials.¹¹ Riebeckite has not previously been reported, and may have been a locally sourced blue(ish) pigment as an alternative for Egyptian blue. Bitumen has been reported once previously,¹² but could have been under-identified from other sites. Greens in Egypt are more commonly Egyptian green, and the range of greens used is debated, but the identified palette seems to be expanding.¹³

Several of the paints from palettes, and plaster from the walls, were analysed for carbohydrate. Of the seventeen samples analysed, eight contained positive evidence of monosaccharides, indicating that plant gum had been added to the pigment as a binder. Acacia trees, from which gum Arabic can be harvested, grow in the local area, and were also present in ancient times, as evidenced by plant remains from Amara West.¹⁴

6 Fulcher, *Painting Amara West*; Fulcher et al., "Multi-Scale Characterization of Unusual Green and Blue Pigments from the Pharaonic Town of Amara West, Nubia"; Fulcher, Stacey, and Spencer, "Bitumen from the Dead Sea in Early Iron Age Nubia."

7 Fulcher et al., "Multi-Scale Characterization of Unusual Green and Blue Pigments from the Pharaonic Town of Amara West, Nubia."

8 Fulcher, *Painting Amara West*, p. 43.

9 Fulcher, Stacey, and Spencer, "Bitumen from the Dead Sea in Early Iron Age Nubia."

10 Fulcher et al., "Multi-Scale Characterization of Unusual Green and Blue Pigments from the Pharaonic Town of Amara West, Nubia."

11 Fulcher and Budka, "Pigments, Incense, and Bitumen from Sai."

12 Siddell, "Appendix 6."

13 Lacovara and Winkels, "Malqata: The Painted Palace".

14 Cartwright and Ryan, "Archaeobotanical Research at Amara West in New Kingdom Nubia."

Figure 2.
Fragment of
painted wall
plaster from house
E13.7 at Amara
West (F5049c).



Ethnoarchaeology

Archaeological sites provide a huge amount of data about the tangible remains but it can be difficult to interpret these in terms of the human beings who created and used them. Interviews were conducted with the populations local to Amara West, focusing on the collection of painting materials, the method of preparation and application, and the people who performed these actions. The interviews were intended to provide an insight into human considerations, actions, and decisions in relation to the painting of houses in the area.

Twelve interviews were conducted in January 2015 with residents in areas near to Amara West, which is itself uninhabited. Interviews took place in three locations (fig. 1): (1) Ernetta, an island in the Nile and location of the expedition house, between Amara West and Abri, the local town on the mainland; (2) Amara East, a village east / downstream of Abri, on the opposite bank of the Nile from Amara West; and (3) the large island of Sai, about 11km upstream of Amara West, which has archaeological evidence of inhabitation broadly

concurrent with Amara West.¹⁵ The interviewees consisted of 10 women and 7 men, sometimes interviewed singly and sometimes as a pair (either married couple or mother and daughter). The interviewees were approached at random while wandering around the areas mentioned looking for painted houses. The majority were middle aged (35-55) as it was thought they would be the most likely to have had experience in painting a house, with three older (age unknown, 1 man and 2 women) and two younger participants (2 women in their mid 20s). It was hoped the older interviewees would remember times before acrylic paint and plastic paintbrushes were available.

In all three locations, houses consisted of an outside wall, within which stood the main house and several outbuildings, usually built of courses of mud-brick (*jālūṣ*), with some walls painted.¹⁶ The most common colours were white, yellow, and red. Floors and some outside walls were mud-plastered in a circular pattern (fig. 3).

Houses could be painted with *bōmastik* (modern acrylic paint) or *jir* (powdered rock). Before *bōmastik* was available in the market, everyone used *jir*, which was collected from the desert. Now *jir* may also be purchased from the market. There was some consensus that yellow and white *jir* were the best to use, and that the use of colour was a fairly modern initiative (last 50 years). It was known that red *jir* could be made by placing yellow *jir* on the fire, but red *jir* was not popular. However, both red and yellow *bōmastik* was commonly used. *Bōmastik* is affected by strong heat and light but the desert *jir* is not affected, therefore *jir* was commonly used for the outside walls in the courtyard, and *bōmastik* for the interior (fig. 3). White gypsum is also used, either in a thick paste to mend cracks, or as a thinner paint for a decorative line around the top of a wall. This is always purchased from the market.

Either men or women can travel into the desert to collect *jir*. Several locations were mentioned often connected with a certain colour of *jir*, and it was also said that usually one travelled to near the place known for *jir* and asked around as to the best place to dig. Often donkeys are taken to help carry the *jir* back, and one woman mentioned carrying it in her scarf. The people who collected it may then be open to selling some of it to their neighbours.

The *jir* is prepared by placing a lump of it into a container of water and variously leaving it to settle, straining off the gritty bits with a scarf or sieve, or giving it a stir with a hand. A traditionally made sieve was described by one man as being made from muslin-

¹⁵ Budka, "Life in the New Kingdom Town of Sai Island: Some New Perspectives."

¹⁶ Dalton, "Reconstructing Lived Experiences of Domestic Space at Amara West: Some Preliminary Interpretations of Ancient Floor Deposits Using Ethnoarchaeological and Micromorphological Analyses"; Wenzel, *House Decoration in Nubia*.

type material that is stretched taut over a frame and glued in place using starch from *hilba* seeds (fenugreek). Sometimes gum Arabic is added, this can be bought from the market or picked off a tree.

Most interviewees stated that men were responsible for painting with modern acrylic paint and women for the mudplastering and *jir*. However, there seemed to be some leeway, with men helping to apply *jir* in hard-to-reach areas. Either could use gypsum. Men could be paid for their painting work, but the suggestion of paying someone to apply *jir* was met with derision. Most of the time it is the family who paints the house, but neighbours might help if it is a big job. When the plaster and/or *jir* is renewed, the women and girls of the neighbourhood get together and paint each house in turn, going from one to the other as a group. It is very social with chatting and laughing. If it doesn't rain, they repaint approximately every 2 to 4 years. At times of celebration also they might renew the *jir*.

Girls watch and learn from their older female relatives how to do the mud-plastering and *jir*. They start contributing to the mud-plastering at about the age of 15, but the painting is easy and they could begin younger. There was no upper age limit, the only limitation being physical ability to participate in the work. Using modern acrylic paints appeared to have very little importance or social cache, they were just useful material for painting. However, mudplastering and applying *jir* was described as more socially embedded and more gendered. This was a skill that was passed down the generations, and had social activities attached to it that linked the family and their house into the community.

These days everyone uses plastic brushes bought from the market to apply paint, but several interviewees remembered their older relatives using a piece of leather with the hair still attached to paint the *jir* onto the walls, or a sheep's tail. One family poured *jir* over the walls from a teapot.

Re-construction of ancient painting materials

Various raw materials need to be collected and processed to make paint, and ancillary materials are also needed, for example, paintbrushes, grinding stones, and palettes. Information gleaned from the archaeological evidence and ethnographic interviews was combined to inform the types of materials and processes that were required.

The first material to obtain in order to make paint is the raw pigment itself. The exact location of the ancient sources of pigment is not known; the white rock that was collected for this experiment was one of the sources of *jir* used today by local inhabitants for



Figure 3. House of one of the respondents. Interior (left) painted in red and yellow *bōmastik*; exterior (right) mud plastered in a circular pattern and painted with yellow *jir*.

painting their houses. It took 25 minutes to walk there from Amara West across the desert. Facing north from Amara West the land dips into the paleochannel, which early in the history of the town would have been flowing with water and would have required a boat to cross, but which within one generation had become dry for much of the year. Beyond this the land rises to Cemetery D. A person or group heading north would either have to walk through or around the cemetery. Either way, they see from the town side, and then pass by, three pyramids each standing to a height of 10 metres. Perhaps more importantly to these people, there would also be the graves of their own ancestors, which they may have visited regularly to lay offerings and ask favours.¹⁷ As the people moved away from the town and the cemetery, the noises of life, of animals, of work and play, would have faded away, and been replaced by the quiet of the desert. They may have set out early on their journey, to avoid the heat of the day. In which case the sun would have only just been rising as they made their way to the top of the escarpment that then drops away into the desert. In modern times there is almost no vegetation visible but when Amara West was inhabited the landscape would have been less dry and desolate than it is today. The desert is scattered with archaeological remains,¹⁸ the inhabitants of Amara West would have been familiar with this evidence of previous inhabitants; this was not a virgin site, the area already had a history. During the New Kingdom some of the historic buildings may have still have been standing, providing oases of shelter.¹⁹ The current residents of the area are familiar with the archaeological remains around them, and often visit them for a picnic.

The route to the rock sources would have been known, and younger people would have learnt the route by accompanying more experienced people on the journey. On arrival at the source, they would have dug out the pigment. Ceramic containers are heavy, so perhaps they used bags, baskets, or scarves. Modern people use large metal cans (*sofiha*, fig. 4), thobes (a woman's wrap around

¹⁷ Binder, "The New Kingdom Tombs at Amara West," p. 604.

¹⁸ Stevens and Garnett, "Surveying the Pharaonic Desert Hinterland of Amara West."

¹⁹ Ibid.

Figure 4.
Sofiha can
containing jir.



garment) or scarves. To dig they may have mainly used their hands, or small metal or stone tools. A piece of flat stone picked up in the desert would make an effective shovel and obviate the need to carry a tool from the town and back.

Alongside the raw materials, a set of tools is also required. A grinding stone of some sort is needed, and this either means sourcing a schist rock from the desert or finding one that has been previously used. Another tool required is a hammerstone. The Nile bank at the local town across the river (Abri) is a shingle beach from where it is a simple task to pick up various smooth hand-sized rocks. A large stash of such rocks was excavated behind the front door of one of the houses at Amara West, possibly a cache of useful tools.

The most numerous paint-related finds from Amara West are ceramic palettes that hold paint. These palettes are also known from other ancient Egyptian sites, thus it seems that this was common practice.²⁰ Ceramic sherds would have been easy to obtain, and may even have been created for the purpose by deliberate breakage. The palettes function better when damp because it prevents the water soaking straight into them when it is added to the pigment powder, so they may have been soaked in water before use.

Experimentation with the application of paint led to the conclusion that a paintbrush would have been a necessary item, and many brushes are known from ancient Egypt that suggest these were

²⁰ Pagès-Camagna and Raue, "Coloured Materials Used in Elephantine"; Kemp and Stevens, *Busy Lives at Amarna*.



Figure 5.
Ancient Egyptian
paintbrush
dating to the
New Kingdom.
The Metropolitan
Museum of Art,
New York, Gift
of J. Pierpont
Morgan, 1917.

commonly used items, for example Metropolitan Museum of Art 17.190.1967 (fig. 5), said to be made of “palm fibres.” Experimentation was undertaken with various local plant resources to attempt to manufacture a paintbrush. The most success was had with the fruit bearing branches of the date palm. These can be snapped into shorter lengths, and are made up of many thin strands that naturally hold together well, but at the broken end can be beaten with a hammerstone to create bristles. A brush manufactured in this way holds paint well and is easy to manipulate. Many brushes can be made from one branch, and this is one way in which similar paintbrushes may have been made by the people of Amara West. Regardless of the origin of the fibres, the process highlights the importance of preparation of the brushes before the use of paint. My interviews with modern residents suggested that brushes based on animal parts might also have been an option. Again, these would have taken some preparation, for example the removal of a tail, or acquiring a piece of skin with wool attached after an animal had been slaughtered. Soft tissue animal products would be very unlikely to survive in the archaeological record.

To create paint, pigments were ground on a grinding stone similar in size to those most commonly found at Amara West. Grinding the raw pigments to create pigment powders initially seems to be a simple task, but there are some important considerations. The location chosen for the grinding is important, even in a light breeze the pigment powders will blow away, wasting all the effort that has gone into collecting and grinding the pigment. A sheltered area is best, or a very still day. On a small grindstone (as is typical at Amara West), only a small amount of pigment can be ground at one time. If

Figure 6.
Grinding red ochre on a small grindstone.
Left — Piece of red ochre to be ground.
Right — after grinding, pigment has spilled onto the floor and there is no working space left on the grindstone.



more pigment is added the powder starts falling off the edge of the grindstone, and it becomes impossible to achieve a good particle size because the build-up of powder prevents the particles from being crushed between the grindstone and the hammerstone. Therefore, the powdered pigment has to be regularly decanted to another vessel if any sizeable amount is to be ground (fig. 6). There is a strong sensory experience to grinding. The choice of hammerstone is based on how the stone fits in the hand, how the fingers curl around it, and how the weight feels when it is brought down. The arm muscle quickly begins to ache, and small injuries to the grinding hand would have been hard to avoid.

Modern interviewees said that jirls learnt to plaster and paint from their mothers by joining in with the plastering and painting process from their early teens. We could imagine the grinding of pigments to form part of a learning process for younger members of the family or neighbourhood, perhaps taking turns at grinding, perhaps just watching and listening. This may have been the time that memories were passed on, both collective memories that describe the ways in which paint must be prepared, and why, and more personal ones of previous times that paint has been made, the people that made it, and what happened to them. In this way, the painting of the houses could be used as a community event, using the painting activity as an opportunity to share both the physical activity and the memories associated with it. Having that communal memory, and connecting the decoration of the house to it, transforms that house into a home that is deeply embedded in a neighbourhood community.

During the process of gathering tools, mixing, and painting, people would have been unavailable to perform their normal tasks, so the whole process may have been accomplished in a group, with one or more people painting and others forming a support network, preparing food, looking after children and animals and perhaps taking part as a social event. Painting may have taken place at particular life events or particular times of year and the painting

process could have been integrated with these celebrations. The interviews indicated that it was desirable to schedule redecoration of the house around important events, even if this did not always transpire in reality.

The experiential study has demonstrated that the preparation of paints and the execution of painting was not a simple process. Many materials had to be gathered, traded, manufactured, and processed, taking time, effort, and planning. There would have been many people involved, both directly and tangentially, and therefore social interactions. The performance of all these actions would have been culturally regulated, including gestures, songs, timings, and the status of the actors within the society. This has also been noted in the decoration of the ancient site of Çatalhöyük in Turkey.²¹ Scholars have also examined how domestic activities serve as a cornerstone for social relationships in the Andes.²² Peripheral objects and tasks to the ones focused on here probably included cooking food (requiring food, pots, fire, utensils), travelling by donkey or boat, making bags or baskets, producing items to trade, meeting and trading with other people, collecting water, minding animals and children, and cleaning. The task of painting was part of a much wider interconnected taskscape, the “spatiotemporal layout of activity at a site.”²³

Narratives

The archaeological evidence, information gathered from interviews, and experience of collecting materials and making paint have been combined to create a fictional passage which imagines what the ancient experience of paint creation may have been. To a certain extent, all archaeology is storytelling, since the “truth” can never be known for certain; all archaeological reporting uses a narrative form of some sort, some of which have become institutionalised and are therefore hardly recognised as storytelling.²⁴ The aim of this fictional section is to demonstrate how important the intangible aspects of the production of paint may have been to its creation, and to add life to the archaeological record, to “people the past.”²⁵

I got up earlier than usual this morning because today we are going to fetch paint-rock from the pit in the desert and we need to leave

21 Çamurcuoğlu, *The Wall Paintings of Çatalhöyük (Turkey)*, pp. 240-246.

22 Leinawever, “Raising the roof in the transnational Andes.”

23 Ingold, “Taking taskscape to task,” pp. 26; Ingold, “The Temporality of the Landscape.”

24 Joyce, “Introducing the First Voice”; Majewski, “We Are All Storytellers”; Pluciennik, “Archaeological Narratives and Other Ways of Telling.”

25 Mickel, “Archaeologists as Authors and the Stories of Sites”; Tringham, “Households with Faces.”

before the sun rises. The younger children are staying with my sister, but I'm taking the older two with me, and it's Menet's first time. She's excited and gets up without complaining, despite the early morning chill. We each take a cloak and then head to the edge of the village where we are meeting Waset with the donkey and her children. Yesterday we filled a waterskin and put some bread aside, and now we tie all this plus several empty baskets onto the donkey, and as the light touches the sky we set off towards the cemetery. In the cemetery we stop for a while to visit our ancestors and leave small food offerings. The children run around chasing each other. We pass the boulders that mark the edge of our daily surroundings and look out into the desert. It's important to start the journey facing the right direction so we take a couple of minutes to discuss the landmarks we need to notice, and then we set off into the desert. As we walk on, the wind picks up and we all wrap our heads in our cloaks to keep the sand out of our eyes and ears. I think about the previous journeys I have made to fetch paint-rock and the events that have led to these painting days: marriage, a new house, a new baby. This journey is to collect paint-rock for the coming festival. We also thought it was a good time to take the older children to the desert pit to show them the paint-rock and how they will have to collect their own painting materials when their turn comes. As we reach the place the wind dies down and we can talk again. The children look around for rocks to use as shovels, and we find some that were used last time and left in a pile at the side of the pit. We sit to eat a little and drink some water while we tell stories of the last trip, who was there, and where we dug. Then we point to where we need to dig. The youngest digs first and fills a basket with the chunks of coloured rock. There are songs to sing while we dig, which remind us of the other times, and of the people who were here with us. Now it is getting hot and digging is hard work, we chide the children and the songs help us finish the work. When we have filled all of the containers, we sit again, and now the flies have come out and they buzz around us. We head back with the sun getting hotter and hotter and pull our cloaks over our heads. There is no wind at all and we can all talk easily. We point out landmarks we need to know to find our way across the desert. Eventually we can see the pyramids in the cemetery. They grow larger on the horizon and then I can hear the workmen in the cemetery swearing and joking and swinging their hammers. We wearily head into the village, and people greet us on our return. They call out to us or stop for a chat. Some people who couldn't come on the journey ask if they can have some of the paint-rock in return for a contribution to the party.

I have gathered the rocks and tree gum, and the day has come when the rock must be ground to a powder. It will take a whole day, so I have asked the neighbours on both sides to join me, and my sister is here too. We will take turns grinding the powder, watching the children, and cooking. Because we have gathered, we are making some special food. I remember my mother making the paint for my sister's house and the smells of the stew she made, and the taste of the special breads. I suggest we make these foods and my sister agrees but the others have their own special foods that they want to make, so we end up with a lot of food! We find a quiet, sheltered corner of the house to grind the rock, where the wind won't reach it, and as we finish each grind, we place the powder into the basket my mother gave to me for holding the powder. We each grind until the ache in our hand becomes unbearable, then the next person takes a turn. As we work alongside each other we chat and sing songs that remind us of other times when we have been grinding paint and the events that led to those times and the people involved. People passing the doorway can smell our food and come in to say hello and talk about the reason for the paint and to taste the food. We give each visitor a bread to take with them. Some of them share their memories of special food with us and some give us advice on the grinding, and how much plant gum to add. Menet sits by me as I grind and asks questions. After she has watched for a while she asks to take a turn. I show her how to hold the hammerstone, the amount of rock to use, and the correct way to pound the rock. It quickly starts to hurt her hand so I send her to take water to the animals. When the basket is full, we can stop grinding. We sing a song of celebration and relief, cover the basket, and put the ground rock aside for another day.

I start the painting by applying a layer of white plaster to the whole wall. It is thick so I use my hand. I mix the plaster with some water and plant gum in a large pot and stir it with my hand, then I take a lump and smear it onto the mudbrick wall. I continue until the whole wall is covered, and there are splashes of white plaster over the floor and over me too. My oldest daughter helps me with the lower sections of the wall; it's her first time so she makes a mess but I quickly smooth it over. This way of applying the plaster takes practice to get it smooth enough to paint on. It doesn't take long to cover the whole wall. Then we leave it to dry while going about our normal tasks. The whole house smells damp while it is drying and I light the fire earlier than normal in the evening to get rid of the damp feeling. After two days I am sure it is dry and we can paint the colour. I have prepared red and yellow ground rock, and some charcoal that I ground to make black. Blue is not for us. So I'll stick

with the normal colours. My husband mixes the ground charcoal with a little water in a piece of broken pot and paints a thin line of black around the wall. I mix red and water and paint the area above the line. He uses a brush we made from palm last time we dried the palm branches; mine is a bigger brush, made with grasses from the river bank that I gathered when the moon was small and then dried on the roof until the moon was full again. When we are done, we invite the family over to admire our work and we share food that they have brought with them. We sing together and play music. We go to bed late, but before we go to sleep, we speak to our ancestors and ask that all will be well in this house now we have painted the walls.

For the first few days after the painting, every time I enter the room I am again surprised at the change in colour and the way it makes the room feel different from before. Then after a while I get used to it. Menet says it makes her shy of her elders, the room feels more formal. When neighbours come into the room they behave differently from before, they do not sit so casually on the floor but stay by the doorway and wait to be invited in. But I remember how this goes; the paint is fresh and this will last for a little while, yet soon they will be back to their normal selves and gradually the paint will crack and the room will still feel different from before, but not so newly painted. My husband is pleased with the effect the paint has had. Soon it will be somebody else's turn and we will have the chance to help them and share their food.

Conclusion

Combining archaeological evidence, interviews of the current inhabitants of the area, and a re-creation of painting materials, allowed the experiences and activities of ancient people to be imagined. The re-creation highlighted the wide range of tasks that would have surrounded the creation and application of paint, and how this would have been embedded in the landscape, and the lives of the ancient people. Each task had associations with others (for example, pottery used for palettes), that were interconnected across a taskscape. The creation of paint should not be viewed as an isolated event, but rather as one of many processes that were taking place within the village that each impacted on the other, and on the lives of the people around it, and their associates, their relationships, and their memories. The application of paint to a house individualises the space to make it unique to the people who live there, and communicates to others in the neighbourhood the social standing and aspirations of the family. Through this communication, the

family situates themselves in the community. The way a house is laid out and decorated could be referred to as a homescape, the way the space is manipulated by the addition of colour (and other elements) to curate the house into a home within a community.

Acknowledgements

Research was conducted during a Collaborative Doctoral Award at UCL and the British Museum, funded by the Arts and Humanities Research Council (Grant 1350956). The samples were excavated as part of fieldwork of the British Museum Amara West Project, funded by the Qatar-Sudan Archaeological Project, Leverhulme Trust, and British Academy.

References

- Binder, M. “The New Kingdom Tombs at Amara West: Funerary Perspectives on Nubian — Egyptian Interactions.” In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions*. *British Museum Publications on Egypt and Sudan 3*, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 591 — 613. Leuven: Peeters, 2017.
- Budka, J. “Life in the New Kingdom Town of Sai Island: Some New Perspectives.” In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions*. *British Museum Publications on Egypt and Sudan 3*, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 429 — 48. Leuven: Peeters, 2017.
- Cartwright, C.R., and P. Ryan. “Archaeobotanical Research at Amara West in New Kingdom Nubia.” In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions*. *British Museum Publications on Egypt and Sudan 3*, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 1 — 16. Leuven: Peeters, 2017.
- Çamurcuoğlu, D.S. *The Wall Paintings of Çatalhöyük (Turkey): Materials, Technologies and Artists*. PhD thesis. University College London, 2015.
- Dalton, M. “Reconstructing Lived Experiences of Domestic Space at Amara West: Some Preliminary Interpretations of Ancient Floor Deposits Using Ethnoarchaeological and Micromorphological Analyses.” In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions*. *British Museum Publications on Egypt and Sudan 3*, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 357 — 88. Leuven: Peeters, 2017.
- Fulcher, K. *Painting Amara West: The Technology and Experience of Colour in New Kingdom Nubia*. *British Museum Publications on Egypt and Sudan 13*. Leuven: Peeters, 2022.
- Fulcher, K., and J. Budka. “Pigments, incense, and bitumen from the New Kingdom town and cemetery on Sai Island in Nubia.” *Journal of Archaeological Science: Reports 33* (2020): 102550. DOI: 10.1016/j.jasrep.2020.102550.
- Fulcher, K., Ruth Siddall, Trevor F. Emmett, and Neal Spencer. “Multi-Scale Characterization of Unusual Green and Blue Pigments from the Pharaonic Town of Amara West, Nubia.” *Heritage 4* (2021): pp. 2563 — 79. DOI: 10.3390/heritage4030145.
- Fulcher, K., R. Stacey, and N. Spencer. “Bitumen from the Dead Sea in Early Iron Age Nubia.” *Nature Scientific Reports 10*, no. 8309 (2020). DOI: 10.1038/s41598-020-64209-8.

- Ingold, T. "The Temporality of the Landscape," *World Archaeology* 25(2) (1993): pp. 152 — 74.
- Ingold, T. "Taking Taskscape to Task." In *Forms of Dwelling 20 Years of Taskscapes in Archaeology* edited by Ulla Rajala and Philip Mills, pp. 16 — 27. Oxford: Oxbow, 2017.
- Joyce, R.A. "Introducing the First Voice." In *The Languages of Archaeology: Dialogue, Narrative, and Writing*, edited by Rosemary A. Joyce, pp. 4 — 17. Oxford: Blackwell, 2002.
- Kemp, B.J., and A. Stevens. *Busy Lives at Amarna: Excavations in the Main City (Grid 12 and the House of Ranefer, N49.18). Volume I: The Excavations, Architecture and Environmental Remains. EES Excavation Memoir 90*. London: Egypt Exploration Society and Amarna Trust, 2010.
- Lacovara, P., and A. Winkels. "Malqata — -The Painted Palace." In *Tracing Technoscapes: The Production of Bronze Age Wall Paintings in the Eastern Mediterranean*, edited by Johannes Becker, Johannes Jungfleisch, and Constance von Rügen, pp. 149 — 72. Leiden: Sidestone, 2018.
- Leinaweaver, J.B. "Raising the Roof in the Transnational Andes: Building Houses, Forging Kinship." *Journal of the Royal Anthropological Institute* 15/4 (2009): pp. 777 — 96.
- Majewski, T. "We Are All Storytellers: Comments on Storytelling, Science, and Historical Archaeology." *Society for Historical Archaeology* 34, no. 2 (2000): pp. 17 — 19. DOI: 10.1007/BF03374309.
- Mickel, A.J. *Archaeologists as Authors and the Stories of Sites: In Defense of Fiction in Archaeological Site Reporting*. BA thesis, Anthropology. William and Mary, 2011.
- Pageès-Camagna, S., and D. Raue. "Coloured Materials Used in Elephantine: Evolution and Continuity from the Old Kingdom to the Roman Period." *Journal of Archaeological Science: Reports* 7 (2016): pp. 662 — 7. DOI: 10.1016/j.jasrep.2016.02.002.
- Pluciennik, M. "Archaeological Narratives and Other Ways of Telling." *Current Anthropology* 40, no. 5 (1999): pp. 653 — 78. DOI: 10.1086/300085.
- Siddell, R. "Appendix 6: Analysis of Pigments from the Gurob Ship-Cart Model." In *The Gurob Ship-Cart Model and Its Mediterranean Context*, edited by Shelley Wachsmann, pp. 243 — 83. College Station: Texas A&M University Press, 2013.
- Spataro, M., M. Millet, and N. Spencer. "The New Kingdom Settlement of Amara West (Nubia, Sudan): Mineralogical and Chemical Investigation of the Ceramics." *Archaeological and Anthropological Sciences* 7, no. 4 (2015): pp. 399 — 421. DOI: 10.1007/s12520-014-0199-y.

- Spencer, N. "Nubian Architecture in an Egyptian Town? Building E12.11 at Amara West." *Sudan & Nubia* 14 (2010): pp. 15 — 24.
- Spencer, N. "Building on New Ground: The Foundation of a Colonial Town at Amara West." In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions. British Museum Publications on Egypt and Sudan* 3, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 323 — 55. Leuven: Peeters, 2017.
- Spencer, P. *Amara West I: The Architectural Report. EES Excavation Memoir* 63. London: Egypt Exploration Society, 1997.
- Stevens, A., and A. Garnett. "Surveying the Pharaonic Desert Hinterland of Amara West." In *Nubia in the New Kingdom: Lived Experience, Pharaonic Control and Indigenous Traditions. British Museum Publications on Egypt and Sudan* 3, edited by Neal Spencer, Anna Stevens, and Michaela Binder, pp. 287 — 306. Leuven: Peeters, 2017.
- Tringham, R. "Households with Faces: The Challenge of Gender in Prehistoric Architectural Remains." In *Engendering Archaeology: Women and Prehistory*, edited by Joan M. Gero and Margaret W. Conkey, pp. 93 — 131. Oxford: Blackwell, 1991.
- Wenzel, M. *House Decoration in Nubia*. London: Duckworth, 1972.