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ARCHAEOLOGY FOR EDUCATION

A Day on the Nile: Living in a Town in Nubia

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Abstract As archaeologists, we are often asked what it was like to live in the past. By blending a fictional narrative with factual archaeological evidence, we offer an interpretation of what a typical day may have been like living at Sai, a town on an island in the River Nile during the second millennium before the common era (BCE), in what is now Sudan. We focus on the question at different levels, thinking about the day-to-day life of the residents of an ancient town, activities that took place, and its broader historical, geographical, and cultural contexts. We also explain how archaeologists work and interpret some of the evidence we discuss, focusing on a range of methods. These include recent advances in virtual 3-D reconstruction, which offer a unique perspective on our interpretation of the past. Many themes covered in this article are highly relevant today and can be linked to several UN Sustainable Development Goals (in particular, 9, 11, and 12). We encourage readers to think about some of the things we discuss in relation to their own lives and experiences and have provided a number of call-out questions in speech bubbles throughout the article to get some of these discussions started.

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Résumé Une des questions qui nous est le plus souvent posée, en tant qu'archéologues, est comment les gens vivaient dans le passé. En mêlant une histoire fictive à des explications factuelles, cet article présente la vue d'une journée typique à la ville de Sai, sur une île du Nil (maintenant au Soudan), pendant le deuxième millénaire av. J.-C. Nous adressons la vie courante des habitants de la ville, ainsi que les occupations et activités qui s'y seraient déroulées, et tenons compte de la ville dans sa situation historique, géographique, et culturelle. Nous présentons aussi certaines des méthodes utilisées pour déchiffrer les vestiges archéologiques, ceci inclut des nouvelles méthodes de reconstruction virtuelle en trois dimensions qui changent notre compréhension du passé. Bien que notre but principal soit d'élucider le passé, la plupart des explications se rapportent aussi bien à la vie moderne, et se rattachent à certains objectifs de développement durable de l'ONU (en particulier les objectifs 9, 11, et 12). Pour encourager les discussions entre lecteurs sur leurs propres expériences, nous avons incorporé des questions (en bulles) adressant certains des thèmes inclus dans l'article.

Keywords Urban archaeology · Ancient cities and towns · Sudan · Nubia · Egypt · 3-D reconstructions

Introduction

Archaeologists have studied and been fascinated by ancient cities for a long time. Their importance is

often linked to their association with major "civilizations." Archaeologists mostly studied cities in places like the Near East and argued that cities were defined by developments such as writing and technology, all in turn applied to the definition of a civilization. In fact, some archaeologists thought non-literate societies would not have been able to establish cities and, in turn, major civilizations (e.g., Clark, 1962; Reisner, 1923). However, archaeological research worldwide has now undermined this misconception, showing clear evidence for cities without writing and how varied these urban centers could be. This includes one of the earliest urban civilizations of Africa: the kingdom of Kerma, named after its capital city in the Third Cataract in Nubia. Kerma's urban society left behind an immense archaeological record (Bonnet, 2019). Using different archaeological methods, ranging from remote sensing to micromorphology, the material from Kerma City (encompassing a relatively small area of about 20 hectares in its heyday) and other urban sites in Sudan reveals much about how people lived in the past, what they did, how they did it, and how they interacted with the landscape and environment.

During the third millennium BCE, there were already complex urban environments in Sudan. To illustrate ancient urban life, we focus on a so-called temple town built during the second millennium BCE on an island in the River Nile. We use the terms "town" and "city" to define these permanent settlements. They often had enclosure walls and a varied population who participated in different activities, including trade, production, and administration.

Sai City is a state-planned town with a stone temple, many administrative buildings, and various living quarters (e.g., Adenstedt, 2016; Budka, 2020). The site allows us to consider lived experiences in ancient Sudan shaped by multiple cultural contacts, technological exchange, and interactions between the two major cultural groups in this region of Africa: the ancient Egyptians and the Kerma people. Ancient towns, such as Sai, had multiple functions: they controlled and exploited resources; were major players in river trade routes; supported military campaigns and mining expeditions; promoted Egyptian ideology; and were also important production centers for various industries (Spencer et al., 2017). These urban sites can only be understood in relation to their surroundings. In ancient northeast Africa, the Nile was key to urban development. People also had to adapt to environmental changes, comparable to the challenges modern societies are facing regarding climate change. Cities like Kerma and Sai can give us new ideas on ways to organize and build cities, ones suited to their local environments.

As archaeologists, we are often asked what life was like for people living in past cities. After explaining some of the ways in which archaeologists study sites, we offer an idea of what living in cities like Sai might have been like. We blend the fictional narrative with factual evidence from excavations at the site—including 3-D reconstructions and the life histories of objects (referred to as object biographies; see also Haour & Moffett, this volume)—as well as information from other research in Sudan.

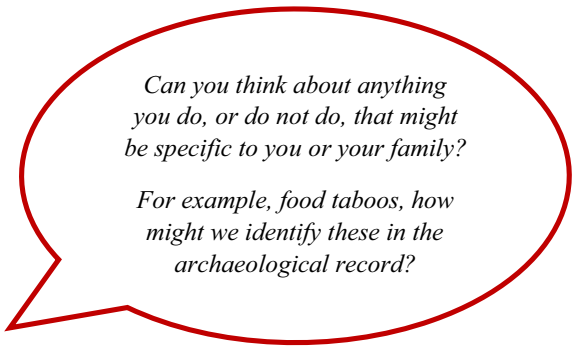
How Do We Know What We Know? (and How Little We Sometimes Know!)

Archaeologists use a range of methods and theories to interpret the past. They combine methods and theories from different academic disciplines and study questions, not just about the past but also about the present and the future (e.g., Kerr, 2020). Archaeology is a fundamental tool to learn to understand big questions about human conditions, climate change, and social organization, among others. In doing so, archaeology brings a unique lens through its time depth of data.

Ancient urban centers are a fantastic resource for archaeologists because they allow us to study various aspects of life at different scales. This includes day-to-day life—for example, learning about the houses people lived in by excavating architectural features, the materials they produced, and what people ate through animal and plant remains. If we study cities within their broader context, bigger questions of how they fit into wider networks can also be considered, such as around economy or trade. For example, we can often tell whether objects were made locally or if they or the raw materials used to make them were imported.

A crucial aspect of archaeological fieldwork is the importance of context. When archaeologists excavate, we are very careful to precisely record where any evidence or objects have come from. This helps us to date and identify specific features or buildings in relation to one another. By comparing

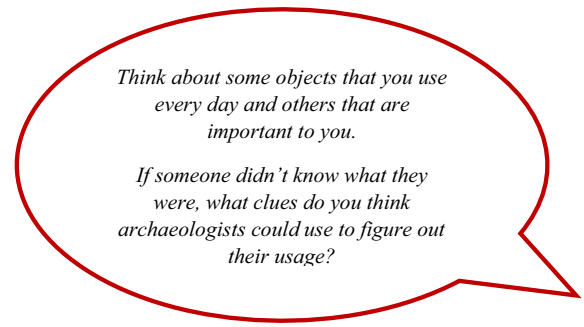
evidence from different sites, we can also understand similarities and differences in people's lives and what was important to them. In some cases, these differences are due to practical reasons—such as the climate or access to natural resources—while in other cases, they are cultural choices, which can be hard to interpret archaeologically. Often people living in the communities where we work today contribute extremely useful ideas to our work.



Reconstructions based on archaeological evidence are a useful source of interpretation and are becoming increasingly sophisticated. For example, 3-D reconstructions allow us to virtually walk around ancient sites and think about what it would have been like to live in them. This overlaps with sensorial studies of the past, like considering lived experiences by using methods such as phenomenology. Phenomenology focuses on less tangible aspects of the past—like smells or sounds—which do not survive archaeologically. It may also focus on visual aspects, such as which buildings would have been seen from where. Reconstructions can account for the time of day and year, for example, by modeling the amount of light that would have reached a room at a given time or considering the need for covered streets and alleyways where they were exposed to prolonged summer sunlight. This allows for more accurate renderings of hypotheticals like window positions or the use of open courtyards to let in daylight. Not everything survives in the archaeological record, and we do not have all the answers! Non-tangible aspects, such as lived experience, leave little to no trace, which does not mean they are not of equal importance to the archaeological interpretation of the past.

Why Is the Archaeology of Cities Important?

We can use the archaeology of cities to understand how people lived and adapted to a specific location over time. This can include aspects such as how towns were managed and controlled. Archaeologists are most interested in how ordinary people lived. People had to cook, eat, sleep, and work, much the same as we do today. They also would have had time for leisure activities, but identifying these in the archaeological record—for example, through objects with no functional purpose—can be much harder.



Cities typically accumulate more archaeological evidence than other types of settlements because they were often lived in for longer and more densely than rural locations. People living in cities might build new houses over the remains of old houses, and the things they threw away build up in what we call "middens" (refuse dumps). This makes cities ideal for studying a range of social practices, including technological innovations, trade, objects, social interaction, and multi-culturalism. The quantity of archaeological remains can be a challenge. For example, distinguishing between different phases of occupation is not always easy, but careful study can provide rich insights.

Studying cities can also help counter biases about how people lived in the past. Just because we behave in certain ways today does not mean the same was true in the past. People have very different beliefs and life experiences, and we need to consider these within their historical, geographical, and cultural contexts, not within our own. Unfortunately, many past and recent interpretations of cities—particularly by Western archaeologists—used European examples as benchmarks for what a city "should" look like. While we are moving away from such problematic approaches, it remains an important lesson in understanding how our

own biases and life experiences can influence interpretations and views of the past. The study of past cities can also be a lesson for today's experience by revealing how people have adapted to local environments or changes in the climate and how we might do so again.

Sai City and Its Occupants

Sai Island is located on the River Nile between the Second and Third Cataracts in northern Sudan (Fig. 1). The town on the island is one of the urban centers established during the so-called Egyptian "colonization" of Nubia (northern Sudan) in what is today known as the New Kingdom (about 1450 BCE). Prior to the New Kingdom, Sai was an important stronghold of the Kerma Kingdom.

Set on sandstone cliffs overlooking the river, Sai is a fortified settlement covering a 2.76-hectare area in an orthogonal south-north layout (238m north-south by about 118–120m east-west). The main city gate was on the western side, opening to a main east-west axis that led to a stone temple; there was probably a smaller entrance on the southern wall. The southern part of the town was densely occupied by administrative buildings, houses, and magazines (storage areas). The other parts of the city show more varied mudbrick buildings, including workshops, cellars, fireplaces, storage bins, and animal stables.

The Egyptian town and its associated cemetery on Sai Island provide important insights into the lifestyle and living conditions in New Kingdom Nubia. To reconstruct life on Sai, all archaeological evidence must be considered, from architecture to pottery, small finds (objects such as jewelry, combs, needles, and weapons), and tools. When studied in relation to associated finds, archaeologists can learn a lot about building practices, social and economic activities, and the life histories of Sai's residents.

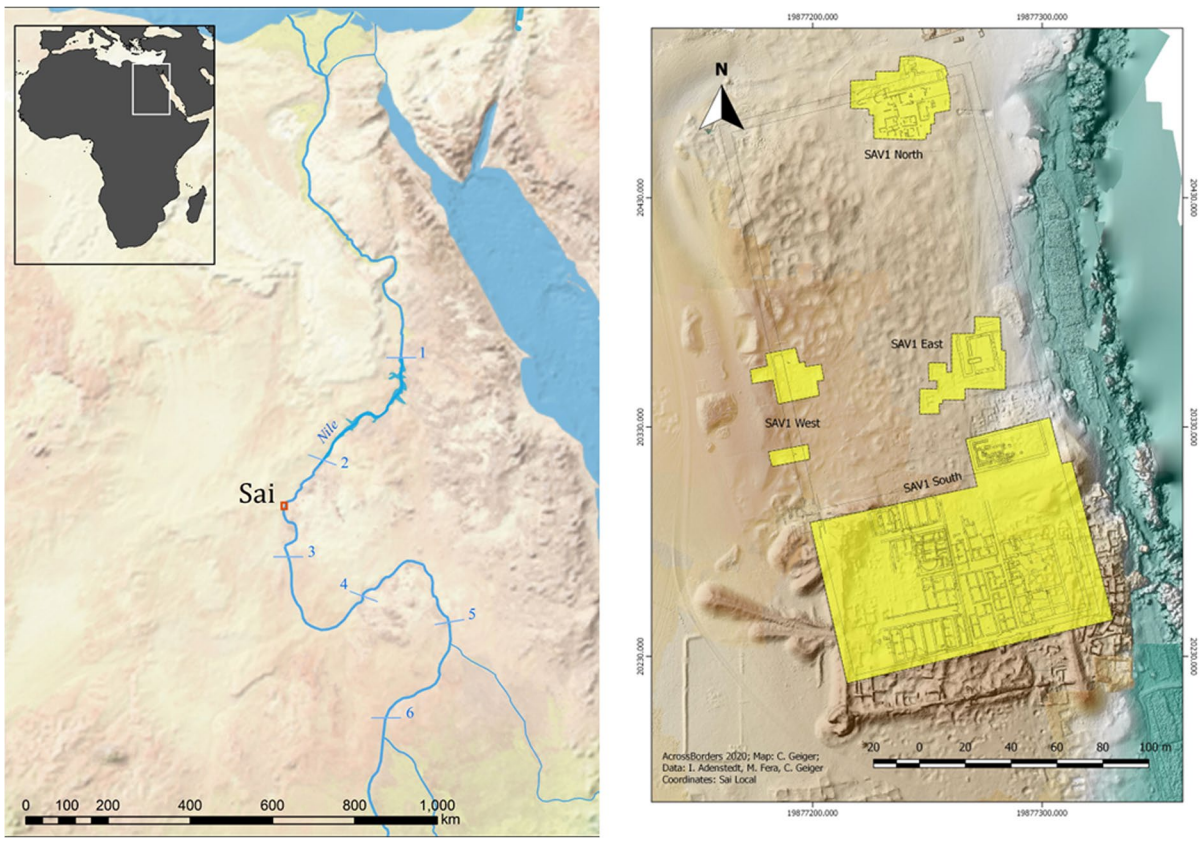


Fig. 1 Location of Sai Island in Sudan and layout of the town with excavated areas marked in yellow (status of 2018). Illustration courtesy of AcrossBorders

Sai was home to colonizing Egyptians, and Nubians who intermingled with them. As such, life in the town displays the dynamic aspects of a growing, mixed community. This ancient example of a complex intermingling of cultural practices can be instructive for modern studies of multi-ethnic communities in urban spaces.

The residents of Sai included a considerable number of families and probably a total of about 200 people, which is small compared to our modern understanding of cities. Sai's occupants were not a static group, and we need to consider changing social structures with families coming and going. It is not always easy to identify people of different ages and genders equally in the archaeological record. For example, we know the most about adult men who had military, political, and economic roles because they left more traces archaeologically than other demographics. Women and children are more difficult to identify in settlement contexts, but they were also important to city life. Here, cemetery contexts can help us to learn more about the occupants.

In what follows, we imagine a typical day at Sai through the eyes of one of its inhabitants. As we move through the day, we explain some of the archaeological evidence that helps us to know about daily life in the city and expand on particular activities or objects and their biographies (see also Haour and Moffett, this volume).

Welcome to Sai!

A girl in the town of Sai woke up. The room was dark. Its windows were small to keep the heat, sand, and wind out. Still, the sand got everywhere, and the room needed to be swept daily! As she woke up, the girl realized something was different. Hmm, what was it? Something was missing …ah yes! She was normally woken up every day by her dog and his wagging tail. But not today. She wondered where he was (Fig. 2).

Object Biography–A dog in the house

This dog clay figurine (Fig. 2) was excavated in Sai City. The figurine has a black painted collar and black dots covering the body; the eyes are also painted black.

This figurine is very unusual and a unique find in Sai City. Was it used by someone who really liked dogs? Or someone who left their dog behind in Egypt and wanted to keep memories of it? The collar indicates that the dog was seen as a pet, belonging to a household, family, or person. People in the past sometimes travelled with pets, but other animals were left in the cities when people were on the move. Maybe a child was missing their dog when the family moved to Sai from Egypt? Dogs were present in Sai City and maybe this inspired the production of this object. Objects like this allow us to speculate about what effects animals had on people.

Fig. 2 Dog figurine made from clay, found in the city of Sai. Photo courtesy of AcrossBorders

The girl dressed and searched for the dog. But she quickly realized that the house was empty. Ah! That must be it, she thought. Her mother must have taken the dog with her. That would make sense. After all, he was a working dog, helping to herd the goats, as well as a pet. So she thought she would go out and investigate. She left the house, entering the small lane leading towards the south, which was still in shadow despite the morning sun. Almost immediately, she had to squeeze past her neighbor walking the other way in the very narrow opening between the house and the serpentine wall just outside it. Soon she would be too big to get through so easily, like adults who could only pass one at a time! She turned left and quickly reached a square pillar in the middle of the street near the southern gate and headed out of the town.

Virtual Reconstruction of Archaeological Sites

Virtual reconstructions can add an experiential dimension to the study of ancient cities. Today's digital technologies mean we can reconstruct what sites may have looked like with speed and a high level of detail that allows researchers to find answers to questions we might otherwise not have known to ask. The release of the free-to-use Unreal Engine 5 in 2022 has effectively removed many long-standing technical hurdles. It promises to be a watershed moment in the interpretation, reconstruction, and dissemination of data acquired through settlement archaeology. Originally created for the development of

video games, Unreal Engine (http://www.unrealengine.com) has become the industry standard in real-time photorealistic visualization and immersive virtual experiences. The nearly limitless technical possibilities of interactive reconstructions using this technology, which we discuss below, also lend an unprecedented opportunity for transparency. Even the smallest details can now be properly constructed and interactively reinforced with additional layers of information that describe the reasoning behind the choices made in building the reconstruction, without any loss in performance. Figures 3–5 were taken directly from within the interactive virtual reconstruction in real time (see the supplementary video).

By navigating the streets of Sai with a virtual character, a feature of urban life in state-planned settlements in Nubia becomes evident: how restricted access was in parts of the town. A serpentine wall completely shields the entrance to the narrow side street that leads from the southern gate (Fig. 3). The confined and restricted nature of Sai's urban planning becomes a first-hand experience through virtual reconstructions.

Next time you are in a busy place, try and think about all the things that wouldn't survive in the archaeological records (like light, sounds, smells, etc.).

How important are these to how you experience that place?

Now outside, beyond the southern gate, the landscape opened up, and the sound of the town was obscured by its massive fortification walls towering above her and reaching nearly 9m in height. From here, the girl could see the River Nile, which surrounded the island. Her mother was easy to spot in the distance, tending to the goats. The girl walked towards her, attempting to wave away the nimiti *(tiny black flies) as she walked. "Have you seen my dog?" she asked her mother, but she already knew the answer—if he had been around, he would have come bounding towards her! Her mother said she hadn't seen him and seemed surprised he would have left the town alone. She told her daughter to head back into town to find him, but not before delivering some goat dung to the potters on her way back. They needed it to mix into the clay they used to make pots. Dung is a common tempering material for pottery (even nowadays) and necessary to increase plasticity in Nile clay.*

The girl headed towards the western gate where the potters worked, calling her dog as she walked, clutching an old pot filled with goat dung. She saw smoke rising from the new kiln outside the city wall, and as she got closer, she could feel the heat of its fire. It was surrounded by recently made vessels, and she recognized some items similar to the ones in her home. Among them were dishes and plates similar to the ones her mother used at home, but with decorations she hadn't seen on locally made items before, only those sold by traders. The typical hand-made cooking pot with basketry impressions that she had seen her grandmother put into a large bonfire some years ago was nowhere to be seen. The girl spotted one of the potters by the pottery wheel, which was as new as the kiln, and handed him the dung before she asked about her dog. But still no luck!

Pottery Production

For the city of Sai, we can assume an industrial-scale pottery workshop during the site's heyday. The amount of pottery found in the town is substantial. Local potters made a wide range of vessels (cooking pots, drinking vessels, storage pots, bread plates, dishes, and plates), but the pottery from Sai also included imports from Egypt, the Levant, and the Mediterranean. Because we still know little about the internal structure of the town, we cannot rule out that

Fig. 3 Virtual reconstruction of a house in Sai City from the southern enclosure wall with a serpentine wall shielding the entrance to a narrow lane. Construction material has been added for a hypothetical renovation, which was known to occur regularly in domestic contexts. As research is ongoing, the geometry and texture of the buildings' façades are simplified. Image: Carl G. Elkins

there may have been small-scale production using bonfires rather than kilns to make small sets of vessels. Perhaps the demands of the various households in the town were fulfilled by small-scale production. No pottery kilns have been found in the town, which leads us to think that workshops may have been located outside the town wall.

Pottery production is cross-culturally closely linked to cultural identity. This is well traceable in ancient Sudan, with a hand-made indigenous tradition and a wheel-made technique imported from Egypt. In New Kingdom Nubia, we can see a dynamic exchange of these two technologies and find pots that are "in-between," showing both Nubian and Egyptian stylistic and technological elements. Thus, the mixed community living in towns like Sai created a unique style that can, in turn, be regarded as an identity marker of this newly composed group with diverse backgrounds. We can assume that Nubian potters adopted wheel-made production from the first-generation Egyptians on the island and then developed the technique further.

Think about some of the objects that you own or use.

Do you know where they come from or how they were made?

Are you using them for their intended original purpose?

Now closer to the western gate, the girl followed her mother's advice and returned to the city. This was the main entrance to the town, and the path was busier, leading straight to the temple where many officials and administrators worked. She kept quiet as she passed the mayor's large house. She hoped her dog hadn't snuck in there. Important officials from Egypt were visiting to discuss the local gold production!

The girl turned towards the north of the city with its three-roomed houses. One was currently under construction, and she had to swerve to avoid the piles of wooden beams and mudbricks.

3-D Models and How Things Were Made

The recent technical advances we discussed above have the potential to change the nature of the interactive experiences a reconstruction can offer. In addition to the experience of walking around the site, 3-D reconstructions can also help us to understand and explain how buildings were constructed. As in real life, virtual buildings can now be constructed using individual bricks, beams, plaster, and thatching without any loss in performance. Layers can be interactively peeled back, revealing how cities were constructed down to the smallest details. These can be reinforced with additional layers of information describing the reasoning behind the choices made. For example, we can consider the size and arrangement of individual bricks, which the user can expose behind overlying plaster and interact with. By interacting with the building material and processes, we can start to understand choices like wall thickness, wall height, and window size. The time of day can be altered to illustrate why a particular window height and size were chosen (for example, consider the amount of light that reaches the windows at different times of day in our supplementary video beginning at 01:32). Roofing layers composed of wooden beams, palm leaf midribs, matting, grass and plaster can be separately revealed to justify roof thickness and ceiling height (Fig. 4). Scans of surviving painted plaster fragments can be integrated into walls to justify choices of decoration. Reconstructions produced in this manner can become meaningful investigations into lived experiences for an audience of specialists and non-specialists alike.

Do you know how your home is built?

Think about the different materials and type of construction needed for each part. Who made these choices and why?

The young girl wandered back to the western part of the city with its many workshops. This was a busy part of town where a dog could easily go missing! "Hello there," said a man. It was her uncle, and he was grinding quartz. He was one of the goldsmiths and had just returned from an expedition. She hadn't realized he was back!

Gold Production

Pharaonic Egypt's strong interest in gold and sandstone is well known, and both materials are available in the region of Sai. Nubian gold was among the main Egyptian economic interests over a long period, but the Kerma people also used these local resources. At Sai, large grinding stones attest to the processing of gold. This involved grinding gold-bearing quartz fragments. Since Kerma times, Nubian goldsmithing was of very high quality and a mark of local cultural identity.

Do you know of any resources in your region which have influenced life in your city/town?

During the New Kingdom, the Egyptians employed local people as overseers of goldsmithing, taking advantage of their expert knowledge. A tomb on Sai included vessels with writing that identified the owner as a local overseer of goldsmiths, which tells us much about the collaboration of Egyptians and Nubians in gold working. Archaeology allows us to reconstruct the complex history of gold mining in ancient Sudan, in which Nubians played a significantly larger role than previously thought. Sai's importance during the Kerma period might be linked to its location in a gold-rich region, making it ideal for coordinating gold exploitation. Gold processing, therefore, illustrates the need to consider cities within their environment and the resources available in the hinterland.

Although she was happy to see her uncle, the dog was her only concern. Still, no one had seen him, so she continued her search. But as she left, she heard her uncle coughing. He seemed tired and thinner than he was when she last saw him. She hoped he was just exhausted from his trip and was not ill.

Fig. 4 Screenshot from the interactive reconstruction towards the southern enclosure at Sai City, with the mayor's imposing house on the left and the rear of a block of houses on the right. The user has engaged with a hotspot on the wall to reveal its brick construction and to expose and separate the individual elements of the roof's and doors' construction. The virtual reconstruction suggests that, with an open courtyard and internal windows, no external windows would have been necessary in these smaller houses. Image: Carl G. Elkins

Health in Cities

It can be difficult to know about the general health and well-being of people in cities based on the study of houses and town life alone. However, cemeteries are a crucial way of determining how people lived before they died. Close examination of the excavated human bones from these cemeteries allows archaeologists to estimate how long people lived in the past. The scientific analyses of these human skeletons can also help to determine more specific things, such as what people ate. Studying bones and teeth can identify the effects of childhood malnutrition on adult skeletons, which can be significant in assessing health. The larger our samples become, the more we will know about how people lived in cities and how the quality of life may have differed in different places, times, and environments.

Can you think of anything in your home that might give clues as to the health of the people that live there?

In some cases, specific illnesses can also be determined. For example, based on bone lesions, cancer has been identified at Amara West, another New Kingdom city close to Sai, from as early as 1200 BCE (Binder

Fig. 5 Virtual reconstruction, showing the possible pig pens next to a villa in the southern part of Sai City during the late afternoon. Image: Carl G. Elkins

et al., 2014). This can be important in our interpretation of the past and understanding the causes and progression of certain illnesses, which, in turn, can inform future medical research.

The girl was getting very worried now! She still hadn't found her dog. It was getting dark, and the goats and sheep that had been grazing outside the city walls were being herded back into town. Their hooves stirred the dust, and their scent filled her nose as she anxiously waited for them to pass.

She continued to search, looking into the houses and courtyards, constantly calling for her dog above all the noise.

Pets and Animals in Cities

In Sai, like all cities along the Nile in ancient times, people and animals lived closely together. This included pets like dogs and cats. Cats are well attested in Sai and might have been brought from Egypt when the town was founded. Since cereals were major parts of the diet, cities like Sai needed to store grain in large quantities. This, in turn, resulted in a problem with rodents like mice. Many rodent bones and evidence of gnawing by mice and rats on objects and ceramic vessels are found in houses on Sai. This is one reason why cats were favored as pets.

Animal keeping was very important for communities like the one on Sai. Within the town, small ruminants (sheep and goats) were most common. They would have been the main source of meat and are traceable archaeologically through animal bones and dung found in the houses. This testifies to the fact that sheep and goats were kept in rooms within the city for at least part of the time, most likely at night. There is also evidence for probable pig pens at Sai, which became clear during the virtual reconstruction of the site (another important benefit of 3-D models; Fig. 5). Pigs were one of the Egyptians' favored sources of meat, and the pigs on Sai (attested not only by the pens but also by bones) were likely brought to the town from the north.

Can you think of foods or products that you only use on special occasions or are imported from somewhere else?

Would it be obvious to someone who didn't know?

Cattle were also important for communities like Sai. These large animals were kept outside the town walls. Their products (meat, milk, blood, leather) were important in the local diet, though not on a daily basis, but more likely for special occasions and the upper social classes. Cow blood and milk are also traceable as components of plaster, and leather was used in various workshops.

Finally, we know that ancient communities hunted and fished (Fig. 6). At Sai, besides fish and mollusks, a small number of wild animals have been documented from cellars in the city, such as gazelles, turtles, and crocodiles.

Object Biography – A pottery sherd used as a weight/net weight

This net weight (Fig. 6) is made from a broken-off piece of a pottery vessel produced in Egypt; it would have been used to weigh down a fishing net in the water. The clay of these vessels has a good hardness and is very heavy. This type of net weight is very common in Egypt, but rare at Sai. Was it made on the spot? Was it possibly imported? We believe that fishing in Sai City might have been centrally organized when the town was newly built, and that net weights of a different type (clay axe heads) were distributed by the Egyptian administration. However, when the people on Sai needed a new net weight, they knew how to produce them and what material to use (heavy, hard water jar sherds). The ancient occupants of Sai knew how to save material, recycle objects, and create tools well-adapted to their lifestyle. Objects such as this net weight also illustrate dynamics in the community of Sai—they were not a passive group depending on supplies from outside. They actively produced what they needed.

As she entered one of the courtyards, the girl was hit by the smell and sound of pigs. She almost tripped over the broken piece of stone used to keep

Fig. 6 A pottery net weight fashioned from a re-cut sherd, found in the city of Sai. Photo courtesy of AcrossBorders

them in. Looking up, she noticed that one of the animals in the pen didn't look much like a pig. As she got closer, she realized it wasn't a pig! It was her dog curled up and sleeping in the pen. Clearly, he had made some new friends. But as she got closer, he woke up and quickly ran towards her. He jumped up and covered her in muddy paw prints, making her laugh. She was still his best friend!

And so the delighted girl and her best friend wandered back home together, although to be safe, she led him gently by the collar, especially as they passed a hunting cat. As she got closer to home, she heard her mother shouting for her to hurry up. Dinner was ready, and she shouldn't be late! After their long day, the girl and the dog returned home near the southern gate for a delicious meal of freshly caught fish.

Cooking in Cities

One of the most common gender stereotypes in archaeology is that only women cooked in ancient societies. This is based on modern concepts rather than on critical assessments of the archaeological record. What do we know about the situation in Sai City?

For Nubia, most assessments of cooking practices are based on the thought that cooking represents a predominantly female activity. Nubian cooking pots have been associated with Nubian women, including in multicultural contexts like Sai, where Egyptians and Nubians lived. But to think that only local women were responsible for cooking when Nubian cooking pots are found in the archaeological record is a simplistic interpretation of the available evidence. Male cooking activities are well-attested in various cultural contexts (also in representations from Egypt), and the evidence from New Kingdom Nubia does not allow for a precise gender attribution.

The Nubian elements found in Sai City, such as Nubian pottery vessels, may be related to Nubian women who were married into the Egyptian community or to Nubian families engaged in food preparation. However, we have no means of identifying who was cooking daily. It is more important to stress that all the activities in houses in Sai were shared by one community living together. It is possible that cooking was a practice shared by several people in one household and that special knowledge was passed on from one generation to the other.

Who does the cooking in your household?

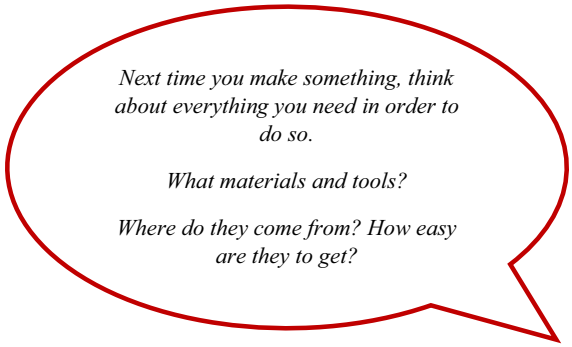
Is it always the same person?

And ask yourself: if you use a special pot, does it make you a different person or give you a new identity? Or are you simply using an available vessel?

Conclusion

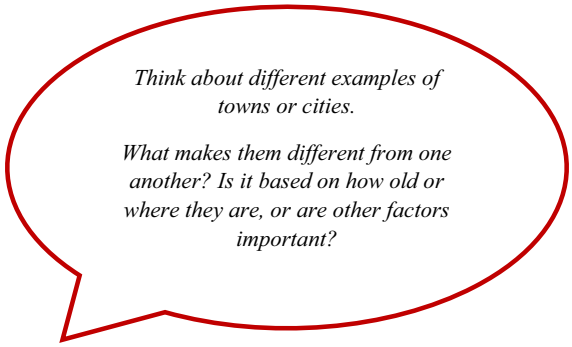
We have offered an interpretation of some of the ways people might have lived in Sai and other cities. This is based on archaeological evidence, but there are other possibilities, and new evidence may change how we think about the past. We can only have some of the answers. Other methods are also fundamental to how we interpret the past. One example is ethnoarchaeology, which uses anthropological research to compare archaeological evidence with how people still do things in the present (see Wayessa, this volume). Experimental archaeology is also becoming increasingly important. This involves recreating artifacts, such as pottery, or even entire buildings using

only techniques and materials which would have been available in the past. Often, we realize that the way we thought things were created needs to be revised!



That said, what are the key takeaways here?

- Sudan has a long history of urban centers, technological industry, and innovation. One thing we have not mentioned so far is that modern technology may play an adverse role on archaeological sites. For example, dams and electrical infrastructure, while important, often damage archaeological sites (e.g., through flooding). These have also led to the displacement of modern communities. How do we manage these different needs and find compromises?



- Cities are never isolated, and when we consider them archaeologically, we also have to think about their broader setting and connections, both locally and much more widely. People in the past were much more connected than we often think!
- Cities don't have to follow a Western model. Looking at cities in the archaeological record can give us different ideas on how to organize and build cities. Studying ancient cities can help us to consider practices that may be more suitable to the local environment, more sustainable, and more environmentally friendly.

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