



# **OUR** Modern Jobs Ancient **WORK**

Photographs by Jason Reblando  
Interviews by Matthew Cunningham — Edited by Jack Green and Emily Teeter



# OUR WORK



# OUR WORK

## Modern Jobs – Ancient Origins

Portrait Photography by Jason Reblando

Interviews by Matthew Cunningham

*edited by*

Jack Green & Emily Teeter

*new color artifact photography by*

Anna Ressman

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*Back:* Police officer Leo P. Schmitz with a statue of the chief of police of  
Western Thebes (OIM E14663). See page 38.

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## Foreword

*Gil J. Stein*

**W**ILLIAM FAULKNER FAMOUSLY WROTE, “The past is never dead. It’s not even past.” We all experience the past at two levels in the here and now. It is with us at a conscious, intellectual level; but at the same time, the past permeates our lives at a deeper, emotional dimension. Like the air around us, the artistic, intellectual, and technical achievements of the ancient civilizations of the Middle East structure our everyday existence so completely that we almost never think about them. On those rare occasions when something makes us aware of the fact that we are doing something that was done in almost exactly the same way thousands of years ago, it stops us in our tracks. We feel an emotional connection of shared experience and shared humanity with the people of those ancestral civilizations, in a bond that stretches across the gulf of space and time.

The Oriental Institute’s special exhibit **Our Work: Modern Jobs — Ancient Origins** shows, in a wonderfully innovative way, the deep connections that link us to the roots of our civilization. By bringing together modern practitioners of a profession with ancient artifacts of the people who did this same kind of work thousands of years ago, we can see that our ancestors weren’t all that different from us. We can understand ourselves and our work as part of a tradition that stretches back thousands of years to Mesopotamia, Egypt, and other parts of the ancient Middle East. This original perspective is an important complement to the more usual way that we learn about the past by travel, reading, or by seeing objects displayed in museum galleries. Bringing together modern people and ancient objects reminds us forcefully of our profound connections with the past, and how, even in our greatest modern accomplishments, we are truly “standing on the shoulders of giants.” The interviews conducted by Matt Cunningham perfectly capture the emotional reaction of the people who sat for the portraits as they interacted with the ancestral tools of their trade.

The portraits in this exhibit by photographer Jason Reblando make this connection and bring home this point in a beautiful and visually arresting way. Jason’s use of the nineteenth-century tintype photographic technique for

his portraits gives them an ethereal, other-worldly quality that makes them float in time; it is the perfect way to link the past and present.

This exhibit was made possible through a generous gift by Kitty Picken. Additional support was provided by John B. Simon, Mr. and Mrs. Norman Bobins on behalf of the Robert Thomas Bobins Foundation, Jack Saltzman, and the members and supporters of the Oriental Institute.

I want to express my thanks to Oriental Institute chief curator Jack Green and special exhibits coordinator Emily Teeter for the wonderful job they have done in conceptualizing and curating this exhibit, and for working so effectively with Jason Reblando to realize his own artistic vision. Thanks are also due to exhibit preparators Erik Lindahl and Brian Zimerle, registrars Susan Allison and Helen McDonald, and conservators Alison Whyte and Laura D'Alessandro. Most of all, we gratefully acknowledge the wonderful people from so many fascinating and ancient professions who shared their time and thoughts with us, and so generously agreed to sit for the portraits in this exhibit. The combined efforts of all of these people have made it possible for this creative exhibit to help us to see the past — and ourselves — in a new and exciting way.

*Gil J. Stein, Director, The Oriental Institute*

# Introduction

*Jack Green  
& Emily Teeter*

**O**NE OF THE MOST UNFORGETTABLE WAYS to learn about the past is to make it relevant to our lives today. Making connections between the past and present reminds us that we stand in a long line of human progress. Technological innovations are a tribute to human ingenuity, while the many similarities of life years ago to the present and the many legacies of the past remind us of our shared humanity with people who lived thousands of years ago — people who deserve credit for their brilliance in early social organization and technical capabilities. Those of us who work professionally with the past still can be amazed at the sophistication of our forbears. Books are written, films are made, lectures are given in the effort to express the importance and excitement of the past. But these efforts, as successful (or unsuccessful) as they may be, often are an impersonal conversation.

The exhibit and accompanying catalog for **Our Work: Modern Jobs — Ancient Origins** reinsert the voices and images of ordinary and extraordinary people into a personalized interpretation of the connections between the ancient and modern worlds. To bring together present and past, individuals — usually with little prior knowledge of the ancient Middle East — were called upon to share their thoughts and insights on selected objects in the Oriental Institute's collections, and to have their photographs taken with those objects.

This resulting series of arresting and thought-provoking portraits by photographer Jason Reblando are the main focus of this show. In many ways, *Our Work* represents a considerable change from the typical exhibit presented at the Oriental Institute, which usually focuses on presenting scholarly research on its archaeological expeditions or specific researcher-led projects. This is the first exhibit to present the commissioned work of a fine-arts photographer, and one of the first that permits non-specialists to take the lead in the exhibit by recording their thoughts and ideas, in contrast to the usual didactic, top-down, curator-led approach. In this sense, although co-curated by us, the *Our Work* exhibit has really been curated and developed by the portrait subjects

themselves. By giving the non-specialist both voice and image, we hope that our collections may become more accessible to our visitors — that some new ways of viewing and learning about the objects have been created. The process has become a multiple-direction dialogue among portrait subjects, the photographer, the videographer, the curators, and invited specialists from the Oriental Institute.

Some inspirations for this exhibit should be acknowledged. Firstly, the Ashmolean Museum at the University of Oxford mounted a photographic campaign in 2009 during its refurbishment entitled *My Ashmolean, My Museum*, in which local luminaries, community members, and celebrities posed with key objects and paintings. The concept was simple — match a person with their favorite museum object or painting that resonated with their professional, personal, or cultural background.<sup>1</sup> The slick and highly manipulated photographs by Theo Chalmers proved extremely eye-catching and popular. We loved the idea, but we considered that we might take it one step further and in a slightly more educational direction by pairing people with an artifact that documents the origins or antiquity of their profession. This simple pairing proved to be effective in eliciting very interesting comments from the participants.

Another inspiration was a seminar series coordinated in May 2011 by Sarah Byrne, then Mellon post-doctoral researcher at University College, London, entitled *Voices in (and around) the Museum*.<sup>2</sup> The idea of inserting the voice, whether an ancient voice or those of people today, resonated strongly with the idea that museums and object collections are as much about people as they are about material culture. One cannot exist without the other. When you see an object, it is not just an object, but the sum of its creation, human agency, and interaction. A person created the object, used it, and discarded, abandoned, or deposited it. Similarly today, objects do not get into museum displays by themselves — curators, preparators, registrars, and conservators interact with objects every day. Objects can take on a life of their own through research and publication, which play such an important role in the Oriental Institute Museum; objects mean nothing without visitors, and they come to life only through their interpretation and study by living people. Objects have life stories or biographies, just like people.<sup>3</sup> Although objects cannot talk back, they carry information that we can use to bring them to life, information that helps us consider the lives of people who interacted with those objects in the distant past.

The concept of this exhibit and catalog integrates interviews with the portrait subjects and represents the dialogue and learning experience among the curators, researchers, and the portrait subject. New insights were obtained through these interactions. They may not always provide earth-shattering revelations that will change the trajectory of scholarly research, but they do encourage specialist researchers to consider asking people today in different professions or with particular skills about their day-to-day experiences. It is important to acknowledge the way oral histories have played a role over the years in recording the lives of working Chicagoans. Author, historian,

and broadcaster Studs Terkel immortalized the role of oral histories through interviews of ordinary working people.<sup>4</sup> As Terkel's life and work was so heavily part of Chicago, we feel that through our interviews, prepared and edited by Matthew Cunningham, we have in part engaged with this strong local tradition of oral history.

Although the concept of the Our Work exhibit is new for the Oriental Institute, the idea of making connections between the past and the present definitely is not. In a convocation address at the University of Chicago in 1920, James Henry Breasted, the founder of the Oriental Institute, spoke of "The New Past," musing,

How far would the average citizen go in his day's program if he were to eliminate as of no more use the things which he has inherited from the early Orient? When he rises in the morning and clothes his body in *textile garments*, when he sits down to the breakfast table spread with spotless *linen*, set with vessels of *glazed pottery* and with drinking goblets of *glass*, when he puts forth his hand to any implement of *metal* ..., when he rolls downtown in a vehicle supported on *wheels*, when he enters his office building through a porticus supported on *columns*, when he sits down at his desk, spreads out a sheet of *paper*, grasps his *pen*, dips it in *ink*, puts a *date* at the head of the sheet, writes a *check* or a *promissory note*, or dictates a *lease* or *contract* to his secretary, when he looks at his watch with the *sixty-fold division* of the circle on its face, in all these and in an infinite number of other commonplaces of life — things without which modern life could not go on for a single hour, the average man of today is using items of an inheritance which began to pass across the eastern Mediterranean from the Orient ....<sup>5</sup>

He continued: "The New Past [displays] clearly how every conquest of progress has carried along with it the germs of the old, and in showing unmistakably how the old surviving in the new has usually never wholly disappeared."<sup>6</sup> Breasted was a master communicator who succeeded in making the past relevant to today's world (fig. 1). Our present demonstration tracing the roots of modern jobs far back into time is just another way of making us appreciate the achievements of our ancient forbears.

The process of preparing the photo shoots and curating this exhibit unfolded quite naturally, once a sequence had been established. Much initial discussion focused on matching ancient objects to a modern profession. Some were easier than others. The stone carver was one of the easiest, whereas items such as the clay token balls proved more challenging. There was lighthearted discussion about inclusion of "the oldest profession," which was not deemed appropriate. Once research was carried out on the potential subjects, and invitations made, we worked with each individual's biographical summary to build closer connections between the ancient object and modern world, which in turn helped Matt Cunningham to prepare the questions for his video interviews.

The physical process of the photo shoot and interviews began with the set-up of the studio, initially in the museum's Photographic Studio, and later



**Figure 1**

James Henry Breasted at the Oriental Institute, being filmed for *The Human Adventure* (1934). On the desk in front of him are museum objects that he highlights in the film's introduction

in our heavy-objects storage room. One of the shoots (of Justice Simon with the cast of the Law Code of Hammurabi) took place in the Edgar and Deborah Jannotta Mesopotamian Gallery. After the arrival of each subject, the curators introduced them to the object for the first time (figs. 2, 3, 4), and Jason began the photographic work. Between the processing of each tintype, we had the opportunity to discuss the object and its wider significance. As soon as the third and final tintype was taken, we began the video interview process, which took between 15 and 25 minutes. The total photo and recording process took between 90 and 180 minutes per subject. Further details on the photographic and videographic process are discussed in the essays by Reblando and Cunningham. We later used transcripts from the video interviews to create the text for each portrait in this catalog. The commentary has been edited due to space constraints, but serves as an important record of the process.

We also tried to select objects for the subject pairings that have a physical presence, and, where possible, we tried to avoid very small objects that would



not be visible in the photographs. Likewise, we chose objects that were stable in conservation terms and could be easily mounted.

Seeking out the twenty-four subjects and arranging their appointments, was a considerable logistical challenge, but a very enjoyable experience. We wanted them to represent the face of the city. Some of our subjects were known to us: Bobins, Tovar, Smigel, Nii, Arnold, Zimerle, Conway, and Zimmer. Quite a few were recommended by others, including Jones, Madhubuti, Simon, Vasser, Allen, Segal, Nicholas, and Silva, while Schmitz was contacted through the University of Chicago's Office of Civic Engagement. Nearly a third of our subjects were previously unknown to us and were located by Emily on the internet (Childs, Shibley, Dyrkacz, Clarke, Wilson, Williams, and Saltzman).

The co-curators prepared summaries of the objects and some sample interview questions for the subjects, which were sent to the subjects in advance, allowing them to carry out a little of their own research, although the extent of background reading by each subject varied from extensive to none. They were

**Figures 2, 3, 4** (clockwise from right)

Jack Green with funeral director Charles Childs Jr.,  
discussing an ossuary from the West Bank

Poet and publisher Haki Madhubuti and Jack Green  
look at a clay plaque of Gilgamesh

From left, exhibit designer and museum preparator  
Erik Lindahl, Ron Vasser, Emily Teeter, and Matt  
Cunningham with the Persian horse bit





**Figure 5** Professor emeritus of Assyriology Robert Biggs (on right) with mathematician and president of the University of Chicago Robert Zimmer, pondering mathematics in ancient Mesopotamia



**Figure 6** Justice John B. Simon conferring with Oriental Institute professor Martha Roth, author of *Law Collections from Mesopotamia*, in front of the cast of the Law Code of Hammurabi

assured that they were not expected to be experts in ancient history — their role was to be the modern face of an ancient occupation. In addition to one of the co-curators being present throughout the photo shoot, we also invited researchers and faculty members of the Oriental Institute to meet in about half the sittings to provide more detailed information or general background on the ancient social or economic context of the object (figs. 5, 6). This was often a stimulating exercise, prompting researchers to consider how a non-specialist might view an object, and also to highlight how much we still do not know about an object. What new insights might these meetings bring about? Some of the responses are summarized by Matthew Cunningham in his essay on the interview process.

We strongly contend that the priority of our presentation is that the subject comes first, thus reversing the traditional top-down approach. We asked questions of each subject during the interviews that helped to bring out particular aspects of importance, but in most cases, the inspiration came straight from them. Some common responses relate to the sense of the antiquity of an object, with statements such as “It’s hundreds of years old” being common, showing that the concept of the antiquity of a profession was very important to the subject. With questions aimed at both considering the function and role of an object in the past, as well as what the subject’s role and activity are in the present, time collapsed, permitting a greater connection between past and present. We also found that some of the responses were deeply personal and sometimes moving, which makes us all realize that there are past lives behind these objects that held meaning, emotion, or pride, in connection to the creation or use of an object. In the exhibit and catalog, the image and text are not always enough to convey this strong connection. We



encourage visitors and readers to listen to and view the interview responses by our subjects, a selection of which are in the exhibit; others are available online.

Jason Reblando's choice of the tintype as a method of capturing these portraits was a conscious means of allowing the viewer to consider a bygone photographic process, several steps removed from modern digital photography. Travel around yard sales and antique stores today and you'll still find anonymous tintype portraits from the nineteenth and early twentieth centuries that were once cherished and displayed in the home. Here, Reblando blurs the boundaries between tintype and original. The  $3 \frac{3}{8}'' \times 4 \frac{3}{8}''$  original tintypes were scanned and reversed from the positive mirror image, and then enlarged to increase their impact, permitting viewers to be confronted by, or rather meet with, the subjects (and their associated objects) face-to-face. The ancient objects are limited in the exhibit itself, partly due to space, but also because we wanted the exhibit to put the people first.

We learned a lot in the preparation of this exhibit. Firstly, we learned how much work the project involved, especially in coordinating the multiple visits over many weeks. We also realized that the twenty-four invited guests would increase awareness of the exhibit by sharing their participation with family members, work colleagues, and friends. As a result, we hope that many new visitors will come to the Oriental Institute. We also learned just how important it is to listen to and engage with our visitors. Sometimes it is important to take a step back and look at objects in a new way, and to reconsider established doctrine.

As with any exhibit, there are many people who assisted with the planning and implementation of this show. Members of the Oriental Institute's faculty and staff who helped prepare background information on the objects and edited catalog text, and some of whom met with the subjects of the portraits, include Robert Biggs, Brian Muhs, Matthew Stolper, McGuire Gibson, Christopher Woods, Martha Roth, Andrea Seri, Walter Farber, Abbas Alizadeh, and François Gaudard. Oriental Institute director Gil Stein and executive director Steve Camp gave us advice throughout the project. Sonya Malunda and Lisa Ballard in the University of Chicago's Office of Civic Engagement provided general advice, and made connections for us with members of the community, as did Jack Cella of the Seminary Co-op Bookstore, and Oriental Institute Visiting Committee member Tom Heagy. We thank Hamza Walker and Theaster Gates, art gurus of the University of Chicago, for their recommendations. Our colleagues JoAnn Scurlock, Andrew Dix, Karen Wilson, and Tate Paulette helped immensely with specialized information about some of the objects. Austin M. Kramer transcribed the interviews on a tight schedule. Wendy Ennes, formerly of the Oriental Institute, helped us with the early planning of the show and led us to our collaboration with Jason Reblando.

The entire staff of the museum was engaged in this project, but a few individuals should be singled out for their special contributions. Staff photographer Anna Ressman, assisted by Austin M. Kramer and Bryce Lowry, produced the new images of the artifacts. Associate conservator Alison Whyte was in charge of the conservation of the objects, and assistant registrar Susan

Allison, aided on occasion by senior registrar Helen McDonald, kept track of their whereabouts. Alison and head conservator Laura D'Alessandro advised on the chemicals that the tintype process produced. Curatorial assistant Mónica Vélez assisted with Spanish translations and label text. In addition to designing the graphics and exhibit, Brian Zimerle and Erik Lindahl played major roles in the photo set-ups. Erik revealed his true self as a jack-of-all-trades as he solved various technical difficulties. Theo van den Hout and Nadine Moeller of the Oriental Institute Publications Committee reviewed the manuscript, and Petra Creamer, our summer intern, assisted with proofreading. We cannot thank Leslie Schramer and Tom Urban of our Publications Department enough for their skill and patience designing and editing this catalog. Brian Zimerle designed the striking cover.

Lastly, we wish to thank all the people who sat for their portraits and shared their thoughts with us. Without them, there would be no exhibit, and we would not have gained the insights that we did.

## Notes

1. My Ashmolean, My Museum, May 12–October 4, 2009. Web link: <http://www.ashmolean.org/myashmolean/gallery-o.php>.
2. Sarah Byrne, “Voicing the Museum Artefact.” *Journal of Conservation and Museum Studies* 10/1 (2012), pp. 23–34. Available online at <http://dx.doi.org/10.5334/jcms.1011204>.
3. See also Sandra H. Dudley, *Museum Materialities: Objects, Engagements, Interpretations*. London and New York: Routledge, 2010.
4. Studs Terkel, *Working*. New York: Partner/Random House, 1974.
5. James Henry Breasted, “The New Past.” *The University Record* 6/4 (October 1920), p. 245. Italics are as in the original.
6. Breasted, “The New Past,” p. 248.

## The Our Work Photographs

*Jason  
Reblando*

**W**HEN THE ORIENTAL INSTITUTE INVITED ME to make photographs for an exhibit, I was simultaneously flattered and surprised. I was excited that the curators were interested in my work, but I knew next to nothing about artifacts from the ancient Middle East. My only exposure to the subject was through fictional characters like Indiana Jones. Curators Jack Green and Emily Teeter proposed an exhibition of photos in which people from various professions would engage with and respond to artifacts that corresponded with their work. I loved the idea of reflecting on the lineage of our workaday lives through these historical objects from



**Figure 7**

Senior Registrar Helen McDonald (on left) and Associate Conservator Alison Whyte move the Sennacherib Prism onto a temporary mount for photography



**Figures 8, 9, 10** (clockwise from upper left)

Jason loading a wet plate into a 4" x 5" view camera.

A conventional 4" x 5" film holder was adapted to hold aluminum plates

Jason focusing and composing an image on the ground glass back of a 4" x 5" view camera

Jason composing the image of clock maker Charles Dyrkacz with the Egyptian water clock



faraway places. From the outset, they emphasized the restrictions under which I would have to work. Due to the extremely fragile nature of the artifacts, the photographs needed to be made on site in the climate-controlled environment of the Oriental Institute. Also, the objects could only be handled by Oriental Institute conservation and preparation staff (fig. 7). Dashed were my ideas of photographing a three-thousand-year-old statue of a police chief from Egypt on a Chicago police officer's squad-car dashboard. At the end of each of our initial planning meetings, we asked the daunting question, "So what's this going to look like?" Though I didn't have the answer at first, I did know that a successful portrait should reveal something about the sitter, the photographer, and the viewer.

As the curators selected the artifacts and people to be featured in the exhibition, I began to think about the history of photography. We would be asking our sitters to engage with thousands of years of history and consider the working lives of predecessors before them. Even though the medium of

photography is not yet two centuries old, I, too, wanted an engagement with history through my choices as a photographer.

I use a large 4" × 5" view camera that needs to be steadied on a tripod (figs. 8, 9). Making a portrait with this equipment is a slow process that requires the willingness of the subject to sit still while I compose and focus the image on the back of the camera under a dark cloth (fig. 10). As I considered the predecessors in my profession more deeply, I decided that instead of using 4" × 5" film as I normally do, I would make tintypes using the wet-plate collodion process, a nineteenth-century photographic process.

The wet-plate collodion process was invented in 1851, twelve years after the invention of the daguerreotype, in 1839. This process can be used to make negatives for various printing processes, but I used it to produce tintypes, a positive mirror image on a lacquered aluminum plate. Each plate needs to be prepared, exposed, and developed within a ten-minute window while the plate is still wet. This time limit meant that I needed to immediately process the images in a darkroom no more than a few hundred yards from where the photo was made. The mid-nineteenth-century wet-plate photographers of the Civil War and American West, such as Carleton Watkins, Mathew Brady, Alexander Gardner, and Timothy O'Sullivan, traveled with a darkroom in the field. I already had respect and appreciation for this fact, but I am now in complete and utter awe of what they accomplished given their working conditions. Whereas I simply walked my wet plate down a hallway to a makeshift darkroom at the Oriental Institute (figs. 11, 12), the wet-plate pioneers carted entire darkrooms with them into the field by horse and wagon. Watkins (and a dozen mules) hauled his mammoth plate camera through the treacherous terrain of Yosemite to make 18" × 22" glass-plate negatives. Gardner photographed the battlegrounds of Antietam, producing some of the first photographic



**Figures 11, 12**

Sign on the darkroom door

The makeshift and temporary — but effective — closet darkroom at the Oriental Institute. The regular darkroom was not rated for the chemicals used for the tintypes





documents of the aftermath of war. My rudimentary darkroom at the Oriental Institute seems quite plush in comparison, but the routine remains the same.

To create the photographic image, syrupy collodion is carefully poured onto a thin, flat surface — in my case, a piece of black lacquered aluminum. The collodion provides a tacky surface to which light-sensitive silver can adhere.<sup>1</sup> Flowing the collodion over a plate requires a degree of dexterity and finesse not needed in my normal photographic practice of using film.<sup>2</sup> It rewards steady hands, and if the collodion does not flow evenly across the surface of the plate, it results in unique imperfections, adding a handmade touch to the image. A sharp waft of ether hit me every time I unplugged the bottle of collodion, so proper ventilation was required. Once the plate is coated, it is made sensitive to light by dipping it briefly into a silver bath, loaded into the camera, and the photograph is ready to be made.

The chemicals react so slowly to light that an exposure can take anywhere from several seconds to a few minutes, depending on the lighting conditions. During the 1800s, sitters were required to pose stiffly for long exposure times. So that our sitters would not have to sit in paralysis during a lengthy exposure, I used high-powered strobes to pump out a powerful burst of light in a fraction of a second. The burst was so bright and so close to their faces that sitters said they could feel a blast of heat come off the strobe.



**Figure 13**  
Unversed tintype of Kenneth Clarke  
with the Sennacherib Prism

The finished tintype is a one-of-a-kind object that can be viewed within minutes of the exposure, much like a Polaroid. The tintypes themselves are very much like the sitters — every plate has its own individual character. Also, the image produced on the plate is reversed, as if the subject were looking into a mirror (fig. 13). After discussion with the curators, we decided to present the final photographs reversed 180 degrees from the original tintype.

Certainly, I chose to make tintypes for aesthetic reasons, but I enjoyed engaging with the conceptual and historical framework, too. Working with these materials enabled me to connect with the past, as all our sitters did. Also, the invention of the tintype was an important moment in photography as it allowed for photographers to have a mobile darkroom if they chose to do so, allowing them to make portraits on the street for common people. This widespread accessibility to photography was unprecedented. Having a photograph was no longer a privilege reserved for the wealthy, who could afford to have their portrait made in expensive commercial studios. The tintype was “the people’s process of choice,” and it “democratized the medium,”<sup>3</sup> a sentiment that I feel is essential to *Our Work*. Though tintypes made in the twenty-first century might seem anachronistic, in 1860, they would have been ubiquitous. These contemporary tintypes not only tell stories of our modern professions and their ancient origins, but also point back to the first time in history almost anyone could have their photo made for them. All one had to do was work.

I would like to thank the entire staff at the Oriental Institute at the University of Chicago for hosting this project, and I am especially grateful for the opportunity to work closely with Emily Teeter, Jack Green, Erik Lindahl, Brian Zimerle, Alison Whyte, Leslie Schramer, and Mónica Vélez. I am fortunate and thankful for my collaborator Matt Cunningham, who brought the exhibit to life with his skillful interviewing. I wish to thank Lisa Elmaleh at the Center for Alternative Photography in New York for sharing with me her expertise in and passion for the wet-plate collodion process. I am indebted to Jin Lee and Bill O’Donnell for their enthusiasm for the project, and to Dawoud Bey, Karen Irvine, and Natasha Egan for their continued support of my work. Finally, it was a privilege to meet and photograph all of the participants. I wish to thank them all for taking a break from their work to make *Our Work* possible.

## Notes

1. Incidentally, collodion was formulated in 1846 for use as a medical adhesive to dress small wounds, not for photography.
2. Manufactured film, such as that made by Kodak, already has light-sensitive material embedded into its emulsion. George Eastman, founder of Kodak, was a pioneer of dry-plate negatives, signaling the decline of wet-plate collodion processes in the late 1870s.
3. Christopher James, *The Book of Alternative Photographic Processes*, 2nd edition. Albany: Delmar Thomson Learning, 2001, p. 450.





## The Our Work Interviews

*Matthew  
Cunningham*

**T**HE ARTIFACTS SELECTED FOR THE OUR WORK EXHIBITION showcase the influence of the ancient Middle East on our modern culture. The idea of this project was to make a connection between museum objects and contemporary professionals working in various fields, exposing them to the roots of their chosen professions.

Nearly every Friday for three months, my colleague Jason Reblando and I would head to the basement of the Oriental Institute. There we would find ourselves among artifacts of the ancient Middle East. To our friends hosting us at the museum, it was nothing to swiftly walk past shelves and cases full of jewelry, pottery, and other objects 5,000 or more years old. Jason and I would walk a little slower, looking longer at each of the objects.

We would eventually make our way to the heavy-objects storage room to set up for that day's guests. My job was to sit with the portrait subjects and interview them on camera for their reflections on the artifact they had been paired with and the origins of their chosen occupation (fig. 14). Each week, I would start the same way, asking the subject to tell me about their work, and to describe an average day. I would then ask them what they knew about the artifact next to them. From there, the questions and answers differed from person to person. Some had gone above and beyond with researching their artifact and the time period it came from, and putting a lot of thought into the connections. Other answers were less thought out, but just as honest.

**Figure 14**

Matt with his recording equipment





**Figure 15**  
Fashion designer Diane Mayers Jones being photographed with the Sumerian worshiper statue

Fashion designer Diane Mayers Jones spends most of her time in her sewing workshop on Chicago's South Side. Diane was paired with a Sumerian statue of a woman dressed in a gown, an object that dates to about 2600 BC and has commonly been identified as a "worshiper statue" (fig. 15). Diane related to the ancient woman more on account of her relationship with her gods than because of her fashion.

Erika Allen is an urban gardener with Growing Power. This organization takes old warehouse spaces, vacant lots, and even plots in city parks and works with the surrounding neighborhoods to transform urban decay and neglect into vegetable gardens, reclaiming control over food for the community like it was in the ancient Middle East. Even the tools she uses are more like the ancient clay sickle she posed with than the machinery of the large commercial farms of today. She voiced her skepticism of how the academics believed the sickle she was paired with was thought to be used. She is hoping to work with a friend to create their own version of the object to test.

From an artisan baker at a neighborhood restaurant to a retired CEO of a Chicago financial institution, the subjects were as diverse as the people of any modern city. Some connections were obvious. Besides advancements in technology, such as the invention of electricity, and material availability, the techniques of the potter, stone carver, and boat builder have remained essentially the same over many millennia.

Other professionals' connections with the past seemed more surprising, like the manicurist, makeup artist, and cowboy (fig. 16), which seem such a part of our contemporary life. I was humbled to discover that their practices went back so far, and I could see the sense of pride each felt upon realizing it.

The interviews on the topics of math and science held much surprise for me. Concepts that seem to be constant have evolved over time, making me wonder how our views of math and science will be interpreted in the future. In early examples of mathematics from Mesopotamia, calculations were based on the number 60 rather than the number 10, as in our current system. This is where we get 60 seconds in a minute and 360 degrees in a circle. And I find it comforting to know that the earlier system is not second nature to modern-day math scholars. The clay cylinder used in the portrait with mathematics professor and University of Chicago president Robert Zimmer is like a student's worksheet, with rows of mathematical tables that were used as a reference. I guess students past and present always need to practice their math tables.

And the Neo-Babylonian medical text in the portrait with University of Chicago Hospital neuro-oncologist Kelly Nicholas may seem far away from the advancements in understanding the brain today, but the practice of medical observation as seen in that early text is still important to the practice of medicine. Diagnoses are very different now, but Dr. Nicholas acknowledges the possibility that successful treatments used today may someday be considered as absurd as the ancient cures seem to our modern sensibilities.



**Figure 16**

Matt interviewing cowboy Ron Vasser, who was paired with a Persian horse bit

The development of the written word was an instrumental part of the ancient world. The Sennacherib Prism, which bears a detailed record of Sennacherib's eight military campaigns, was paired with Kenneth Clarke of the Pritzker Military Library (fig. 17), an institution that not only acts as a research library, but also houses a vast collection of military-related materials and explores the role of the citizen-soldier in a democracy. Kenneth brought with him a recently donated artifact from the recent war in Iraq. It was a logbook that was a moment-by-moment record of what Bravo Company First Battalion, 12th Cavalry Regiment, 3rd Heavy Brigade, did while in Baqubah, Iraq — a modern equivalent of the Sennacherib Prism's lengthy tally of battles.

Another object connected to early writing is the Gilgamesh tablet. Poet Haki Madhubuti had a personal connection to his object. As the co-founder of Third World Press, which was started in the late 1960s as part of the Black Arts Movement that gave voice to a community that was not otherwise being heard, Madhubuti sees himself as a modern-day Gilgamesh — an activist trying to find a worldview that he can understand, explain, and bring back to his people.

Finally, others' connections were more of a commentary on how our society has evolved back to a more sustainable place. An artisan baker and an award-winning pastry chef are using locally produced grains and fruits to make their noshes; a craft-beer brewer is experimenting with how beer was made in ancient Sumer — all three of these individuals are turning away from contemporary expectations of their work and embracing an earlier time.



**Figure 17**  
Interviewing Kenneth Clarke  
of the Pritzker Military  
Library



When I was asked to participate in the Our Work exhibition, I jumped at the opportunity. This project connects artifacts that represent ancient occupations with the faces, voices, and stories of modern-day people working in jobs that are the direct descendants of those ancient occupations. This vantage point highlights the abstract link between ancient and modern life.

After I interviewed the guests, I had the daunting task of selecting five of them to create mini-documentaries that show them at work, pursuing their passion. This was a great way to continue the idea of making a modern connection by taking the museum-goer out of the gallery and into the actual life and work of the subjects in their own environments. There were so many great people from whom to select my stories. Whom should I choose? I wanted to get a mix of jobs that have not changed much — the potter, stone carver, and farmer — as well professions whose early origins are more surprising and unexpected, such as the cowboy and the confectioner. I also took into consideration which subjects had visual beauty: the transformation of a lump of clay or a piece of raw stone into a thing of beauty, a once-vacant lot being given life as an urban farm, a cowboy and his horse walking off into the sunset, a pastry chef mixing up some treats — that hopefully I could taste.

Now on the other side of this experience, I realize that this exercise of interviewing the participants did more than make a connection with the past; it documented long traditions in various professions and their role in our society now, which will hopefully give us some insight into what is to come.



# THE PHOTOGRAPHS



**“The law is a basis and a framework in which people know what is expected of them and also what they should not do.”**

**John B. Simon**  
Justice | Chicago, Illinois

Law Code of Hammurabi (cast)  
Iraq | ca. 1792–1750 BC  
OIM C478



# Justice

John B. Simon is a justice of the Illinois Appellate Court, First District. Simon retired from the Chicago firm of Jenner & Block in order to continue his long record of public service. He currently serves as chair of the Illinois Supreme Court Rules Committee and chair of the Illinois Supreme Court Historic Preservation Commission.

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“There is a relevance to the Code of Hammurabi today, as there was when it was created, that is emulated by the structures of governments and laws that cover the entire world – every different society, different cultures, different governments. And so there is a constancy here, a linkage of past and present through the immutable, tangible expression graven in this stele.”

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“It is not that the Code of Hammurabi would be followed literally in today’s society, but that now, as then, we constantly have these law codes in the public’s eye. The posting of the Declaration of Independence and later enactment of the Constitution of the United States are exactly that type of thing, a tangible marker point of freedom and opportunity being given to the public.”

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“My oath of office is to follow the Constitution of the United States and the Constitution of the State of Illinois. My obligation, and that of the colleagues with whom I serve, is to not prejudge anything and take each case on its own merits, to completely understand the facts in the record and, after applying the law to those facts, to make a decision that comports with prior precedent and, if it does not, to explain why.”

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“The significance of the opinions of the Court to the parties involved in their individual cases is obvious, but of equal significance is that the public reporting of the cases validates the openness and fairness of the framework of the process and explains the basis for the decision.”

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“Here the past and present is fused by the similarity of the Code of Hammurabi and the laws, albeit not identical, of today. Both inform the citizenry of what is expected of them and what they should not do. Providing this guidance and using an open and fair justice system to resolve the myriad conflicts among the public makes the law the sublimator of conflicts, protects people from harm and fosters certainty and an environment in which they have the opportunity and freedom to empower and improve their lives. Those societies that embrace these fundamental precepts will be the beneficiaries of the ancient wisdom of the Code of Hammurabi.”

## Law and Society in Ancient Babylonia

The earliest set of laws comes from Ur-Nammu, who ruled in Mesopotamia around 2050 BC. His law collection includes capital punishment for murder, robbery, adultery, and rape, and fines of compensation for bodily injury. Similar laws are inscribed on Hammurabi's law code stele nearly three centuries later. Hammurabi (reigned ca. 1792–1750 BC) lists on the stele the main sectors of Babylonian society, including the *awilum* (free males), the *mushkenum* (a semi-dependent class), and *wardum* (slaves). One of Hammurabi's provisions states, "If a man should destroy the eye of a man, they shall blind his eye," recalling the phrase "an eye for an eye," found in the Hebrew Bible. This is known as *lex talionis* (Latin), a law of exact retribution. However, the principle applied only if a free male damaged the eye of another free male, not if the injured person was from a different class. Hammurabi's code covers family law, slavery, and professional, commercial, agricultural, and administrative law in ancient Babylonia. The longest section of the stele concerns the family in Babylonia, with provisions on marriage and divorce, adultery, adoption, and inheritance.

### Further Reading

Marc Van De Mieroop, *King Hammurabi of Babylon: A Biography* (Oxford: Blackwell, 2005), especially chapter 8, "Hammurabi the Lawgiver."

Martha T. Roth, *Law Collections from Mesopotamia and Asia Minor*, 2nd ed., SBL Writings from the Ancient World (Atlanta: Scholars Press, 2000).



D. 20521

### Law Code of Hammurabi

Plaster cast of original diorite stele originally from Iraq and excavated at Susa, Iran, now in the Musée du Louvre, Paris

Old Babylonian period, reign of Hammurabi,  
ca. 1792–1750 BC

222.5 x 67.7 x 45.6 cm

Cast purchased in Paris, 1931

OIM C478

King Hammurabi of Babylon is most celebrated for his collection of laws, inscribed in Akkadian cuneiform script on a diorite stele over 2 meters (7 feet, 4 inches) high. It was found early in the twentieth century by French archaeologists at Susa, in Iran, where it had been taken as booty, probably from Sippar, in Babylonia (modern Iraq), by the Elamite king Shutruk-Nahhunte, in the twelfth century BC.

At the top of the stele, Hammurabi is depicted standing before the enthroned sun god Shamash, the Mesopotamian god of justice. Shamash gives Hammurabi the rod and ring, symbols of kingship and justice, reinforcing the principle that the king ruled with the authority and sanction of the gods. Below the pictorial representation are a historical prologue highlighting Hammurabi's role as protector of the powerless, listing his military campaigns, building exploits, and the patron deities of cities he ruled, followed by the law collection of approximately 300 provisions formulated as offenses with their remedies. An epilogue describes the king as a military leader who brought peace to his subjects. The stele and the inscription in its entirety function as a commemoration of the ruler's model of wisdom and justice for all future generations.

#### Published (selected)

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Martha T. Roth, *Law Collections from Mesopotamia and Asia Minor*, 2nd ed., SBL Writings from the Ancient World (Atlanta: Scholars Press, 2000), pp. 72–142.



**Diane Mayers Jones**

Fashion Designer | Chicago, Illinois

Female Statue

Iraq | ca. 2650-2550 BC

OIM A12412

**“I just feel like we are so bonded here.”**

## Fashion Designer

Diane Mayers Jones is a Chicago fashion designer who specializes in custom formalwear for women, particularly for proms and weddings. She was initially self-taught, but later formally trained. She also gives introductory and advanced sewing courses in her studio, Dzines by Diane. She has been in business for more than twenty years. She draws much of her inspiration from traditional and classic styles from the 1950s and 1960s.

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“As I look at her, she’s wearing this dress and I’m blown away because I am a dress person. I am always wearing a skirt, a blouse, or a dress, so as I look at her I think, ‘Wow,’ you know, she’s got on this beautiful wrapped dress .... I’m into the clothing business where I love making beautiful dresses, beautiful prom and wedding dresses; some of the garments that I make are just so — you know — with the times, a lot of wrapping, a lot of draping; when I see her, she’s got a little draping going around the front with the low-cut collar, it’s just wonderful. I feel like we are so bonded here.”

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“She actually has the one-strap thing that is very fashionable now. If I did a little tweaking, it could be worn by the women of today. We could add more draping and it would be the perfect red-carpet dress. And she’s already got the hairdo, so it’s ideal.”

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“The work that actually goes into a garment of this style took so much longer in the past because they had to do everything by hand. They had to make the fabric — they had to actually sew the fabric by hand ... the dyeing, the coloring, going out and getting the plants to change the different colors on the fabric, and then weave it .... [They] didn’t use a weaving machine — they just used their hands. I’ve got technology: I’ve got a sewing machine, I’ve got sergers, I’ve got all kinds of different equipment that can do embroidery and make buttonholes in a matter of minutes. These people worked hard at what they did. So of course it took many weeks, maybe months to produce garments of this nature.”

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“It’s amazing just reading about how she’s a worshiper and how you can see her hands are cupped together in reverence to God. I’m a very religious person, and it makes me think of myself, because I’m very into the church scene as you call it, so I’m always putting my best foot forward in an effort to be closer to God.”

## Textiles and Costume in Ancient Mesopotamia

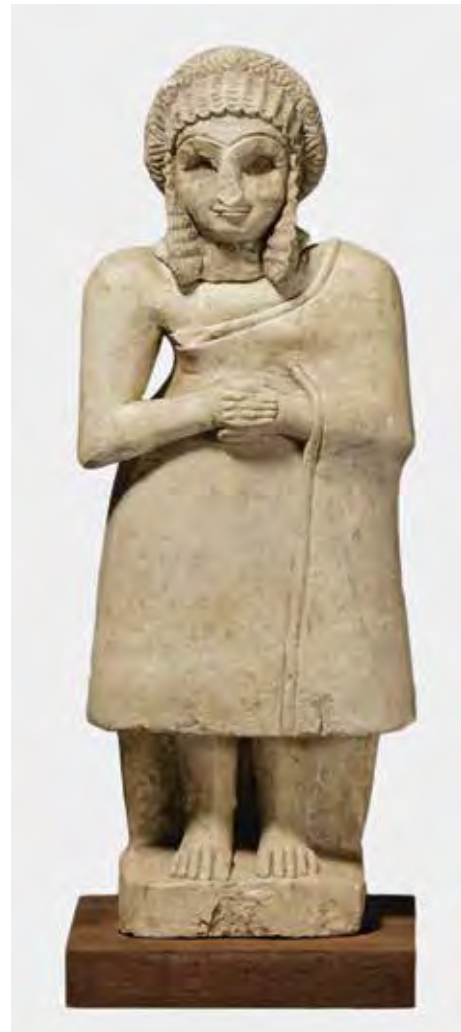
Textiles made in ancient Mesopotamia were traded widely and were much in demand. Old Akkadian cuneiform texts (ca. 2220 BC) from Tell Asmar (ancient Eshnunna) mention institutions where women and orphaned children produced high-quality textiles, mainly using sheep wool. Flax, used to make linen, may also have played an important role in the textile industry. Plain-weave linen has been found in the Royal Cemetery at Ur (ca. 2500 BC). It could take many weeks to produce a high-quality piece of cloth on a loom, depending on the material, weave count, and elaborations.

The material of the cloth represented on the female statue shown here is unknown, and most physical evidence for textiles in Mesopotamia has not survived. It was most likely made from sheep wool rather than linen. Linen, at that time in Mesopotamia, was apparently reserved for priests, high officials, rulers, or statues of deities. Another type of garment, a pleated woolen skirt or shawl that resembled a sheepskin, was also worn in ancient Mesopotamia. Wraparound skirts secured with a belt at the waist, either pleated or unpleated, tended to be worn by men during the mid-third millennium BC.

### Further Reading

Carol Bier, "Textile Arts in Ancient Western Asia," in *Civilizations of the Ancient Near East*, ed. Jack M. Sasson et al. (New York: Charles Scribner's Sons, 1995), vol. 3, pp. 1567–88.

Dominique Collon, "Clothing and Grooming in Ancient Western Asia," in *Civilizations of the Ancient Near East*, ed. Jack M. Sasson et al. (New York: Charles Scribner's Sons, 1995), vol. 1, pp. 503–15.



D. 20522



### Female Statue

Limestone

Early Dynastic III period, 2650–2550 BC

Iraq, Khafajah, Sin Temple IX

Excavated by the Oriental Institute, 1933–1934

H: 36.1 cm

OIM A12412

Found in a temple at Khafajah, Iraq, this standing female figure is depicted wearing a shawl, likely one piece of cloth roughly the size of a single bedsheet. It was probably wrapped around the body and draped over the left arm, leaving the right arm and shoulder and lower legs and feet exposed. The shawl's edge or hem that hung down the back and the front of the body was most likely fringed or tasseled, although specific detail is not actually visible on the statue. The hands are clasped together, a gesture traditionally thought to be a sign of perpetual worship and piety to the gods. The figure represented here is likely to have been a woman of relatively high status in ancient Sumerian society. Women rarely acted as individuals outside the context of their families. Those who did so were usually royalty or the wives of men who had power and status.

### Published

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Henri Frankfort, *Sculpture of the Third Millennium BC from Tell Asmar and Khafājah*, Oriental Institute Publications 44 (Chicago: The Oriental Institute, 1939), no. 104, p. 68, pl. 74.



**Leo P. Schmitz**  
Police Officer | Chicago, Illinois

Statue of a Chief of Police  
Egypt | ca. 1127 BC  
OIM E14663

**“There’s always going to have to be somebody  
who’s going to protect the people.”**



## Police Officer

Leo Schmitz is currently deputy chief of Englewood 7th District for the Chicago Police Department. He started as a patrolman and was promoted to patrol and detective division sergeant, lieutenant in patrol and Area 4 Gangs. He was commander of the 8th and 7th District, Organized Crime of Gang Investigations and Enforcement.

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“Basically my job – and it’s probably the same for the Medjay chief of police back then, though we can’t ask him – is that we are both in charge of individuals that report to us and charged with protecting the people. Protect people who are weak. Take care of the children and the elderly. Our job is to make things safe to ensure people can have a good life. I am sure that they were doing the same back then that we are doing now. In general terms, police are police no matter where they are in the world.”

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“Well, I know that the Medjay chief of police was a chief back in Egyptian times, but what was pretty profound to me was that back then, he was doing the same thing I’m doing. It’s good to hear that the police profession has been going on that long.”

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“It’s funny because I’m sure that the Medjay chief of police started the same way we do if we’re talking about a burglary, asking a myriad of questions. What time did they enter? How did they do it? Where did they go with it? What are they going to do with the items that they stole? I would imagine that’s very similar back thousands of years ago even until now. Those are the same things that he probably thought of with his guys as I would now. And even though today we can do fingerprints, we can have cameras to see people coming and going, we have information that he may not have, it all comes back to these basics: Where did they break in? What did they take? Where did they go? And who in the area does this? It would have been the same ideas and principles back then as it is today.”

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“There’s a lot of things that we can do with technology that help us clear cases, but it really comes down to getting the bad guy. It probably took longer back then to find the bad guy or it might have taken a shorter time, but we all strive for the same thing: we’re going to find out who did it, and we’re going to go after them. In the end, it’s still the same theory, same idea.”

## Police in Ancient Egypt

From at least 1600 BC, the Egyptians had a professional police/desert patrol/security force called the Medjay. Initially, they were made up of Nubians, a people famed for their archery skills and as trackers in the desert. The weapons they carried consisted of bows and arrows, battle axes, slings, and spears. They carried rectangular shields. The Medjay were divided into ranks. The entry-level Medjay appear to be patrolmen. Men with supervisory titles had greater responsibilities, including reporting crimes, sitting on the local court, testifying against those accused of crimes, and attending interrogations, as well as more ordinary administrative duties. Police were state employees. The chiefs reported to the vizier (akin to a prime minister), or to the highest official of the temple.

### Further Reading

Jaroslav Černý, *A Community of Workmen at Thebes in the Ramesside Period*, Bibliothèque d'Étude 50 (Cairo: Institut français d'archéologie orientale du Caire, 1973), pp. 261–84.

A. G. McDowell, *Jurisdiction in the Workmen's Community of Deir el-Medīna*, Egyptologische Uitgaven 5 (Leiden: Nederlands Instituut voor het Nabije Oosten, 1990), pp. 51–55.



D. 20523

### Statue of a Chief of Police

Brown granite

Ramesside period, Dynasty 20, ca. 1127 BC

Egypt, Luxor, Medinet Habu

H: 28.7 cm

OIM E14663

This statue depicts a man seated on a cushion with his robe pulled over his knees. The inscription on the front and back of his garment identifies him as the “chief of the Medjay of Western Thebes, Bakenwerel.” This Bakenwerel is probably the same chief of the Medjay who was part of the team that investigated the robbery of tombs in Western Thebes in about 1110 BC. According to contemporary texts, the commission visited a number of tombs and found that some of them had been robbed while others were intact. Men were rounded up and interrogated. One of the gang confessed how they stripped the gold and silver from the mummy and coffins of King Sebekemsaf and his queen. Over the next several days, the investigation devolved into a nasty political battle between two of the officials — a situation that echoes some modern police investigations.

#### Published

Nancy Thomas, ed., *The American Discovery of Ancient Egypt* (Los Angeles: Los Angeles Museum of Art; New York: Harry Abrams, 1995), p. 189, cat. no. 90.



**“This is so much more elegant than all those papers — this is so beautiful.”**

**Margie Smigel**  
Real Estate Broker | Chicago, Illinois

The “Chicago Stone”  
Iraq | ca. 2600 BC  
OIM A25412

## Real Estate Broker

Margie Smigel has been a broker for residential and investment real estate for nearly three decades. She is owner of the Margie Smigel Group, LLC, real-estate brokerage in Chicago. She began as a property developer and investor in Boston in the late 1970s, playing a role in the rebuilding of the now vibrant Fenway neighborhood. She is also a graphic designer, photographer, filmmaker, poet, and writer.

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“Well I know that [the stone] has something to do with a real-estate contract, and when I saw it I thought, ‘This must be what they mean by “it hasn’t been written in stone,”’ because this is written in stone! So now I know. But what’s so beautiful about this piece is that it’s so permanent. I mean, you really get the sense that this is permanent, this will survive.”

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“Today, everybody gets a survey at closing, so they actually have a pictorial representation of what they’re buying. It all probably comes from this. They just keep changing the required documentation over the years. But the survey is something that hasn’t essentially changed.”

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“Everything is still on paper at closing. The proof of the transaction is on paper, and they want what’s called wet signatures. They’re tactile, you own them, you have them, you’ve signed them and you get to take them home for your paper file. But this is so much more elegant than all those papers – this is so beautiful. It would be nice if at least your deed were in stone. Wouldn’t it be lovely to carry home your tablet of your deed from your closing?”

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“I didn’t know there were actually transfers where people sold land the way they sold a cow. I imagine it might have been bartering of some sort, but it might have been cash. Well, it’s nice to have a sense of history.”

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“The question is, though, was there a broker in this transaction? Did anybody get paid? Or was there just a seller and a buyer? It’s unclear to me how long we’ve been around, but certainly real-estate transactions have been around that long, and that’s pretty exciting.”

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“The irony is that I just started a new real-estate business, and my goal is to make it completely paperless. Signatures are written electronically via a website, and files are kept on a cloud as PDFs. After five years, I will delete them, and it will be as though they never existed. What a profound change from this stone that has survived for thousands of years. What artifact will remain of our present-day transactions thousands of years from now?”



## Land and Property in Ancient Mesopotamia

Most documents from Mesopotamia in the Early Dynastic period (ca. 2700–2350 BC) concerning land and property relate to the temple and palace, including agricultural estates and houses in the city owned by these institutions. The “Chicago Stone,” described below, is probably a rare example of a declaration of property acquired by an unnamed elite individual in this period. In the Old Babylonian period (ca. 2000–1600 BC), evidence for ownership of private property comes from archives of clay tablets found in the houses themselves. Some individuals and their families owned large houses and agricultural land, and they could sell and rent their property, the value of which could rise and fall. When the male head of a household died, property would be distributed among his male heirs — from fathers to sons. As not all house owners were literate, a scribe was usually needed to read, write, and witness agreements made between family members. Some tablets feature an image of the house plan with labels indicating who owned each room and provide detailed information about property inheritance over several generations.

### Further Reading

J. Nicholas Postgate, “Household and Family,” in *Early Mesopotamia: Society and Economy at the Dawn of History* (London: Routledge, 1992), pp. 88–108.

Elizabeth C. Stone, *Nippur Neighborhoods*, Studies in Ancient Oriental Civilization 44 (Chicago: The Oriental Institute, 1987).



Front

D. 20550



Back

D. 20524



### The “Chicago Stone”

Basalt

Early Dynastic period, ca. 2600 BC

Iraq, unknown provenience

Purchased in New York, 1943

25.0 x 32.0 x 5.5 cm

OIM A25412

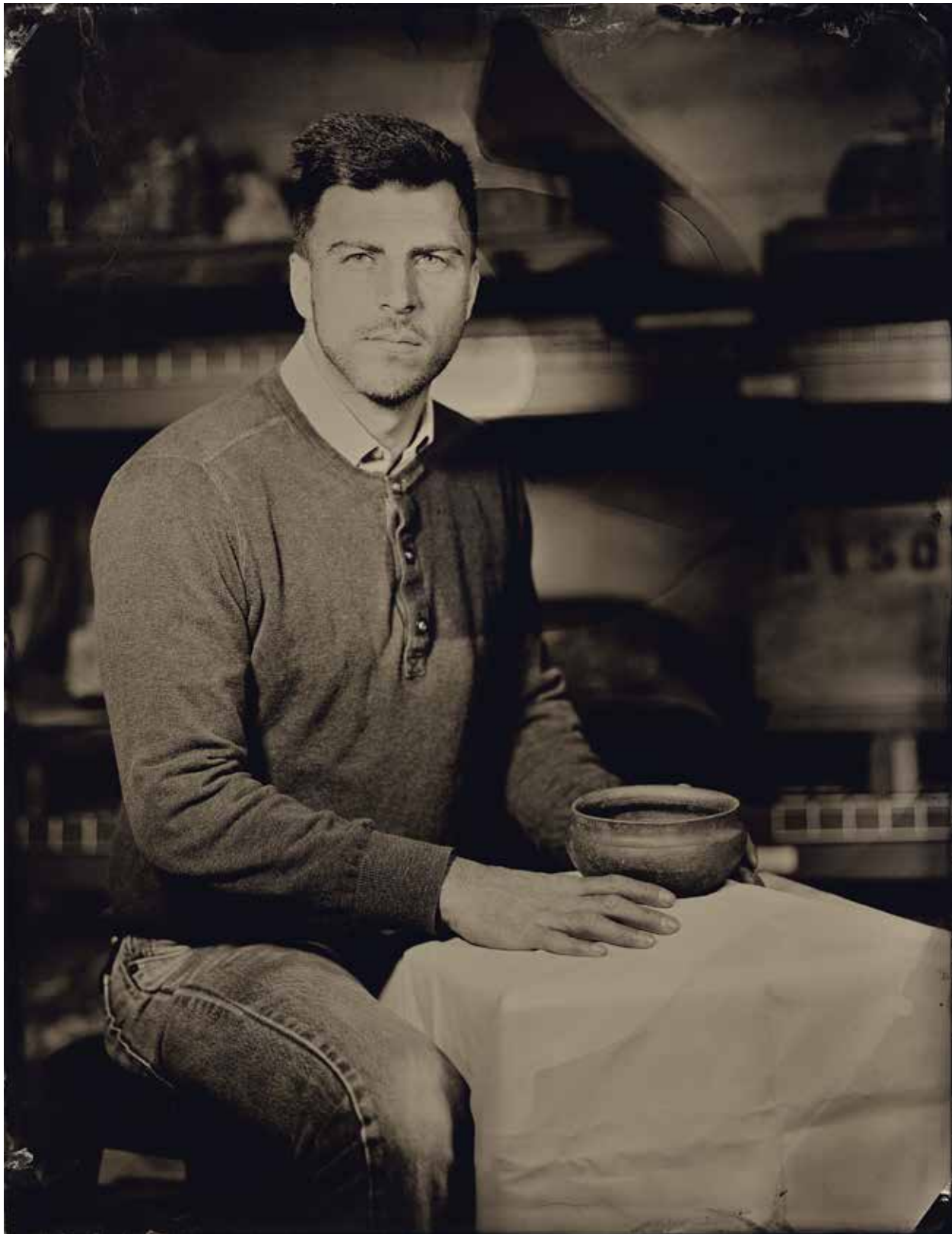
Written in the Sumerian language, this rectangular stone slab is called the “Chicago Stone” because of its current home. It is one of the oldest known display documents relating to real-estate transfers in Mesopotamia. The nine columns of text written on each of its two sides record the sale of a number of fields, probably to a single buyer, who is unnamed. Land-sale records of the period usually record acquisition of property by single buyers from several sellers, collections of individual and separate transactions. In the Chicago Stone, the buyer makes a grand account of many distinct purchases. Purchases were made in silver as well as oil, wool, bread, and sheep fat.

The signs on the stone represent early cuneiform (“wedge-shaped”) writing that still resembles pictographic signs (picture-writing). Typical of early texts, the signs are organized into “cases” (ruled boxes) that include personal names and quantities of items. This text was read vertically from top to bottom, beginning with the leftmost column on its front (flat side). The use of stone suggests it was intended as a permanent, indestructible record. Such sales records, later known as *kudurrus*, were deposited in temples to give them the protection of the gods and so they could be viewed publicly. Their purpose was to describe the land owned by an individual and how it came into his possession.

#### Published

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Ignace J. Gelb, Piotr Steinkeller, and Robert M. Whiting, *Earliest Land Tenure Systems in the Near East: Ancient Kudurrus*. 2 vols. Oriental Institute Publications 104 (Chicago: The Oriental Institute, 1989 and 1991), vol. 1, pp. 48–55, vol. 2, pls. 20–23, 87–88, 91.



**“I’ll make forays into other mediums, but I always come back to clay. I think it’s just that natural, earthy contact with the material.”**

**Brian Zimerle**  
Potter | Chicago, Illinois

Bowl  
Egypt | ca. 2613–2181 BC  
OIM E28207

## Potter

Brian Zimerle is a ceramicist who teaches at the College of DuPage in Glen Ellyn, Illinois. He has worked in other mediums, but returns to ceramics because of the appeal of clay and his interest in the history and the science of ceramics. He is also a preparator and exhibit designer at the Oriental Institute.

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“Ceramics is one of the oldest processes of creating artifacts or creating objects of art, and in a lot of ways it hasn’t changed: there are a lot of techniques that are still the same as they were 4,000 or 5,000 years ago. A lot of our tools are the same, and a lot of the processes are the same. There are more contemporary things that we use today: we have electricity now, we have electric wheels, which makes the process of throwing on the wheel a little bit easier. But a lot of it is pretty consistent throughout.”

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“There’s always this kind of wanting to know how they [ceramic objects] were made, and I think with a lot of potters, they’ll look at something and think, ‘How was that made? How can I do that?’ Looking at different pieces in our collection, it is an interesting thing to see these different kinds of techniques. Sometimes I see things that I don’t quite understand how they would accomplish, and I sit down there and I try to figure out how I would do it. Sometimes it answers the question, sometimes it doesn’t.”

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“My day job working here at the Oriental Institute makes a wonderful connection when working with the different artifacts, because I get to see the work of the potter. Because I can see little things where they made a mistake, or maybe there was a problem with a piece — [*indicating the bowl*] you can see a little indentation down here on the lip, so maybe when they’re on the wheel their hand caught the lip and dented it down, so they tried to fix it back up — so I definitely see that hand of the potter, which is always really interesting.”

---

“I sometimes wonder how a potter was appreciated in their society. Was it an important endeavor? Did it make them a rock star? I mean, these pieces would feed people, they would store their valuable food that they would need to survive, so did that make them worth more than other people?”

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“One of the things I’ll definitely tell my students is that whatever you make in clay and fire: it’s here forever. This material will not break down that easily, it’s going to last forever, so keep that in mind: whatever you make, it’s gonna be around.”

## Ceramics in Ancient Egypt

The earliest pottery in the Nile Valley dates to about 6000 BC. Vessels were initially hand formed on a mat or later on a short stand that could be rotated. In about 2450 BC, a hand-turned wheel was introduced. The kick wheel was not used in Egypt until about 500 BC. Kilns were mudbrick enclosures that were fired from the bottom. Egyptian pottery is made of two types of clay: a reddish Nile silt from the riverbank, and a buff marl (lime-rich clay) that was mined in the desert. The clay was mixed with chopped straw or finely ground stone temper. Most Egyptian pottery is undecorated other than being covered in a slip that was decorative and that also made the vessel more water resistant. Pottery styles changed over time, and therefore ceramics are very valuable for dating archaeological sites. Professional potters who worked in organized workshops were male, while women made ceramics on a household level. A text known as the “Satire on the Trades” refers to the rigors of the potter’s life, how he grubs in the mud and how the hot air from the kiln burns his nose.

### Further Reading

Janine Bourriau, *Umm el-Ga'ab: Pottery from the Nile Valley before the Arab Conquest* (Cambridge: Cambridge University Press, 1981).

Colin Hope, *Egyptian Pottery* (Shire: Princes Risborough, 1987).

Janine D. Bourriau, Paul T. Nicholson, and Pamela J. Rose, “Pottery,” in *Ancient Egyptian Materials and Technology*, Paul T. Nicholson and Ian Shaw, eds. (Cambridge: Cambridge University Press, 2000), pp. 121–47.



D. 20525

**Bowl**

Baked clay

Old Kingdom, Dynasties 4–6, ca. 2613–2181 BC

Egypt, Sedment el-Gebel

By exchange with the Metropolitan Museum of Art, 1968

9.6 x 15.9 cm

OIM E28207

This thin-walled, elegant vessel, finished with a red slip, was turned on a slow wheel. The style with the flaring rim was very popular in the time of the pyramids. Bowls in this style range in size from small to almost tray sized. They were the equivalent of “good china,” and they are often recovered from cemeteries near royal centers, where the best artisans worked. Such bowls were used for serving food and also for displaying flowers. The indentation below the rim made it very easy to hold and the lip would have been easy to drink from.

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**Published**

Emily Teeter, ed., *Before the Pyramids: The Origins of Egyptian Civilization*, Oriental Institute Museum Publications 33 (Chicago: The Oriental Institute, 2011), p. 96, fig. 10.5.



**Gloria Margarita Tovar**  
Manicurist | Chicago, Illinois

Relief of a Manicurist  
Egypt | ca. 2430 BC  
OIM E10815

**“It’s fashion — it goes with your outfit,  
it goes with what you’re wearing,  
people like colors.”**



# Manicurist

Gloria Margarita Tovar is a nail technician at the Elizabeth Arden Red Door Salon in Chicago.

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“They [the Egyptians] probably had to look presentable for other people, to make them see who they were. They knew there were kings, so they had to look nice — the same as today. Even when you have a job, and you go to an interview, you have to look nice.”

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“Color makes them feel good. Like when I’m done, and I put on a color, they’re like, ‘Oh my god, my hands look gorgeous, the color just makes me feel like a new person,’ and that’s what I see, and that’s what I enjoy — seeing the expressions on their face, and them being clean, and the polish looks nice, and everything looks really, really good.”

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“Well, first of all, when I heard about [how long there have been manicurists], I thought it was amazing. It’s amazing because I have always said, that back to the earliest times, we always took care of ourselves. You know, our hair, our skin, so when I saw this piece, I said, ‘It’s still here, it’s just a different way.’”

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“It’s a good experience getting to do this. I’m learning a lot getting to be here, but I’m really amazed about this — that we still, to this time, have this.”

## Manicurists in Ancient Egypt

Both men and women in ancient Egypt were very concerned with their appearance, and they lavished special attention on grooming. Scenes in private tombs dating to the Fifth and Sixth Dynasties (ca. 2450–2181 BC) show men giving manicures and pedicures. The scenes are accompanied by short texts giving the men's titles, indicating that they were organized into ranks, from simple manicurists to managers and supervisors of manicurists. Some manicurists were employed by the palace. They too were divided into technicians and supervisors. The nails and feet of some mummies are colored with henna, suggesting that its application was part of a manicurist's services.

### Further Reading

A. Lucas and J. R. Harris, *Ancient Egyptian Materials and Industries*. 4th ed. (London: Edward Arnold, 1962), p. 87.

Robert J. Forbes, *Studies in Ancient Technology*, 2nd ed. (Leiden: E. J. Brill, 1965), vol. 3, p. 20.



D. 20526

**Relief of a Manicurist**

Limestone

Old Kingdom, Dynasty 5, ca. 2430 BC

Egypt, Saqqara, tomb 19

Purchased in Egypt, 1920

75 x 32 x 4 cm

OIM E10815

This section of a door lintel from the tomb of a man named Kha-bau-Ptah gives his title as “overseer of the palace manicurists.” He is shown seated on a chair, holding a staff that was the mark of an elite man. Kha-bau-Ptah’s tomb, with its stone portico and expensive decoration, indicates that he was a wealthy man. Texts in his tomb record that he also served as a priest of Re and Hathor, and as the “overseer of the palace hairdressers.” His title suggests that the palace employed a team of nail-care specialists who were under his supervision. During Kha-bau-Ptah’s time, the king was a semi-divine being, and touching his body, or the bodies of members of the royal family, must have been a great honor.

**Published**

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Emily Teeter, *Ancient Egypt: Treasures from the Collection of the Oriental Institute Museum*, Oriental Institute Museum Publications 23 (Chicago: The Oriental Institute, 2003), p. 28, cat. no. 9.



**“Gilgamesh obviously was an activist ... he was about tomorrow, the next millennium, and how we exist and stay alive.”**

**Haki Madhubuti**  
Poet | Chicago, Illinois

Epic of Gilgamesh Tablet  
Iraq | ca. 1800–1600 BC  
OIM A22007

Gilgamesh Plaque  
Iraq | ca. 2000–1600 BC(?)  
OIM A9325

## Poet

Haki Madhubuti is an author, educator, and poet. He is one of the founding members of the Black Arts Movement, and the founder and publisher of Third World Press (established 1967). He is co-founder of the Institute of Positive Education/New Concept Development Center, and co-founder of the Betty Shabazz International Charter School. Now retired, he was formerly a professor at Chicago State University, where he directed the Master of Fine Arts in Creative Writing program, and a professor at DePaul University. He currently writes full-time and works at the Third World Press and in Chicago schools.

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“The Gilgamesh tablets represent the early writings, the early scribes – and that’s what I’m about. I’m a paper person – even though I have an iPad, I still write on legal pad – and I have a great appreciation for this historical piece of literature.”

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“Any people who are in control of their own cultural imperatives are about the healthy replication of themselves and their communities. This replication starts with language and writing. Gilgamesh obviously was an activist, in terms of trying to find a worldview that he could understand and explain and bring back to his people. What I understand from Gilgamesh, on one level, is that we make our lives essential not only to our civilization but to the furthering of civilization. And writing is about that. Storytelling is about that.”

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“To be connected with literature and language and storytelling is very important. That’s one of the reasons we started Third World Press: our story wasn’t being told. It became our mission to give voice to the African American story. All too often cultures are not recognized unless they create something, unless they leave a legacy, unless they are about going into the next century or the next millennium. We came along and said, ‘Let’s start telling our story ourselves.’”

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“The oral tradition is passed down from generation to generation, but in the written tradition, we see more permanency. With the oral tradition, interpretations keep changing. You give one story to a child, and it goes through the grandfather, but by the time it gets to the next generation, it’s changed several times. When you have the written tradition, you have something that’s going to stay; you have something to build upon, and obviously you can interpret it also. But the written tradition creates – for me as a poet and as an individual who is constantly writing – a longevity that’s going to stay as you wrote it, not just as you told it.”



## The Epic of Gilgamesh

Gilgamesh was probably a historical figure, a king of the city of Uruk (in southern Mesopotamia, in what is now Iraq) in about 2800 BC. The legends that grew up about him in both Sumerian and Akkadian (languages of ancient Mesopotamia) probably began as oral traditions, later collated by scribes to form what we today call the Epic of Gilgamesh, the most elaborate and popular of Mesopotamian literary compositions. In the poem, Gilgamesh, who is described as part god, part man, tyrannizes his subjects in the city of Uruk. The gods create the wild-man Enkidu to distract him. Gilgamesh and Enkidu fight, then become great friends, and join forces to defeat the monster Humbaba in the Cedar Forest. Upon their return to Uruk, they are met by the goddess Ishtar (Inanna in the Sumerian version), whose advances Gilgamesh spurns. Punished by the gods for attacking Ishtar, Enkidu dies, leaving Gilgamesh to consider his own mortality, and to seek immortality, which he cannot attain. Gilgamesh realizes that although he will not live forever, his monuments and exploits will continue after his death. The most complete copy of the Akkadian version was written on twelve tablets and formed part of the library of King Ashurbanipal (reigned 668–627 BC) at Nineveh, Iraq. The Epic of Gilgamesh is recognized today as a literary classic and the oldest known epic poem.

### Further Reading

Andrew R. George, *The Epic of Gilgamesh: The Babylonian Epic Poem and Other Texts in Akkadian and Sumerian* (Harmondsworth: Penguin Classics, 2000).

Stephanie Dalley, *Myths from Mesopotamia: The Flood, Gilgamesh, and Others* (Oxford: Oxford University Press, 2009).



D. 20527



D. 20528



**Tablet from the Epic of Gilgamesh**

Clay

Old Babylonian period, ca.1800–1600 BC

Iraq, Ishchali

Excavated by the Oriental Institute, 1934–1935

11.8 x 6.2 x 3.0 cm

OIM A22007

This tablet corresponds to the contents of the third tablet (of twelve) in the later version of the Epic of Gilgamesh found in the library of Ashurbanipal and contains part of an early version of the story of Gilgamesh and Enkidu's journey to the Cedar Forest. In this part of the epic, Gilgamesh and Enkidu enter the forest, and Gilgamesh begins to cut down the sacred cedar tree with his ax. The sound brings the monster Humbaba, terrifying Gilgamesh, whose cry for help unleashes winds from the sun god Shamash that trap Humbaba. Showing no mercy, Gilgamesh and Enkidu cut off the head of Humbaba and defiantly bring it back to Uruk.

**Published**

Andrew R. George, *The Babylonian Gilgamesh Epic: Introduction, Critical Edition and Cuneiform Texts* (Oxford: Oxford University Press, 2003), vol. 1, pp. 259–66, vol. 2, pl. 16.

Samuel Greengus, *Old Babylonian Tablets from Ishchali and Vicinity*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 44 (Leiden: Nederlands Historisch-Archaeologisch Instituut, 1979), cat. no. 277.

**Plaque depicting Gilgamesh**

Clay

Isin-Larsa to Old Babylonian period,  
ca. 2000–1600 BC(?)

Iraq, unknown provenience

Purchased in Iraq, 1930

28.2 x 8.5 x 5.2 cm

OIM A9325

This plaque depicts what may be Gilgamesh standing on the head of the slain Humbaba, monster of the Cedar Forest. Gilgamesh was a semi-divine character who is said to have reigned for 126 years and was 11 cubits tall (equivalent to more than 16 feet). This may explain the elongated appearance of the figure, which bears similarities to terra-cottas and molds from the Ur III, Isin-Larsa, and Old Babylonian periods. This example may be a modern pressing from an ancient mold, or a modern copy of an ancient terra-cotta. The choice of imagery points to the widespread popularity of the Gilgamesh story during the late third and second millennia BC.

*Previously unpublished.* For cited parallels, see:

Tallay Ornan, "Humbaba, the Bull of Heaven and the Contribution of Images to the Reconstruction of the Gilgamesh Epic," in *Gilgamesh: Ikonographie eines Helden*, ed. Hans Ulrich Steymans, *Orbis Biblicus et Orientalis* 245 (Fribourg: Academic Press; Göttingen: Vandenhoeck & Ruprecht, 2010), pp. 229–60 and 411–24, esp. p. 245 and figs. 17–18.



**Kenneth Clarke**  
Keeper of Military History | Chicago, Illinois

The Sennacherib Prism  
Iraq | ca. 689 BC  
OIM A2793

**“Humans ... seek the truth on what happened ...  
though there are ... people who distort  
or change ... their history.”**

## Keeper of Military History

Kenneth Clarke is president and CEO of the Pritzker Military Library, which preserves and shares information about the citizen-soldier in America. The library collects books, artifacts, letters, diaries, and log books from soldiers. It is open to members and visitors and also contains a museum, lecture hall, and recording studio for producing its own television programs.

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“I have been looking at this piece for many years, and I’ve come to the [Oriental] Institute over the years, and the interesting thing for me about this piece is how it interacts with other pieces of history, and how one civilization is talking about this very same piece in its own texts, and another civilization is talking about this very thing in its own texts, so you have that kind of inter-textuality of the piece that then also contributes to a larger understanding of the regional history at the time, and that’s really fascinating from many different perspectives.”

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“The Prism is a very, very, very, very early accounting of a historical action that is military based. And there aren’t a lot of those kinds of histories that predate this artifact, so you are dealing with one of the first times when human beings were documenting their exploits and battles, so to speak, or what happened.”

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“We can boil it down to the very specifics: this [prism] is a six-page book. It’s a six-page military history. The [Pritzker] library is full of 45,000 volumes of military history – we’ve come a long way in how we record military history, and how we record history .... What you have here [*indicating the log book*] is the log book of Company B First Battalion, 12th Cavalry Regiment, 3rd Heavy Brigade Combat Team, 1st Cavalry Division. And in this book you have the moment-by-moment record of what B Company did while they were engaged in battle in Iraq in 2007 fighting against Al Qaeda insurgents. The particular soldier who came into possession of this was First Sergeant Robert Colella. He ... made it the basis for a more traditional military history book about this battle .... The book that First Sergeant Colella produced is more akin to the Sennacherib Prism, I would say. It’s kind of like what you have with the Prism and the Israelite account in the Old Testament and then also Herodotus’ version of it, you kind of have this kind of thing happening, where it is kind of the business end of soldiers who are literate.”

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“I think that what humans have proved over and over again is that they want to actually try to seek the truth on what happened, and even though there are going to be people who distort or change what their history is, there are going to be others who pretty much try to tear it back down and put it back together and make sure that it is accurate.”

## Military History in Ancient Assyria

The ancient Assyrians conducted military campaigns annually to ensure divine favor from their patron god Ashur — an ideology that helped motivate the expansion of the Neo-Assyrian empire (ca. 900–612 BC). As part of these actions, the Assyrians sometimes conquered cities and took spoils of war. In addition to the Sennacherib Prism and other cuneiform documents, military history was recorded visually. From the Southwest Palace of Sennacherib at Nineveh, in Iraq, a series of carved wall reliefs depict the siege of Lachish, a site in Israel. They include images of archers, siege engines, and battering rams, and defense by the city's inhabitants. Refugees or captives including women and children are shown leaving the city with their belongings. Battle victims and executions are also depicted. Archaeological excavations at Lachish have uncovered a siege mound and projectile weapons — physical evidence for a battle. In reliefs featuring military campaigns, scribes are sometimes shown writing on wax boards or papyrus. They may have been recording unfolding events, counting enemy dead, or preparing military communications or letters. The role that campaign records or letters played in the preparation of Assyrian historical annals is unclear. It is not difficult to see how annals, composed years after the event, omitted details that were unfavorable to the portrayal of a successful ruler.

### Further Reading

"Biblical History in Assyrian Sculpture," in *Assyrian Sculpture*, by Julian Reade (Cambridge: Harvard University Press, 1999), pp. 62–71.



D. 20529

### The Sennacherib Prism

Clay

Neo-Assyrian period, reign of Sennacherib, ca. 689 BC

Iraq, unknown provenience

Purchased in Iraq, 1919

38 x 14 cm

OIM A2793

This six-sided prism was written in the Akkadian language in cuneiform (“wedge-shaped”) script on behalf of Sennacherib, king of Assyria (reigned 704–681 BC). It contains the narratives of eight of Sennacherib’s military campaigns, ranging from Judah in the west (modern Israel) to Elam in the east (Iran). The prism describes in detail the manner by which Sennacherib defeated most of the major Near Eastern powers, including Babylonians, Chaldeans, and Elamites.

During his campaign of 701 BC, Sennacherib traveled west and attacked the Israelite king Hezekiah, laying siege to Jerusalem. On this prism, Sennacherib boasts of his victory over Hezekiah, king of Judah, but not of a victorious siege. Other accounts of the siege story come from the Hebrew Bible (2 Kings 18–19, Isaiah 37), which states that 185,000 of Sennacherib’s forces were killed in their camp one night by an “angel of the Lord” — commonly interpreted as a plague. This detail is not found in the Assyrian version. Elements of the “plague” story appear to be presented by the classical historian Herodotus, in the form of mice devouring essential equipment of the Assyrian army. But this is in relation to Sennacherib’s troops camped in the Egyptian Delta, not Judah. Sennacherib’s annals represent a selective treatment of events, perhaps compiled by individuals who were not eyewitnesses. According to the annals, Hezekiah submitted to the Assyrian king and paid tribute. The Hebrew Bible mentions that Hezekiah paid tribute to the Assyrians before the siege, but no mention is made of tribute after the siege. We shall probably never know the true circumstances of the siege and its outcomes, given the different standpoints and motivations of those recording the events.

### Published

A. Kirk Grayson and Jamie Novotny, *The Royal Inscriptions of Sennacherib, King of Assyria (704–681 BC)*, *The Royal Inscriptions of the Neo-Assyrian Period 3/1* (Winona Lake: Eisenbrauns, 2012), pp. 167–88.

Daniel D. Luckenbill, *The Annals of Sennacherib*, *Oriental Institute Publications 2* (Chicago: University of Chicago Press, 1924).





**Marguerite Lynn Williams**  
Harpist | Chicago, Illinois

Harp  
Egypt | ca. 1400-525 BC  
OIM E19474

**“I believe that music celebrates our life,  
and we can express emotions, happy or sad, through music  
in a very intense and powerful way.”**



# Harpist

Marguerite Lynn Williams is the principal harpist of the Chicago Lyric Opera Orchestra.

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“Music plays an important role in society. The fact that the profession of musician, and harpist in specific, has been around for centuries makes me think how important and long lasting it must be to humankind.”

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“The harp is one of the most ancient instruments, like the human voice and drums, and is played widely to this day. I had learned about ancient Egyptian harps and bow harps previously, since they are important to the development of the modern pedal harp.”

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“To me it’s amazing that this instrument still exists and is in such great shape. The life of a modern harp is tiny compared to this Egyptian instrument. With the mechanism for the pedals, a modern harp would probably last thirty professional years, maybe up to seventy-five useful years. The pressure on the strings is about two tons, and it eventually is too much for the wood to handle. This one being thousands of years old is amazing!”

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“The harp is very unique – the character of it can change and play in practically any genre of music. I love music in general, but the harp is really special to me.”

## Harps in Ancient Egypt

Harps were known in Egypt from at least 2500 BC, when they are shown in scenes that decorate tomb chapels. The earliest style is the shoulder harp, which the musician played while seated or standing, the long neck of the harp supported on his or her shoulder. Early scenes of harpists show them playing solo or in the company of flutes or oboe-like instruments. Harps were played by both women and men, and in some cases, they are shown in mixed-gender ensembles. Scenes of banquets with musicians and dancers suggest that some harpists were professionals who could be hired for specific events. Harps were also played during religious rituals and festivals. We know almost nothing about the sound of ancient Egyptian music because there was no system of musical notation until the Roman period (first century AD).

### Further Reading

Kimberly Marshall, ed., *Rediscovering the Muses* (Boston: Northeastern University Press, 1993), esp. pp. 68–91.

Lise Manniche, *Music and Musicians in Ancient Egypt* (London: British Museum Press, 1991).



D. 20529

## Harp

Wood

New Kingdom–Late Period, Dynasties 18–26,  
ca. 1400–525 BC

Egypt, Luxor

By exchange with the Metropolitan Museum of Art, 1958

83 x 8 cm

OIM E19474

The curved neck and sound box of this harp are carved from a single piece of wood. The long, narrow sound box would have been covered with skin that is now missing. A tapering piece of wood, called the hitch rail, is loosely socketed into the upper end of the sound box. The end of the hitch rail was loosely tied to the end of the sound box. One end of the gut strings was attached at the notches on the hitch rail, and the other was wrapped around the neck of the harp and secured by the pegs. The vibration of the strings was transferred to the hitch rail and then amplified by the sound box. Harps of this style and size normally had four strings, while other types could have ten or more. The four wooden pegs are ancient. This style of harp would have been balanced on the shoulder and the strings plucked with both hands.

## Published

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Emily Teeter and Janet H. Johnson, eds., *The Life of Meresamun: A Temple Singer in Ancient Egypt*, Oriental Institute Museum Publications 29 (Chicago: The Oriental Institute, 2009), p. 41, cat. no. 9.



**“If they want something special,  
we try to make it  
and satisfy the person.”**

**Mario Silva**  
Baker | Chicago, Illinois

Bread Pan  
Egypt | ca. 2630-2524 BC  
OIM E1986

## Baker

Mario Silva has worked at the Medici bakery on 57th Street for almost a decade. Starting at 3:00 AM, his team makes about 1,200 loaves of bread a day.

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“I started being interested in baking when I would watch people mold the bread and work with the dough, and it was very interesting. I said I wanted to learn, which is what I continue to do today — learn. I keep watching others. I inform myself of how it’s done and continue to learn. I learn more from watching and asking than going to any school.”

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“From what I know, the Egyptians used this [bread pan] to bake bread. They put the dough they prepared in it and then heated it up. But I don’t really know how it was accomplished. No, the truth is, I wouldn’t know how to use this bread mold today. But it’s very interesting.”

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“I haven’t tasted it [ancient bread]. But from what I know, I’ve been told that they used almost the same ingredients that we use today — probably a little more sour, but agreeable.”

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“I don’t know how they learned to make bread in those times. It’s been so long since it began, and today it is so easy for us. But I think that in those times it was more difficult to make bread.”

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“I think the art of bread baking has changed a lot. We have the technology and processes to make more bread more easily and more practically — it has changed a lot.”

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“Well, I think bread is a pleasant, accessible food. One can eat it like other kinds of foods so that they can be well nourished. I think that’s why [the Egyptian diet contained so much bread], and why it is so popular everywhere.”

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“Well, sitting here I have learned more about what bread is and how it was made. This is an experience that I wasn’t expecting. But it’s so great that I’m doing it. Now I know more and will have to learn more about bread-making processes.”

## Baking in Ancient Egypt

Bread was the main component of the Egyptian diet. In the earliest times, households probably baked their own bread, but by about 3200 BC, industrial-scale bakeries had emerged. Both men and women could be bakers. Large-scale bakeries were established by the state near royal construction projects to feed the workers. Temples too had bakeries to supply the thousands of loaves that were offered to the gods. Commercial bakeries could produce huge numbers of loaves. For example, the bakeries that supplied bread for the offering cult at the temple at Medinet Habu in about 1200 BC used 25,134 sacks of wheat, equal to about 1.8 million liters of grain, each year.

### Further Reading

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Delwen Samuel, "Brewing and Baking," in *Ancient Egyptian Materials and Technology*, Paul T. Nicholson and Ian Shaw, eds. (Cambridge: Cambridge University Press, 2000), pp. 537–76.

Hilary Wilson, *Egyptian Food and Drink* (Shire: Princes Risborough, 1988), pp. 11–19.



D. 20530



**Bread Pan**

Baked clay

Old Kingdom, Dynasty 4, ca. 2630–2524 BC

Egypt, El-Kab

Gift of the Egyptian Research Account, 1896–1897

18 x 21 cm

OIM E1986

Bread was baked in many shapes, and it could be hand formed or made in thick-walled pottery molds and pans like this example. The interior of the pan was coated with a fine-grained clay that, when tempered by heat, created a non-stick finish. The dough was put into the mold, and the radiant heat from the mold in the oven baked the bread. Thousands of these bread pans have been recovered from Egypt.

*Previously unpublished*



**Jack Saltzman**

Game Manufacturer | Chicago, Illinois

Game Board  
Egypt | ca. 2707–2219 BC  
OIM E16950

**“And as far as the game itself,  
like I say, it should be colorful, it should be  
interesting, it should be easy to work with —  
it shouldn’t be too complicated.”**

## Game Manufacturer

Jack Saltzman is the proprietor of the Chicago Game and Card Company. He works with game developers and inventors to bring their ideas to full production. From assisting with final design to fine tuning rules, securing game components, and designing packaging, Jack assists with producing games for the marketplace.

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“It seems to me that people haven’t changed over the years. You know, they were playing board games thousands of years ago; they’re playing board games now. Just now, because of technology, you can make so many variations and so many more — but it seems like the same concept: people want to be entertained, people want to spend time, to do something different.”

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“Board games are popular now because parents feel they want to have some time to spend with their children, and sitting around a board game for 20 to 30 minutes you get to talk, you get to communicate, you get to feel each other out, see what’s going on. It could have been the same thing back then too, you know, everything was very labor intensive in the old days, maybe it was a time to just play a game and relax a little bit, and talk to people.”

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“I just think it’s interesting that they found this — that 4,500 years ago they’re doing the same thing that we’re doing now. We have a much larger scale of games, but you know people haven’t changed. I mean, all these years, people haven’t changed. They like to play games. Maybe it was a gambling game, maybe it was the kids and the family sitting around playing the game to communicate. It just hasn’t changed. It’s all exactly the same.”

## Game Boards in Ancient Egypt

Markers for game boards have been recovered from Egyptian tombs dating to 3000 BC, but the tradition of playing board games is probably older. The earliest examples of game pieces are cone-shaped markers made of colored stone, small ivory figures of lions and lionesses, and colored marbles. The Egyptians played many different board games including Twenty-squares, Senet, Dogs and Jackals, and Mehen. Moves were determined by casting throwsticks or knucklebones. Dice, with their opposing sides equaling seven, were imported from Western Asia probably in the early first millennium BC. The popularity of playing games is indicated by the many examples of game boards scratched into the roofs and floors of temples, where people passed time. Some Egyptian games had a religious significance, the winner symbolically being granted rebirth in the afterlife.

### Further Reading

Peter Piccioni, "Mehen Mysteries and Resurrection from the Coiled Serpent," *Journal of the American Research Center in Egypt* 27 (1990), pp. 43–52.

Wolfgang Decker, *Sports and Games in Ancient Egypt* (New Haven: Yale University Press, 1992), pp. 124–35.



D. 20531

**Mehen Game Board**

Egyptian alabaster (calcite)

Old Kingdom, Dynasties 3–6, ca. 2707–2219 BC

Egypt, unknown provenience

Purchased in Egypt, 1932

D: 38 cm

OIM E16950

The Mehen game board was in the form of a coiled serpent. Like many examples, the tail of the snake on this board is in the form of a bird's head. Mehen games vary in the number of squares, from about forty to several hundred, and the snake may be coiled counterclockwise or clockwise. Scenes on tomb walls of people playing board games show that Mehen was played by up to six opponents, each having three markers in the form of lions or lionesses and six marbles. The objective of the game was apparently to race your opponent around the coils of the snake's body to its head. In Egyptian mythology, Mehen was a giant snake whose coils encircled and guarded the sun god.

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**Published**

Emily Teeter, *Ancient Egypt: Treasures from the Collection of the Oriental Institute Museum*, Oriental Institute Museum Publications 23 (Chicago: The Oriental Institute, 2003), p. 13, cat. no. 2.





**“I’m left wondering whether or not the people of this time had any appreciation for biology in the way that we do.”**

**Kelly Nicholas**  
Physician | Chicago, Illinois

Medical Tablet  
Iraq | ca. 750–500 BC  
OIM A3441



## Physician

Kelly Nicholas, M.D., Ph.D., runs the Neuro-oncology (brain tumor) Program at the University of Chicago Medical Center. He has a clinical service where he sees patients in the outpatient clinic and consults in the hospital. He designs and runs clinical trials for brain-tumor care, working with neurosurgeons, radiation and medical oncologists, and others. He teaches medical students, post-graduate students, oncology fellows, and neurosurgery fellows.

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“When I look at this, and read this ... I know intellectually that there is a connection, but I think that so much space and time separates us .... There seemed to be a codified, ritualized – for lack of a better word – ... procedural way in which things were done, that individuals were identified in a role as a doctor, that it was defined by society, that it was regulated by rules of conduct, and that it was documented and that these documents were passed down over time, that there was a tradition and an order to it. But I still am lost, I’m left wondering whether or not the people of this time had any appreciation for biology in the way that we do.”

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“I recognize ... that it was a regulated profession [in ancient Mesopotamia], that there were codes and laws that regulated that profession, and also that it was taken very seriously. ... Some of the things that they did probably had medicinal benefit from our standpoint. For example, they picked herbs and extracts of things that had astringent qualities for disinfecting wounds, so there was the beginning of a science, if you will.”

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“The Diagnostic and Statistical Manual (of Mental Disorders) is what we call the psychiatry textbook that we use [today], and so there’s certainly a similarity in how we structure our thought .... We are taught early in medical school that getting the right history, both allowing the patient to talk but also guiding them in that conversation so that you get the information that you think will be helpful to you making a diagnosis, and that came through loud and clear [in this ancient text] .... They describe [on this tablet] if a man extends his leg and his mouth is seized and he is unable to speak, it describes a seizure, so it is definitely based on the external world.”

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“Much of what we do today will be considered ludicrous [in the future]. I’ll give an example. Today we can cure a cancer patient by poisoning them to the point of death, but giving them antibiotics and support and someone else’s bone marrow, and completely suppress their own immune system so that they don’t reject that bone marrow. I can only imagine that today we look back and say, ‘Can you believe that the doctors [in antiquity] used to taste the urine as part of a diagnosis?’ They used to use leeches, they used to describe evil humors .... Well, I could imagine sometime in the future people saying, ‘Can you believe that they used to poison people, and give them someone else’s bone marrow?’ And you know, that’s what we do. And we’re saving lives, but again, it’s all within a cultural context.”

## Medicine in Ancient Mesopotamia

The respective roles of the *asu* and *ashipu* as healers and physicians in ancient Mesopotamia are still debated. The *ashipu* observed his patients carefully and developed terms to describe the signs and symptoms of their illnesses and possible treatments. Known from around 2100 BC, the *asu* was a healer associated with cleaning wounds and applying bandages. The polytheistic religions of ancient Mesopotamia provided an explanatory system that allowed for both “natural” (internal) and “supernatural” (external) causes for disease. There was no clear dividing line between medicine and magic. What this meant was that treatments consisted of medicinal plants, minerals, and animal products prepared in a variety of ways, including as bandages, salves, potions, and enemas. These were supplemented by amulets, recitations, and magical rituals. The scholar-physician Esagil-kin-apli, patronized by the Babylonian king Adad-apla-iddina (reigned 1068–1047 BC), reorganized known medical knowledge into a diagnostic and prognostic handbook consisting of a series of forty tablets or “chapters,” forming an important resource for Mesopotamian physicians down the centuries.

### Further Reading

Robert D. Biggs, “Medicine, Surgery, and Public Health in Ancient Mesopotamia,” in *Civilizations of the Ancient Near East*, ed. by Jack M. Sasson et al. (New York: Charles Scribner’s Sons, 1995), vol. 3, pp. 1911–24.

JoAnn Scurlock and Burton R. Andersen, *Diagnoses in Assyrian and Babylonian Medicine: Ancient Sources, Translations, and Modern Medical Analyses* (Urbana: University of Illinois Press, 2005).



D. 20533

### Tablet with Medical Text

Clay

Neo-Babylonian, ca. 750–500 BC

Iraq, unknown provenience

Purchased in Iraq, 1919–1920

9.4 x 8.6 x 2.8cm

OIM A3441

This fragmentary tablet is a copy of Tablet 28 of the diagnostic and prognostic handbook by the scholar-physician Esagil-kin-apli. Written in Neo-Babylonian script, it describes symptoms that can be compared today with neurological conditions including strokes and seizures. In the tablet, the cause of sickness is usually ascribed to a supernatural agent, such as a deity, ghost, or demon. Suggested treatments were thought to placate deities or spirits, or protect the individual from malevolent supernatural forces or curses. One section of the tablet suggests the cause of a seizure disorder and the required treatment:

If “hand” of ghost turns into seizure, that person is sick with “hand” of his city god; in order to save him from “hand” of his city god, you sew up the flesh of wild animals, the “little finger of a corpse” (a plant name), old rancid oil (and) copper in virgin she-goat skin with dormouse tendon. If you put it on his neck, he should recover.

It is unclear whether such treatments were successful, although some ingredients listed in the sources are known to act as depressants on the central nervous system. The psychological impact of treatment on a subject could have had positive physical effects, or the patient may have recovered naturally. The tablet also lists medical dream omens, symbols seen in dreams as pointing to a change in condition. For example, if a patient sees a sheep, dog, or pig in a dream, their condition may worsen, or they may die. If a patient sees a stag, an ox, or a garden in a dream, they will most likely recover.

### Published

Nils P. Heeßel, *Babylonisch-assyrische Diagnostik*, *Alter Orient und Altes Testament* 43 (Münster: Ugarit-Verlag, 2000), pp. 307–17

René Labat, *Traité akkadien de diagnostics et pronostics médicaux* (Paris: Académie Internationale d'Histoire de Sciences; Leiden: E. J. Brill, 1951), pls. 50–51.



**Robert Zimmer**  
Mathematician | Chicago, Illinois

Mathematical Cylinder  
Iraq | ca. 2000–1600 BC  
OIM A7897

**“Mathematics is actually a phenomenally powerful tool  
in virtually every type of human endeavor.”**

# Mathematician

Robert Zimmer is a professor in the Department of Mathematics at the University of Chicago. He first joined the University of Chicago in 1977, and became the University's thirteenth president in 2006. His fields of interest in mathematics are in geometry and ergodic theory. He is known for establishing the University of Chicago's "Zimmer Program," which involves understanding of symmetry and the relationship to of geometry and topology to certain algebraic structures.

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"If you look at this tool, which is a kind of multiplication table, in spite of various views to the contrary, I do believe that the kind of basis of understanding that you get from actual drill and mastery [of times tables] is an important thing .... One of the beauties of the structure of mathematics is that it becomes multi-layered so that at any moment you create a degree of mastery that gives you a capacity to now think about the next thing, and if you never establish foundations, if you never establish mastery at a foundational level, it inhibits your capacity to think about the next things .... I think people do need to be able to do a certain amount of calculation themselves, not because it may be the case that their calculator is missing, but because it is something that actually helps you think."

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"When one thinks about what mathematics is actually about at a fundamental level, it really does go back to thinking about counting ... about measurement, to thinking about shape, and understanding those in increasingly sophisticated ways .... The way that they connect other sorts of phenomena ... that you see today in mathematics you see reflected in this object right here."

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"Living without zero is difficult, but obviously, people were able to do a great deal without it, which is really kind of impressive. After all, I mean, this tool [the cylinder] was used at a time when people were making significant calculations, they were solving significant problems, they didn't have zero and yet they were still able to do it."

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"Mathematics evolves out of its own internal logic and the types of things that people can understand ... it also evolves out of the demand for its use. It is the language for being precise and quantifying certain types of phenomena, and as phenomena evolve that you need to understand in new ways, you're going to have to develop a mathematics that accommodates that and solves that problem. So you have this dual drive for the evolution of mathematics: this internal logic, and the external demands."

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"Just looking at the kind of way that cultures evolve, societies evolve, if you imagine all that happening without mathematics, you would have a totally and completely different world, and a different capability of giving people a secure life, a healthy life, a rich life."



## Mathematics in Ancient Babylonia

The Old Babylonian period (ca. 2000–1600 BC) was a time of intense scribal activity for which we know the most about scribal education. Much of what we know today about Mesopotamian mathematics comes from the cuneiform tools and textbooks that instructors used to teach their students, and the provision of practical mathematical and metrological skills necessary for scribal bureaucracy. Mathematicians worked creatively using simple algebraic procedures to solve practical problems, such as calculating the area of a field, the volume of a vessel, or interest. In addition to multiplication tables, other mathematical tablets include practical problems involving geometry, algebra, or trigonometry. One problem might be, “How much grain is necessary to sow a field of  $x$  size, given furrows separated by  $y$  distance?” Mesopotamian mathematics used the sexagesimal system of notation, with calculations based on the number 60 rather than the base-10 system that we use today. The concept or notation of zero was not known in ancient Mesopotamia. It was established much later by mathematicians of the early Islamic world.

### Further Reading

Marvin A. Powell, “Metrology and Mathematics in Ancient Mesopotamia,” in *Civilizations of the Ancient Near East*, ed. Jack M. Sasson et al. (New York: Charles Scribner’s Sons, 1995), vol. 3, pp. 1941–57.



D. 20534



### Mathematical Tables Inscribed on a Cylinder

Clay

Old Babylonian period, ca. 2000–1600 BC

Iraq, unknown provenience

Purchased in Iraq, 1930

13.9 x (diameter) 11.2 cm

OIM A7897

This object is one of the earliest known collections of mathematical tables written on a cylinder. It was suspended or held upright with a cord or on a post that passed through the hole at the center. The scribe could spin the cylinder to the column he wanted to read. The text begins with a table of reciprocals and continues with thirty-seven separate multiplication tables. Originally an important and valuable reference tool for its owner, it is now significantly damaged, and less than half its original height. Only twelve of its original thirteen columns are preserved to varying degrees. Cylinders or prisms of the kind would presumably represent an exercise for an advanced scribal student, demonstrating competence and memorization in multiplication, reciprocals, and squares.

#### Published

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Otto Neugebauer and Abraham Sachs, *Mathematical Cuneiform Texts*, American Oriental Series 29 (New Haven: American Oriental Society and the American Schools of Oriental Research, 1945), pp. 24–33.



**“It’s super gratifying to grow  
your own food, harvest it, and cook  
it for your family. To me, that’s being civilized.”**

**Erika Allen**  
Farmer | Chicago, Illinois

Clay Sickles  
Iran | ca. 3400–3100 BC  
OIM A33006

## Farmer

Erika Allen is the Chicago and National Projects director for Growing Power, a not-for-profit organization that works with people and the environments in which they live and work to develop healthy, affordable, and sustainable food systems controlled and operated by the community. She grew up on a farm in Oak Creek, Wisconsin, working in the fields with her father, Growing Power founder Will Allen.

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“I know that it is a sickle, although when I look at it, I think that I would use it for making rows. And it’s about five to seven thousand years old? It is part of our transition as a people, as human evolution began to have domestic animals and agriculture, so this object is a powerful symbol of building our civilization. Some of the tools that we use today are similar – but they’re not made out of clay or stone.”

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“Civilization has always been marked by our ability to feed ourselves and maintain our communities, and we’ve lost that. So when you begin to unravel a problem, you go back to the basics. When you are growing food, it’s an act, it’s a hands-on process, it’s supposed to involve people. It builds an intimate relationship with the earth. I think that, spiritually, people are craving that, while physically, we need that contact and we need those nutrients. Feeding yourself, feeding your family, and feeding your community makes a big difference.”

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“I direct nine farms across Chicago, about thirteen acres total. In cities, you can’t not deal with people, with your neighbors. I think most urban farmers will say that they are invested in their community; they are invested within the context of the people that live around their farm. You should, if you are a good operator, be engaging the community on a deep level. If you’re truly building a community food-system project, you are the community.”

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“I think in my lifetime, and certainly in my son’s, water rights are going to be like salt was back in the day, more valuable than gold, because there is no life without water. The aquaponics systems that we use are very ancient forms of technology. We recycle fish waste to fertilize our crops, and the crops clean the water for the fish. It’s not anything new; it’s really very simple, and these things were used in the ancient world.”

## Farming in Ancient Mesopotamia

From around 10,000 BC, the domestication of plants began to change people's lives and the course of human history. There was a major shift from hunting to a more sedentary village lifestyle that allowed people to tend their crops and livestock year round. In northern Mesopotamia, enough rain falls to grow crops without irrigation. In southern Mesopotamia, the land between the Euphrates and Tigris rivers was exceptionally fertile, but rainfall was too low. Early irrigation began there around 5500 BC, permitting reliable harvests and crop surpluses. Villages and populations grew in size, leading to a huge growth in urban settlement by around 3400 BC. Objects from the site in the Susiana Plain in southwest Iran, where this clay sickle was found, exhibit strong similarities to those from southern Mesopotamia at this time. The mass production of these clay sickles, as well as beveled-rim bowls, which may have been used for baking bread, attests to a high degree of social organization in the production and redistribution of food.

### Further Reading

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Susan Pollock, *Ancient Mesopotamia: The Eden That Never Was* (Cambridge: Cambridge University Press, 1999), especially chapter 2, "Geographic Setting and Environment," and chapter 3, "Settlement Patterns."

P. R. S. Moorey, *Ancient Mesopotamian Materials and Industries* (Winona Lake: Eisenbrauns, 1994), pp. 175–76.



**Sickle**

Baked clay

Protoliterate period, ca. 3400–3100 BC

Iran, Chogha Mish

Excavated by the Oriental Institute, 1965–1966

L: 24 cm

OIM A33006

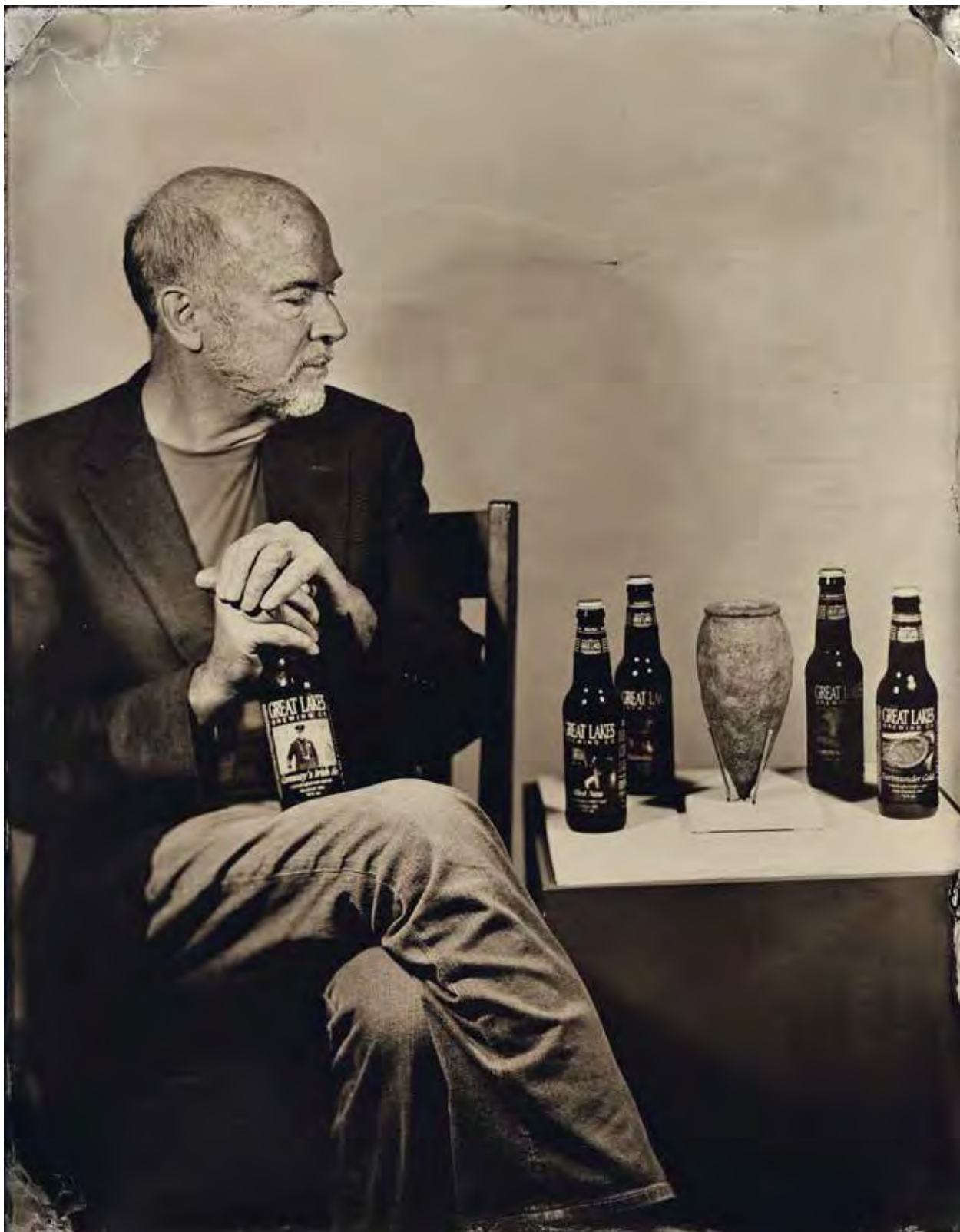
Clay sickles were common reaping and multi-purpose cutting tools in southern Mesopotamia between about 5000 and 3000 BC, appearing in southwestern Iran by around 3400 BC. The earliest examples were found alongside flint sickle blades at Eridu in southern Iraq. Clay sickles became increasingly common, probably because it was easier to make them from molds in a single piece than to find and work flint. The sandy clay, fired to a high temperature, produced a sharp and abrasive cutting edge. It is commonly assumed that cereals were harvested with these tools, although microscopic analysis of examples found in Iraq suggest they were also used for cutting reeds. Clay sickles went out of use around 2900 BC, probably as copper tools became more common.

**Published**


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Pinhas Delougaz, Helene Kantor, and Abbas Alizadeh, *Chogha Mish: The First Five Seasons of Excavations, 1961–1971*. 2 vols. Oriental Institute Publications 101 (Chicago: The Oriental Institute, 1996), vol. 1, p. 106, no. 23, CHM III-361.





**“The thing that just fascinates me is [that ancient brewers] were sharp, and they knew what they were doing, and they had been doing it for thousands of years.”**

**Patrick Conway**  
Brewer | Cleveland, Ohio

Beer Jar  
Egypt | ca. 3800–3300 BC  
OIM E5330

## Brewer

Patrick Conway is co-owner (with his brother Dan) of Great Lakes Brewing Company, in Cleveland, Ohio, a brewery known for high-quality lagers and ales. In 2013 the company will celebrate the twenty-fifth anniversary of its founding. Patrick is working with Oriental Institute scholars to re-create beer from ancient Sumer.

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“I would think that the beer served in this vessel was probably mostly flat, slightly cool, unfiltered, and it may have had residual amounts of husks from wheat or barley in it. The flavor may have been different depending on the different herbs and spices that were employed, such as dates, raisins, grapes, or figs; they had so many different raw materials at their fingertips.”

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“These people were observant, and they knew what was going on. People were brewing for 10,000 years, 5,000 years before the Sumerians developed the written language, so all that information was passed down orally. And if this was the beverage of choice — being the only drinkable product — it had to have been good. I’ll bet they really had these recipes and systems down, though we don’t have a clear written record of them. And that’s why I hope that we can keep going with our project [to re-create ancient beer], because I’m fascinated to know. In fact, I can see us continually tweaking it for years to come, because there were so many variables, and so many choices of raw materials. It wasn’t just wheat and barley, it was pomegranate, figs, dates, and honey, so the possibilities were endless.”

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“The process today is similar to the process from 5,000 years ago, and it’s articulated poetically in the Hymn to Ninkasi — all the steps are there. There’s no reference to a recipe (or a formula, as we say in the industry), but they did malt their wheat and their barley, and they mashed, which means mixing barley with water to convert starches to sugars; they syphoned off that sugary liquid (wort) and added other ingredients to it to add flavor and promote fermentation. So their steps were very similar to ours, but they just didn’t have the sophisticated equipment to do what we do. ... We can create more clean and consistent beer.”

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“The other thing that’s compelling — since we are brewers, not archaeologists — is the synergistic energy that’s going on behind the scenes with GLBC and the Oriental Institute. It makes me happy to know that the people who may be the most excited about this are the archaeologists. They want to know what this beer tasted like, and we’re ready to stand up and in a collaborative way actualize that dream. Besides our brewers, I think our staff and our customers will embrace it as well.”

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“We think about the past differently because of [our project to re-create ancient beer]. In fact, the deeper we go, the more respect we have for this culture, and the fact that they were able to make beer without having the understanding we do of yeast, and that they were able to do it over and over and have it become the beverage of choice for an entire culture, is impressive. ... To think civilization was born on the alluvial plains of the Tigris and Euphrates Rivers, and that in rather inhospitable and arid terrain, we see not just brewing, but also the beginnings of written language, law, mathematics, and astrology, is remarkable.”

## Brewing Beer in Ancient Egypt and Mesopotamia

Beer was produced and consumed on a massive scale in Egypt and Mesopotamia. Enjoyed by rich and poor alike, it was a dietary staple that provided nourishment and a safe alternative to drinking water of dubious quality. It was also a source of pleasure and a reason for celebration and song. Beer was served at lavish royal feasts and presented to the gods in temple rituals; it was doled out as rations for workers; and it was consumed in local taverns, inns, and private homes. Palaces and temples maintained their own breweries staffed by brewers, maltsters, and other specialists.

In Egypt, brewers and breweries are depicted in tomb reliefs and wooden models, and archaeological remains of breweries date back as early as the fourth millennium BC. Beer was such a staple of the diet that the standard funerary offering formula calls upon the king and the gods to provide the deceased with “bread, beer, oxen, and fowl.” Analysis of beer remains has failed to prove conclusively that it was flavored with extracts derived from plants, although it has been suggested (but not proven) that dates were added to beer to boost the sugar content. Hops were not known in ancient Egypt.

Complementing this evidence, cuneiform documents from Mesopotamia offer insights into the details of the ancient brewing process and into the equipment and the complex technical vocabulary employed by brewers.

### Further Reading

Delwen Samuel, “Brewing and Baking,” in *Ancient Egyptian Materials and Technology*, Paul T. Nicholson and Ian Shaw, eds. (Cambridge: Cambridge University Press, 2000), pp. 547–57.

Michael M. Homan, “Beer and Its Drinkers: An Ancient Near Eastern Love Story,” *Near Eastern Archaeology* 67 (2004), p. 2.

Kathleen Mineck, “Beer Brewing in Ancient Mesopotamia,” *Oriental Institute News & Notes* 201 (Spring 2009), pp. 8–10.



D. 20536

**Beer Jar**

Baked clay

Naqada II period, ca. 3800–3300 BC

Egypt, Abadiya, grave B 217

Gift of the Egypt Exploration Fund, 1898–1899

19.7 x 9.3 cm

OIM E5330

This vessel is the ancient Egyptian equivalent of a beer bottle. Huge numbers of these roughly made jars are associated with the rise of large-scale brewing in the fourth millennium BC. These jars were rapidly modeled by hand, and impressions made by the fingers of the potter can be seen. The rough, porous fabric promoted condensation and evaporation, which helped cool the liquid within. These pointed jars would have been held upright by a ring stand, or perhaps by inserting it into the sand. Egyptian beer was made of either barley or emmer wheat. Breweries were usually part of bakeries, because the bread-making process provided the yeast necessary for the beer's fermentation. Scenes of brewing from ancient Egypt show that beer was made in large vats and then transferred to smaller jars that were sealed by placing a saucer over the mouth of the vessel; the saucer and neck of the jar were then sealed with a large cone-shaped mud seal.

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**Published**

Emily Teeter, ed., *Before the Pyramids: The Origins of Egyptian Civilization*, Oriental Institute Museum Publications 33 (Chicago: The Oriental Institute, 2011), p. 173, cat. no. 27.





**"I'm getting on a horse ... the concept is the same, so I am living part of that history at this moment."**

**Ron Vasser**  
Cowboy | Chicago, Illinois

Horse Bit  
Iran | 550-330 BC  
OIM A22945

## Cowboy

Ron Vasser is a cowboy who has been involved with horses on the competitive level for over twenty years. He has been associated with riding groups like the Broken Arrow Horseback Riding Club, which organizes the High Noon ride and picnic in Chicago's Washington Park each summer. Ron is a captain in the Melrose Park Mounted Operations Division, and is certified in mounted search-and-rescue operations. His beautiful and very fast horse, Sunburn, is an Arabian mixed with Tennessee Walker. Ron is an award-winning former television producer and director.

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"Looking at a piece like this reinforces my understanding that I am doing something that people did thousands of years ago ... the bit I use may be a little flashier, or the metal may be different, but the concept is the same, so I am living part of that history at this moment."

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"First thing you want to know when you're on a horse is, can I make him stop? You want to know where the brakes are, you want to know where the steering is. After that, you're golden. Having that bit is a way of controlling the horse, getting him to stop, but it depends on what kind of training your horse has had. You may use that with the reins attached to it to get the horse to turn to the left or to the right."

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"Any person who is into horses can look at that and say, 'Oh, that's a bit' — a bizarre-looking bit because of how it's designed, but basically they could see that's probably a snaffle bit ... it appears to have some ridges ... something that would give the horse rider a little bit more control in the horse's mouth."

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"Horses were used, back in the old days, for more than just riding. They were used to get messages across. We remember the history of the wild old west, the Pony Express, and using the horse to get the mail across, and having riders having different posts to meet, and to keep that mail moving you've got to get your speed up, and it's a dangerous situation because you could encounter hostile activities along the way."

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"Watching the cowboy movies, wanting to be a cowboy, and loving horses, and I got a chance to ride a little bit, and just fell in love with it. Horses have a magic to them, they're very therapeutic; they're gentle. My horse and I, we have a 'Yes' relationship, and that relationship is this: Will I take care of you? Yes. Will I make sure no one's ever going to hurt you? Yes. Will I bring people around you that are only going to be good to you? Yes. For him to me: Will I let you ride me? Yes. Will I always look after you? Yes. Will I let other people be around me and be as good as I can? Yes."



## Horses and the Achaemenid Empire

Horses appear in ancient Mesopotamian textual sources by around 2100 BC, and the earliest images of people riding horses appear in the Near East around 1800 BC. Horse-drawn chariots were introduced to Egypt via the Levant soon after, during the Hyksos era, and were highly prized status symbols. By the first millennium BC, horses were more commonly used for cavalry by the Assyrians, and subsequently by the Medes and Persians. Classical sources mention that the Achaemenid Persians (550–330 BC) developed body armor for their horses and riders. Also identified with the Persians is the Nisaeen breed of horse, which are characterized by their obedience and small heads. Horses were important gifts or tribute to the Persian king, as shown in the reliefs at the Apadana (audience hall) at Persepolis.

Horses helped communicate messages over great distances. The Royal Road from Sardis to Susa (1,600 miles) had way stations each one day's ride apart. Relays of horses and men could shorten to one or two weeks a journey that on foot would take three months, permitting messages to reach the Achaemenid king quickly, a little like the Pony Express.

### Further Reading

John Curtis and Nigel Tallis, *The Horse: From Arabia to Royal Ascot* (London: British Museum Press, 2012).

Ann Hyland, *The Horse in the Ancient World* (Westport: Praeger, 2003).

Robert Drews, *Early Riders: The Beginnings of Mounted Warfare in Asia and Europe* (New York: Routledge, 2004).



**Horse Bit**

Bronze

Achaemenid period, ca. 550–330 BC

Iran, Persepolis

Excavated by the Oriental Institute, 1937–1938

22.4 x 2.3 cm

OIM A22945

This horse bit is one of several found in the so-called Treasury and Garrison Quarters at the royal city of Persepolis. It has bar-shaped cheek pieces and a flexible snaffle (jointed) bit made in two sections linked in the center. Double loops on the bars were used to attach the headstall straps. The larger rings at the ends of the bit would have been attached to the reins. Although the mouthpiece is studded with knobs, it may not have been harmful to the horse. It was probably designed to result in a strong reaction in the event of a sudden manoeuvre in battle. Horse harness fittings have occasionally been found in human burials of the first millennium BC in western Iran (Luristan) and northern Syria, and may have been associated with the burials of riders or keepers of horses.

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**Published**

Erich F. Schmidt, *Persepolis 2: Contents of the Treasury and Other Discoveries*, Oriental Institute Publications 69 (Chicago: University of Chicago Press, 1957), p. 100, pl. 78:4.



**“It was when I was twelve  
or thirteen that I really knew  
I wanted to carve stone into sculpture.”**

**Walter Arnold**  
Stone Carver | Elgin, Illinois

Chisels  
Egypt | ca. 1450–1323 BC  
OIM E16522, E16963

Mallet  
Egypt | ca. 2494–2181 BC  
OIM E2049

## Stone Carver

Walter Arnold has been a sculptor and stone carver all his life. As a teenager, he was inspired by the gargoyles on buildings at the University of Chicago and by being told that the art of stone carving was lost. Eventually, he traveled to Italy, where he trained with traditional carvers. Among the projects he has worked on are the National Cathedral in Washington, D.C., and the pizza- and hamburger-eating gargoyles on the facade of Medici Restaurant in Chicago.

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“Tools haven’t changed that much. Carbide-tipped steel came in in the mid-twentieth century, and there’s now some computer-run machining for rough out, but it really comes down to the blade of the chisel cutting against the stone to do the work right, and that part has changed very little in concept.”

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“Looking at the Egyptian tools, they used softer metal. I probably spend an hour a year sharpening chisels. In the granite shops a hundred years ago, they would have one blacksmith for every three carvers, because you would wear out tools that quickly. With these soft tools that [the Egyptians] used, they probably had to spend a lot more time reshaping and sharpening them, and also they would have had to do a lot more with abrasive sanding, polishing, grinding, rather than chiseling just because the chisel wouldn’t hold up that well. So the change in metallurgy is one of the big differences in how they worked and how I work.”

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“There’s not a lot of difference in the wooden mallets. One thing you’ll notice on mine is that I’ve worked all the way around it. The Egyptian one is only worn on one side, because the wood has knots and flaws in it, so there was only one workable face, probably because it was much harder for them to get ahold of good wood. You want a wood that’s very hard, that’s very dense, very heavy, and they probably had to import it. We have much greater accessibility to unusual materials and better choice of materials to use for tools.”

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“This chisel has a stamped or engraved mark of the king on it. A lot of my tools have a name stamped in them, and those would be either the name of the carver who owned them, or of the carving shop or company that owned the tools. So it’s something interesting and similar still going on – marking your tools. Tools were very valuable, they were hand forged, you needed the right steel, you needed the right metal, you needed a good smith or metal worker to forge them, and so they were highly valued and you didn’t want them walking off, so you wanted to mark and label the ownership on them.”

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“I think the one change in both my job, my profession, and in society since Egyptian times is our view of time. A hundred years ago, in the studios in Italy, the owner of the studio would say to the carvers, ‘I give you the work, God gives you the time.’ It was a concept that you spend as much time as it takes to do it right, and we don’t really have that luxury or attitude in any field now; it’s all ‘Time is money.’”

## Stone Carving in Ancient Egypt

By at least 4000 BC, artists in Egypt were carving elaborate vessels and cosmetic palettes of granite, basalt, and other difficult-to-work stones. By 1500 BC, relief carving on walls was done by teams of men whose titles reflected their specialty: outline draftsmen who put a proportional grid and the initial sketch of the design on the wall, sculptors who did the carving, finishers who smoothed the wall, and painters who added the final color and detail. Artisans who carved statues were similarly specialized, being organized into quarrymen who roughed out the statue, sculptors who did the carving (subdivided into those who worked on hard stone and those who worked on softer materials), and men who finished the surface of the statue. Many artisans worked in palace workshops or on state-sponsored projects such as building tombs or carving statuary for the royal family. Craftsmen also undertook private commissions.

### Further Reading

Dieter Arnold, *Building in Egypt: Egyptian Stone Masonry* (Oxford: Oxford University Press, 1991), pp. 257–67.

John A. Wilson, “The Artist in the Egyptian Old Kingdom,” *Journal of Near Eastern Studies* 6/4 (1947), pp. 231–49.



D. 20538



D. 20539

### Mallet

Wood

Old Kingdom, Dynasties 5–6, ca. 2494–2181 BC

Egypt, Deshasheh, tomb 86

Gift of the Egypt Exploration Fund, 1896–1897

L: 35.3 cm

OIM E2049

### Chisels

Copper alloy

New Kingdom, Dynasty 18,  
ca. 1450 BC

Egypt, unknown provenience

Purchased in Egypt, 1935

L: 17.5 cm

OIM E16963

Copper alloy, wood

New Kingdom, Dynasty 18,  
ca. 1323 BC

Egypt, Luxor, Medinet Habu

L: 11.0 cm

OIM E16522

The basic tools of the stone carver were the wooden mallet and various chisels, saws, and drills. For most of Egypt's history, cutting tools were of flint or copper. By about 1000 BC, bronze was employed. Iron was not commonly used until the sixth century BC. The small chisel with the wood handle is a miniature tool that was recovered from a foundation deposit at the temple of King Aye, where it had been placed to identify and commemorate the king who commissioned the structure. The longer chisel, for cutting mortises in wood, is engraved with the name of King Thutmose III. It presumably also came from a foundation deposit.

### Published

E2049: W. M. F. Petrie, *Deshasheh*, Fifteenth Memoir of the Egypt Exploration Fund (London: The Egypt Exploration Fund, 1898), p. 33.

E16522: Uvo Hölscher, *The Excavation of Medinet Habu 2: The Temples of the Eighteenth Dynasty*, Oriental Institute Publications 41 (Chicago: University of Chicago Press, 1939), pl. 53 B1b.

E16963: *Previously unpublished*





**Mindy Segal**  
Pastry Chef | Chicago, Illinois

Statue of a Confectioner  
Egypt | ca. 2500 BC  
OIM E14054

**“I explored all the different avenues of cooking and baking and found a natural love and instinct for baking pastries and breads.”**

## Pastry Chef

Mindy Segal is a James Beard Award–winning pastry chef and baker. She is the proprietor of Mindy’s HotChocolate Restaurant and Dessert Bar in Chicago.

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“I can only imagine how baking was done back then. I would probably be afraid to use the practices that they used back then, considering the fact that nowadays sanitation is a very huge part of baking and cooking. But I think that some of our techniques were not that far apart, which would maybe be cool to go back in time and find out.”

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“I think that my profession over the years has definitely evolved and become specialized. I think that because the artisan movement has really changed and become very important over the last few years, people are branching off into different areas of my industry. So you’ll get more people that are making chocolate, more people that are just making bread, more people that are just making candies, more people that are making cakes, and more people that are making just plated desserts in a restaurant, and I can even break that down even more – there’s cupcake people, there’s cookie people, there’s doughnut people, so I think that it has a lot to do with this whole movement of artisans, the craft movement, where people who are specializing in one thing and one thing only, and I think it’s great, I love it.”

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“I think that maybe 5,000 years ago they figured it out, but the idea of what a sweet bread was then and what a sweet bread is now are probably two different things. It probably had some sort of sweet element, but it probably wasn’t the same idea, which is kind of interesting to see how it has evolved over time.”

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“Ironically enough, I went to the store the other day and I bought a bunch of dates because I want to make a date bread for my bakery, and that’s something I’m actually working on, so it’s ironic [that the Egyptians sweetened bread with dates].”

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“It’s kind of amazing and intimidating at the same time to be sitting here with someone who does what I do, but so long ago, so I think that it – it makes you think ...”

## Baking in Ancient Egypt

In about 3200 BC, industrial-scale bakeries appeared in Egypt. Bakers, both men and women, were known as *kefnw* in ancient Egyptian. By about 2500 BC, the title *bener* “baker of sweet breads” appears, suggesting that this skill had become its own specialty. The type of bread made by confectioners was probably sweetened with dates, because the title *bener* is derived from the ancient word for date, and the sweet loaves were called *beneret*. Baking, like so many other professions in ancient Egypt, was hierarchical, and workers were able to advance to supervisory and administrative positions. Several different titles that denote levels of confectioners are known, from the simple *bener* to the *khrep benet* “controller” or “administrator of bakers,” to the highest level: *imy-r benet* “overseer of bakers.”

### Further Reading

Delwen Samuel, “Brewing and Baking,” in *Ancient Egyptian Materials and Technology*, Paul T. Nicholson and Ian Shaw, eds. (Cambridge: Cambridge University Press, 2000), pp. 557–70.

Hilary Wilson, *Egyptian Food and Drink* (Shire: Princes Risborough, 1988), pp. 11–19.



D. 20540

### Statue of a Confectioner

Granite

Old Kingdom, late Dynasty 4–early Dynasty 5,  
ca. 2500 BC

Egypt, unknown provenience

Purchased in London, 1933

H: 45.5 cm

OIM E14054

The faintly incised inscription by the feet of this statue identifies this man as the “confectioner” Tchenenet. Another monument probably belonging to the same man refers to him as the “overseer of confectioners.” His advanced rank is not surprising, for the granite that was used to make this statue would have been very expensive, and it is unlikely that an ordinary baker would have had the resources to commission such a monument. It was made for his funerary cult, where it would serve as the recipient of offerings that were thought to sustain the soul of the deceased.

### Published

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David Silverman, “An Old Kingdom Statue in the Oriental Institute Museum,” *Journal of Near Eastern Studies* 32 (1973), pp. 466–76.

Emily Teeter, *Ancient Egypt: Treasures from the Collection of the Oriental Institute Museum*, Oriental Institute Museum Publications 23 (Chicago: The Oriental Institute, 2003), pp. 18–19, cat. no. 5.



**“This is my first exposure to these artifacts. I find them intriguing. It looks to me like these are the precursors of accounting.”**

**Norman Bobins**  
Banker | Chicago, Illinois

Sealed “Token Balls”  
Iran | ca. 3400–3100 BC  
OIM A64606, A32567

## Banker

Norman (Norm) Bobins is the retired chairman of the board, president, and CEO of the LaSalle National Bank. His forty-year banking career started with the American National Bank and Trust Company in 1967. In 1981, he joined Exchange National Bank, which was acquired by LaSalle Bank. He is now chairman of Norman Bobins Consulting, LLC (NBC), a private financial-consulting company. He also serves as non-executive chairman of The PrivateBank and Trust Company and non-executive chairman of the board of Transco, Inc.

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“It is fascinating how tracking of events so many years in the past evolved.”

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“I think it is exciting to see the roots of accounting. This is the first time I’ve really understood how people kept track of animals or of bushels of grain, something of course that became much more important and prevalent in the nineteenth and twentieth centuries.”

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“When you look at these artifacts they seem to suggest they are the ancient version of the modern-day ledger — a way of keeping track of how many things you have, who you gave them to, what you got for them, when you think you’ll get them back or payment for them.”

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“These pieces of antiquity suggest the concept of a sealed document — something that is protected, can’t be changed and can’t be forged. This is a very sophisticated concept. I certainly had no idea that it went so far back in history.”

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“I see these as the ancient answer to cash bags. We put money into bags and seal them with a clamp. They can only be opened by breaking the seal. I think there’s a lot of similarity there. If the seal is broken, you know that the integrity of whatever was designed to be within has been violated. I think that unto itself is a key component of what we’re discussing here; and why it is such an interesting discovery, particularly so far back into history.”



## Accounting and “Banking” in Early Mesopotamia

Banks as we know them today did not exist in ancient Mesopotamia, but activities associated with banking, including accounting, and safeguarding of wealth, loans, and interest, are all features found in ancient Mesopotamia. The clay envelopes, also known as “token balls,” featured here date from the time of the earliest cities, just before the earliest writing emerged. They are thought to be administrative tools for recording a transaction of items from one party to another in a way that could not be tampered with.

In early Mesopotamia, temples and palaces could serve as repositories of wealth in the form of finished goods or materials, and agricultural produce could be stored and redistributed as food rations for workers. In the early second millennium BC, temples and private merchants provided loans of weighed silver as investments for long-distance trading ventures, with the expectation of returns if the ventures were successful. Such documents were written on clay tablets and sealed within clay envelopes, often with marks or seal impressions made by witnesses.

### Further Reading

J. Nicholas Postgate, *Early Mesopotamia: Society and Economy at the Dawn of History* (London: Routledge, 1992), especially chapter 10, “Domestic Economy,” and chapter 11, “Foreign Trade.”

Denise Schmand-Besserat, *How Writing Came About* (Austin: University of Texas Press, 1997).



D. 20541



D. 20542

**“Token Balls”**

Clay

Protoliterate period, 3400–3100 BC

Iran, Chogha Mish

Excavated by the Oriental Institute, 1963, 1965–66

Both ca. 6.2 cm in diameter

OIM A32567, A64606 (broken, with exposed tokens)

These clay envelopes, or “token balls,” date from the protoliterate period in southwestern Iran, corresponding with the Late Uruk period in southern Iraq, when the two regions had close connections. The hollow clay balls are best described as envelopes containing multiple clay “tokens” in a variety of discoid, spheroid, and other forms. They may represent quantities of commodities such as measures of grain, or livestock such as sheep and goats. One is broken, exposing the tokens originally enclosed within it. The surfaces of token balls were impressed with one or more cylinder seals rolled across the semi-soft clay. The balls were a tamper-proof account of a transaction, which could be checked by either party if there was a dispute. From around 3100 BC, token balls were superseded by numerical and pictographic tablets, which represent the earliest known writing. The token balls signify the role of a central authority in recording such transactions, but little is known about the individuals or institutions once managing these specialized administrative tasks.

**Published**

Pinhas Delougaz, Helene Kantor, and Abbas Alizadeh, *Chogha Mish: The First Five Seasons of Excavations, 1961–1971*. 2 vols. Oriental Institute Publications 101 (Chicago: The Oriental Institute, 1996), pp. 120–26, pl. 34:M (OIM A32567 = CHM II-349) and pl. 39:C (OIM A64606 = CHM III-776).

Christopher Woods, “Early Writing and Administrative Practice in the Ancient Near East: New Technology and the Study of Clay Envelopes from Choga Mish,” *Oriental Institute News & Notes* 215 (Fall 2012), pp. 3–8.



**Charles Dyrkacz**

Clock Maker | Chicago, Illinois

Water Clock  
Egypt | 284-246 BC  
OIM E16875

**“I’m by myself,  
I answer to nobody,  
I work at my own pace,  
and I’m very comfortable.”**

## Clock Maker

Charles Dyrkacz is a fourth-generation watch and clock maker, and the owner of Antique Watch & Clock World in Chicago. He started working on clocks when he was about nine years old, helping his grandfather in the garage. He was later trained by his father and his aunt.

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“[Clock making] hasn’t changed. It’s always been the standard repair procedures — fix it, get it timed, get it set up, that’s it — and get it back to the customer. There is basically no change. There are modernistic movements — they have changed, but the majority of clock and watch repair is all the same, it’s still work and repair.”

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“The more I study it [the water clock], the more I’m understanding what needs to be completed on it to make it work. It’s basically just a stone bucket without a hole in the bottom — which was supposed to have a hole .... Basically just to get it running all you have to do is raise it up, drill a hole in the bottom, fill it up with water and let it drip.”

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“We went from real wristwatches and clocks to quartz operating with batteries that burn out periodically. And now we have cell phones. But I’ve lived long enough to see changes in life, and maybe the cell phones are going and we won’t have to tell time by cell phone anymore. It’ll be a radial blip in our brain or something.”

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“I have no idea how long it took to get just this particular clock type to where it’s at now. On a regular clock or a pocket watch or a wristwatch at the store, people will drop it off, and they expect it back in a week or two. I’ve got clocks that I’m still making parts on four months down the road, so it’s all up to the person who has it.”

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“I think this clock wasn’t accurate because it didn’t define minutes. It was supposedly defined by hours, but that’s neither here nor there, most likely it was defined by start and ending of the day, period. Twelve hours in, twelve hours out. You know, that’s the only thing I can see in the clock. It was a lot of work for nothing, back then, but then again it was probably the owner’s symbol of leadership, or whatever he decided to make it.”

## Water Clocks in Ancient Egypt

The Egyptians recorded time for state, economic, agricultural, and sacred purposes. Time was measured by observation of the sun and stars, and also with measuring devices like water clocks — vessels that equated the flow of a volume of water with a specific length of time — much as an hourglass measures time with sand. There were two different types of water clock in ancient Egypt. Flowerpot-shaped outflow clocks, like the one illustrated below, measured water as it drained from the vessel at a controlled rate. The other type was a column-shaped container that gradually filled at a specific rate as time passed. The earliest reference to a water clock dates to around 1526 BC. It occurs in a biographical text of the nobleman Amunemhet, who claimed that he made one for King Amunhotep I. The oldest surviving example (now in Cairo) is from Karnak and dates to the reign of Amunhotep III, some 200 years later. Water clocks continued to be used in the Far East into recent times.

### Further Reading

A. J. Turner, *The Time Museum: Catalogue of the Collection*, Vol. 1: *Time Measuring Instruments*, Part 3: *Water Clocks, Sand-glasses, Fire Clocks* (Rockford: The Time Museum, 1984).

Brian Cotterell and Johan Kamminga, *Mechanics of Pre-industrial Technology* (Cambridge: Cambridge University Press, 1990), pp. 59–64.

Robert W. Sloley, "Ancient Clepsydrae," *Ancient Egypt* 1924 (1924), pp. 43–50.



D. 20543



### Water Clock

Limestone, carnelian beads

Ptolemaic period, reign of Ptolemy II, 284–246 BC

Egypt, unknown provenience

Purchased in Egypt, 1933

52.5 x 67.0 cm

OIM E16875

The exterior of this water clock is decorated with twelve panels, each representing gods associated with a month of the calendar. An ape — the representation of the god Thoth, the keeper of time — sits at the front. The interior of the vessel is drilled with holes against which the water level was measured. These holes are arranged in twelve vertical rows, one for each month, separated by large *ankh* (life) or *djed* (stability) hieroglyphs. Nine of the rows have twelve holes; the remaining four have thirteen, a pattern also seen on the Karnak water clock, now in Cairo. The different calibrations were probably necessary because the length of the night, and hence each hour, was longer in the winter months than in the summer. The interior dimensions of the Chicago water clock are proportionally the same as the example in Cairo. This water clock lacks any sort of drain hole, suggesting that it was never finished. This may also explain why the exterior, which was carefully smoothed, presumably to receive inscriptions and decoration seen on other water clocks, is decorated only on its upper half.

### Published

Jan Quaegebeur, "Documents Concerning a Cult of Arsinoe Philadelphos at Memphis," *Journal of Near Eastern Studies* 39 (1971), pp. 259–62, pls. 2–3.

Emily Teeter, *Ancient Egypt: Treasures from the Collection of the Oriental Institute Museum*, Oriental Institute Museum Publications 23 (Chicago: The Oriental Institute, 2003), pp. 107–08, cat. no. 55.





**“When it comes to makeup  
— if it was back then or now —  
women just want to look beautiful.”**

**Melissa Wilson**  
Makeup Artist | Glendale Heights, Illinois

Cosmetic Palette  
Nubia | ca. 3800–3000 BC  
OIM E23673

## Makeup Artist

Melissa Wilson studied at the Media Make Up Academy in Chicago and is currently a freelance makeup artist for Bobbi Brown cosmetics. She is “following her dreams” as she builds up her portfolio with photographers and agency-represented models to achieve her current goal of being represented by an agency.

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“[People wore makeup in ancient times] for the same reason lots of people still want to wear makeup — they feel that it helps their appearance. Females wear makeup to attract the male figure, and I think it’s the same reason [as in the past]. But it’s also for themselves — when women wake up and they apply makeup, it enhances and refreshes their appearance. It makes them feel much better, and makes them much more ready for the day ahead of them. It changes their persona.”

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“A lot of makeup artists use a metal palette, or even the kind that looks like a painter’s palette that you can put your thumb through. But my palette is the back of my hand, which a lot of artists use. I always say if the back of my hand isn’t dirty, I haven’t done a day’s worth of work, and I really do mean that — you’ll see yourself covered in all these colors and people look at you like, What did you do? Where did you come from?”

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“As much as this is a piece of history, I feel like my life is a piece of history, because for me to be able to see this, I think it’s really amazing being able to see something that is very much the same as what we use today, but completely different at the same time. It’s still very much the same — it’s just a matter of what we use today, and what we used yesterday.”

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“There still is green eyeliner out there, believe it or not. It may not be as bright as this, but I mean — that’s a look.”

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“Maybe not as intense as Cleopatra, but we still do the winged eye — I mean, that’s still a thing. And I do it sometimes just for fun. It’s just a look. Makeup on a face, that’s the great thing: It’s not permanent, so maybe today I’m doing a winged eye and tomorrow I’m not.”

## Cosmetics in Ancient Nubia and Egypt

Egyptian and Nubian cosmetic palettes stained with the remains of pigments dating to approximately 4000 BC document the early use of eyeliner and perhaps other cosmetics. The love for eyeliner is evident from early tombs (ca. 3800 BC) that were stocked with what must have been considered the bare essentials: vessels filled with food and drink and a cosmetic palette. Both men and women in Egypt used green or gray eyeliner made of malachite or galena and other cosmetics, including red ochre for lips and cheeks, white cerussite (lead carbonate) for the face, and henna for the nails. Eyeliner is thought to have been appreciated not only for its aesthetic value but also because the copper and lead content acted as an anti-bacterial agent to protect the eyes from infection.

### Further Reading

A. Lucas and J. R. Harris, *Ancient Egyptian Materials and Industries*. 4th ed. (London: Edward Arnold, 1962), pp. 80–85.

Robert J. Forbes, *Studies in Ancient Technology*. 2nd ed. (Leiden: E. J. Brill, 1965), vol. 3, pp. 1–22.



D. 20544

### Cosmetic Palette

Quartz, traces of malachite  
 A-Group, ca. 3800–3000 BC  
 Nubia, Qustul, tomb L17  
 17 x 8 cm  
 OIM E23673

This cosmetic palette was used to grind malachite (copper carbonate hydroxide) that was used as eyeliner. The green pigment still stains its surface. Malachite eyeliner was used from at least 4000 BC to about 2500 BC, when it was largely replaced by dark gray galena (lead sulfite). The ground pigment was mixed with water or gum to form a paste that was applied with the fingers or a small stick. The pigment on this palette has scratches in it made by such a stick or perhaps a small stiff brush. The choice of quartz rather than a common stone like sandstone suggests that this palette was a luxury possession that indicated the status of its owner. This example was excavated from an elite cemetery, where most of the palettes were of various colors of quartzite. This example has small feet to support it; these further distinguish it from other palettes, which are usually flat, oval pieces of stone.

### Published

Bruce B. Williams, *Excavations between Abu Simbel and the Sudan Frontier*, Part 1: *The A-Group Royal Cemetery at Qustul: Cemetery L*, Oriental Institute Nubian Expedition 3 (Chicago: The Oriental Institute, 1986), pp. 304, 307, pls. 44g, 45e, 46a.



**Kofi Nii**  
Taxi Driver | Chicago, Illinois

Wheels  
Iraq | ca. 705 BC  
OIM A11811, A11813

**“You can’t find a square block and put it on the car,  
it’s got to be a round wheel.”**



## Taxi Driver

Kofi Nii has been a taxi driver in Chicago since 1989. His cab is equipped with a very good sound system that features the music of reggae greats such as Bob Marley. A native of Ghana, he worked as a merchant seaman before settling in Chicago.

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“Those wheels date back to ... an age that I wasn’t even born, and they look very interesting. I know that in those days people had to have more stuffing for their ears because [the wheel is] metal, it will make some noise, a lot of noise .... It would wear out quick [on Chicago’s streets].”

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“Yeah, transporting. In those days, they were using the wheel to transport merchandise, you know, wheat, and something to go and sell; so it’s transportation, and right now that’s what I’m doing, transporting people, from point A to point B.”

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“Without the wheel there won’t be transporting, because you can’t find a square block and put it on the car; it’s got to be a round wheel .... Yeah I say amen to those who invented it because they helped a lot, because I can’t imagine a square brick going *pu-dum*. By being round it moves smoothly.”

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“[If I rode an ancient chariot] I know my bones will be creaking. Because for every bump I’m gonna feel it in my bones .... Yeah, and you’d be smelling the animals too .... You have to rest the animals too. If you go for quite a while, you have to rest the animals, so they can continue. Because if you keep riding them for too long, you might not be riding them anymore. They get tired too ...”

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“I guess that’s how they derived the ‘horsepower’ for the cars, from the horse pulling ... you know ... mechanical horsepower ... how many [horsepower] your car get? That’s how they know how fast your car can go ... one horse pulling a load goes slower than many horse pulling .... The car gets tired when it runs out of gas! When you run out of gas, the car is tired!”

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“I’m an ambassador too for the city of Chicago. Because when visitors come, I’m the first one to meet you at the airport, I mean, take them out of the airport, so every question they ask, I should be able to answer. In my cab, I’ve got a DVD player, I got a good stereo system in it, so I can play music, live recordings, or I can play CDs ... Bob Marley. Relaxed! A lot of times when I pick up customers ... I give them Jimmy Cliff, and the person says, ‘That’s a nice way to start a day.’”



## Wheeled Transportation in the Ancient Near East

Transportation in the Near East was important for trade, communication, and warfare. The earliest wheeled wagons were in use from around 3500 BC in the Caucasus and Eastern Europe, and the earliest wheeled transportation in Mesopotamia is known from depictions of four-wheeled wagons dated to around 3300 BC. They became more common in Mesopotamia by around 2600 BC, when oxen-drawn wagons with composite, solid-wood disk wheels are first attested in burials at Ur and Kish. Lightweight battle wagons pulled by asses or onagers are also known from images dating to this time, with horses appearing in texts by around 2100 BC. Wooden six-spoked wheels from horse-drawn chariots are known from ancient Egypt, for example, from the tomb of Tutankhamun (reigned ca. 1332–1323 BC). They were usually made of hardwoods like elm and tamarisk, with rawhide as a tire and metal fittings or bandings for the axle and securing pin. Wheel size was important for maneuverability and speed; the larger the wheel, the faster the vehicle.

### Further Reading

Mary A. Littauer and Joost H. Crouwel, *Wheeled Vehicles and Ridden Animals in the Ancient Near East* (Leiden: E. J. Brill, 1979).



D. 20545

### Iron Wheels with Bronze Hubs

Iron, bronze

Neo-Assyrian period, reign of Sargon, ca. 705 BC

Iraq, Khorsabad, Palace of Sargon, Nabu Temple

Excavated by the Oriental Institute, 1932–1933

A11811: 23.1 x 0.80 cm

A11813: 21.6 x 0.79 cm

OIM A11811, A11813

These miniature wheels were found at the Neo-Assyrian capital at Khorsabad, ancient Dur Sharrukin (“Fortress of Sargon”). They probably came from a ceremonial cart or wheeled stand that did not survive its burial. A number of bronze-wheeled carts or stands are known archaeologically from the Near East and Cyprus in the late second and early first millennia BC. Iron-wheeled stands found at sites such as Nimrud and Tell Halaf were probably used as portable heating devices (braziers). Wheeled stands in the ancient Near East were also used in religious ceremonies, for carrying ritual basins or an altar or hearth for liquid or burned offerings. It is unlikely that spoked wheels on full-size drawn carts or chariots would be made from solid metal. During the Iron Age (ca. 1200–586 BC), as iron working became more widespread, metals such as bronze or iron were used as bands or hoops around wooden wheels to add strength and durability without compromising speed.

#### Published

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Gordon Loud and Charles B. Altman, *Khorsabad 2: The Citadel and the Town*, Oriental Institute Publications 40 (Chicago: The Oriental Institute, 1938), p. 62, pl. 24:E.



**“I’ve always been interested in boats, since my earliest memories. All I’ve ever wanted to do was something with boats.”**

**Wayne Shibley**  
Boat Builder | Chicago, Illinois

Vessel Decorated with a Boat  
Egypt | ca. 3800–3300 BC  
OIM E10758

## Boat Builder

Wayne Shibley, of Wayne Shibley Wooden Boats, repairs, restores, and builds wooden boats.

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“For me it’s always been kind of magical when you get on the water, and I imagine it was like that with people in ancient times too — maybe that’s a spiritual thing.”

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“It [the boat depicted on the jar] was used on the Nile, and, being long, it’s probably fairly river worthy, and fairly fast.”

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“The fact that wood was lashed together [in ancient times] — you don’t see any lashing now; metal fasteners are used. But they still depended on the wood planking to swell to keep the water out, so there’s a lot of similarities — there are differences too, but what we have now is built on what was used then.”

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“I use quite a few power tools, but I also use chisels and handsaws, occasionally an ax or an adze — but chisels, I’m sure they used those in Egypt.”

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“I do use some fiberglass and modern adhesives, but a lot of the work I do is still traditional European construction. Something from a hundred years ago or more, some variations on the material, but yeah, wood.”

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“Oh yeah, I definitely feel connected to the past. My son is in computers and he always kids me about how I’m high-tech 1800.”

## Boat Builders in Ancient Egypt

Because most of the population of Egypt lived near the Nile River, boats were the main mode of long-distance transportation. Early representations show very long boats that were probably made of bundles of reeds. The earliest remains of actual boats date to about 2950 BC. They are made of planks of wood fastened with mortise and tenons that were probably secured with rope lashing. Scenes of boats and models of boats from tomb walls provide information about the different types of watercraft, including sailboats, barges, papyrus skiffs, specialized boats for transport, kitchen tenders, fishing and hippo-hunting boats, and canoes.

### Further Reading

Steve Vinson, *Egyptian Boats and Ships* (Shire: Princes Risborough, 1994).

Cheryl Ward, "Ships and Shipbuilding," in *The Oxford Encyclopedia of Ancient Egypt*, ed. Donald Redford (Oxford: Oxford University Press, 2001), vol. 3, pp. 281–84.

Nancy Jenkins, *The Boat Beneath the Pyramid* (New York: Thames & Hudson, 1980).



D. 20546

**Vessel Decorated with a Boat**

Baked clay, pigment

Naqada II, ca. 3800–3300 BC

Egypt, unknown provenience

Purchased in Egypt, 1920

31.5 x 27.0 cm

OIM E10758

Vessels decorated with scenes of boats have been recovered from Egyptian Predynastic tombs. The boat on this vessel is typical. It is equipped with two cabins and powered by more than forty pairs of oars (represented by the fringe-like pattern under the boat). The emblem of a god appears on a pole. The boats on these vessels probably allude to the deceased person's symbolic voyage across heaven from death to rebirth. Vessels decorated with images of boats such as this one were made over a 500-year period, attesting to the popularity of the imagery and to the role that these painted vessels played in the funerary cult.

**Published (selected)**

Gwenola Graff, *Les peintures sur vases de Naqada I–Naqada II*, Egyptian Prehistory Monographs 6 (Leuven: Leuven University Press, 2009), p. 348, no. 463.

Emily Teeter, ed., *Before the Pyramids: The Origins of Egyptian Civilization*, Oriental Institute Museum Publications 33 (Chicago: The Oriental Institute, 2011), p. 185, cat. no. 37.





**Charles Childs Jr.**  
Funeral Director | Chicago, Illinois

Ossuary  
West Bank | ca. 20 BC-AD 70  
OIM A29791 A-B

**“Dealing with the dead  
is a very personal situation.”**

## Funeral Director

Charles S. Childs Jr. is a third-generation funeral director and embalmer working at the Chicago firm of A. A. Rayner & Sons. He started his career in the field of mortuary science in Chicago in 1979, becoming the first African American elected to the Executive Board of the National Funeral Directors Association, and the first to become president of the Illinois Funeral Directors Association.

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“Traditionally we don’t like to think of death. Unfortunately, that’s the cycle of life, and we’re all here for just a short amount of time. It’s like this object ... it certainly has outlived a lot of people. It’s centuries old, so to an extent, we know that life is temporary, and how you fulfill your afterlife could depend on how you treated people in life.”

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“With items such as this you can see that, with the intricacies of the designs, that somebody felt that the person who was going to be inside of this had a great meaning to them, and you can see that with some of the markers and monuments that are on display in different cemeteries. Everybody couldn’t afford to do this — only some people were able to do something like this.”

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“The funeral is obviously for the living, the celebration of life, the memorialization of life, to provide some kind of history of that loved one or that deceased to perpetuate through the generations of the family how that person has impacted your life, the community, and society at large.”

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“I feel the connection of everybody that we’ve had a chance to serve. Absolutely. And that’s why in our family and in our tradition we try to make that transition as smooth as possible ... to make that memory of a loved one a lasting and favorable memory. Everybody differs I guess when they think about when actually does life end. Is it that last breath? There are times when I think that there are still spirits around. You can see it sometimes in the way people respond to death. Some people are very heartbroken and very grief-stricken, but some people are very elated because they realize that death has in fact stopped a lot of pain.”

## Secondary Burial in the Ancient Southern Levant

An ossuary, or “bone box,” is a chest or structure used to contain disarticulated human skeletal remains. Although secondary burials and clay ossuaries are attested from Chalcolithic times (ca. 4500 BC), free-standing and portable stone ossuaries did not become common in Jerusalem until the Herodian, or late Second Temple, period (ca. 20 BC–AD 70). Soon after death, the body was ritually washed and shrouded, then buried in the earth or in a rock-cut tomb. After some years, the defleshed skeletal remains were removed, placed in an ossuary, and reinterred within a communal tomb.

The biblical passage “I will gather you to your fathers, and you shall be gathered to your graves in peace” (2 Kings 22:20) may relate to the Israelite practice of secondary burial in pits or rock-cut chambers within Iron Age tombs (1200–586 BC). Use of stone ossuaries modified this practice, allowing remains of individuals and family members to be separated from those of others. Some argue that ossuary use was connected with Jewish traditions of the Second Temple period, perhaps even an emerging concept of physical resurrection for some individuals. Others suggest that Roman fashions for stone cremation urns were the main inspiration for ossuaries. Stone ossuaries continued to be used until the mid-third century and may have also been used by early Christians.

### Further Reading

Jodi Magness, “Ancient Jewish Tombs and Burial Customs (to 70 CE),” in *The Archaeology of the Holy Land: From the Destruction of Solomon’s Temple to the Muslim Conquest* (Cambridge: Cambridge University Press, 2012). pp. 230–55.

Rachel S. Hallote, *Death, Burial and Afterlife in the Biblical World* (Chicago: Ivan R. Dee, 2001).



D. 20548



D. 20549

### Ossuary

Limestone

Late Second Temple period, ca. 20 BC–AD 70

West Bank, Jifna

Gift of Dr. Harold Willoughby, 1953

67.0 x 23.5 x 33.5 cm

OIM A29791 A–B

Stone ossuaries in the Second Temple period were often decorated with designs and motifs, and they could also be carved with the name of the deceased. This ossuary is decorated with incised rosettes, a common motif. Most ossuaries are plain. The Hebrew inscription on the side reads “Yoezer, son of Yehohanan, the scribe.” Some ossuaries were inscribed in Greek or Aramaic. Although the common appearance of stone ossuaries attests to a flourishing funerary industry, little is known about the secondary burial ceremony itself. Did one or more family members physically handle the transfer of remains and carve the name of the deceased on the ossuary, or were there ritual specialists who carried out such activities?

### Published

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Gabrielle V. Novacek, *Ancient Israel: Highlights from the Collections of the Oriental Institute of the University of Chicago*, Oriental Institute Museum Publications 31 (Chicago: The Oriental Institute, 2011), pp. 102–03, cat. no. 51.

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## CONCORDANCE OF MUSEUM OBJECTS SHOWN IN THE PORTRAITS

*Objects in bold are in the exhibition*

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A3441	Medical tablet	74	<b>E2049</b>	<b>Mallet</b>	94
A7897	Mathematical cylinder	78	<b>E5330</b>	<b>Beer jar</b>	86
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A11811	Wheel	114	E10815	Relief of a manicurist	50
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