SEEN Not Heard

Composition, Iconicity, and the Classifier Systems of Logosyllabic Scripts

Edited by ILONA ZSOLNAY



INSTITUTE FOR THE STUDY OF ANCIENT CULTURES
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Seminar participants.
From top, left to right: Jerry Cooper, Andréas Stauder, Guolong Lai;
Zev Handel, Claudia Brittenham, David Schloen;
Holly Pittman, Orly Goldwasser, Piotr Michalowski, Christopher Woods;
Ilona Zsolnay, Elisabeth Rieken, Wang Haicheng, Joshua Roberson.
Photo by Bryce Lowry

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Edited by

Ilona Zsolnay

with contributions by

Diane Brentari, Claudia Brittenham, Orly Goldwasser, Zev Handel, Holly Pittman, Elisabeth Rieken, Joshua Roberson, Gebhard Selz, Andréas Stauder, Ilya Yakubovich, *and* Ilona Zsolnay

and response by

Wang Haicheng

Papers from the postdoctoral seminar
"Seen Not Heard: Composition, Iconicity,
and the Classifier Systems of Logosyllabic Scripts"
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Preface and Acknowledgments

This volume of the ISAC Seminars series contains the proceedings of "Seen Not Heard: Composition, Iconicity, and the Classifier Systems of Logosyllabic Scripts," a postdoctoral fellow conference held March 2–3, 2017, at the University of Chicago's Oriental Institute (now the Institute for the Study of Ancient Cultures). The goal of this symposium was to interrogate writing as a visual and tactile medium that is not simply a handmaiden to the spoken word but a communication system that is richly experienced. To tackle this innovative project, an international roster of participants was brought on board, with papers given by art historian Holly Pittman; Assyriologists Piotr Michalowski, Gebhard Selz, Christopher Woods, and Ilona Zsolnay; Egyptologists Orly Goldwasser, Joshua Roberson, and Andréas Stauder; Hittitologist Elisabeth Rieken (for Rieken and Ilya Yakubovich); Mesoamericanists Claudia Brittenham and David Stuart (presented by Brittenham); and Sinologists Zev Handel and Guolong Lai. It was a further privilege to have sign language specialist Diane Brentari provide a primer on classifiers in sign language to the participants and audience and to have Assyriologist Jerry Cooper and art historian Wang Haicheng deliver responses.

In the years between the convening of "Seen Not Heard" and the publication of its proceedings, the world was rocked by the COVID-19 pandemic and the OI (ISAC) experienced several academic and staff changes. Therefore, I would like to thank former OI directors Gil Stein and Chris Woods for bringing me to Chicago and making funds available for the conference and for the publication of this volume. I also extend my gratitude to Petra Goedegebuure, who stepped in as director of the postdoctoral program. Many thanks also go to OI (ISAC) Publications staff members Tom Urban and Leslie Schramer, who were there at the beginning; Charissa Johnson, managing editor during the pandemic; and current managing editor Andrew Baumann, who has seen the project through to its close. Many thanks, too, to numerous members of the OI (ISAC) staff whose support to the postdoctoral fellows was invaluable to the arrangement and production of these events, and finally to the book's copyeditors and typesetters, without whose tireless and unsung work volumes such as *Seen Not Heard* would be a morass of typos, failed sentences, and abused fonts.

For all but a few participants who were not able to contribute to this volume, it represented both an intellectual and, at times, a physically challenging commitment. I therefore warmly thank all participants and final contributors for their continued dedication to the project. The excellence and pioneering quality of the work is evident on every page.

Ilona Zsolnay



Rabbit scribe from the Princeton Vase (Mayan, 670–750 AD).
Image courtesy of the Princeton University Art Museum
(https://artmuseum.princeton.edu/collections/objects/32221).

Introduction

The sign systems that comprise logosyllabic scripts, such as Egyptian hieroglyphs or Chinese characters, convey meaning in a manner both similar to and different from alphabetic scripts. First and foremost, it is likely that unlike alphabets, no logosyllabic writing system was, at its inception, designed to convey fully fledged spoken sentences graphically. Instead, each system's original purpose was notational, and because the graphs used represent whole concepts in and of themselves, it may in fact be more appropriate to refer to these scripts as *pictographic* or *ideographic*. This is to say that they were inscribed at first with no markers meant to indicate a particular (vocalic) reading. Logosyllabic systems are similar to alphabetic ones because, as the technology develops, graphs come to represent phonemes in addition to whole concepts, which, like letters, can be arranged and rearranged glottographically (by sound) to spell out (sound out) words. Most notably, though, the graphs of logosyllabic scripts retain some illustrative quality throughout their usage. This phenomenon runs contrary to the letters of alphabetic scripts, whose original iconicity is entirely lost to the average person and therefore leaves the letters with only a learned relationship to their signified sound. In other words, as logosyllabic scripts develop, they may—depending on the writing system—either continue to appear as pictographic or become more abstract and seemingly nonrepresentational.

Being composed of graphs that originate as pictographic and eventually come to represent syllables in addition to whole concepts, logosyllabic scripts have greater power to transmit metalinguistic information than do alphabetic scripts. Because they are image based, the graphs themselves visually convey more than the sound(s) they signify. Indeed, the very choices made in determining which image should represent which concept or sound are cognitive data ready to be mined. As graphic designer Katherine McCoy discusses in her work on typography, Cubists and Futurists explicitly used the visuality of font to map nonverbal ideological meaning implicitly onto any phonological units represented by alphabetic signs (McCoy 1988, 116). Similarly, chosen logographic signifiers may implicitly carry cultural perspectives. Using the example of the glyph that signifies the word *sḏr* "to spend the night," a reclined figure on a bed, Egyptologist Orly Goldwasser notes that only the highest classes of society would have had access to a bed or understood the sign's significance (Goldwasser 2002, 22). For Goldwasser, the Egyptian logographic script contains a complete knowledge-organization system that is "not at all arbitrary or context-bound, but faithfully represents the deep structured system of world-organization of the Egyptian elite society" (Goldwasser 2002, 25). The chapters in this volume explore this visual, and at times tactile, aspect of writing. The majority of the studies presented investigate early Mesopotamian cuneiform and Egyptian and Anatolian hieroglyphic systems and scribal productions. But broadening its scope, this volume also includes contributions that consider Mesoamerican text exhibition, as well as mechanisms inherent to two present-day logographic scripts, Chinese and American Sign Language. Finally, while the volume does

preference speech writing systems (a term coined by Elizabeth Boone [2011, 314]), it also contains a study that reflects on the syntax and semantics of ancient Near Eastern seal impressions, here perhaps better termed *art writing* (Boone 2011, 314).

1. THE DISCOVERY OF THE SIGN

The study of graphs and their ability to convey meaning is primarily, but not wholly, located in the now well-developed field of semiology and the study of semiotics. These areas of inquiry have as their forebears the early twentieth-century linguist Ferdinand de Saussure and sometime philosopher Charles Peirce, two figures well known to anyone interested in what are now commonly referred to as *signs*.[1] As a linguist, Saussure's primary concern lay in understanding the role of language in the formation of meaning. Originally, Saussure approached language using historical linguistics models to determine how language systems were related. Eventually he moved away from this familial approach and instead theorized that any language is in actuality a relational system of arbitrary signs. Phonemes lie at the heart of these systems, for it is only through their combination that different words, which Saussure called *signifiants* (sound images, hereafter *signifiers*), can be created. The signifiers, in turn, signify objects or ideas, the *signifié* (hereafter *signified*) (Saussure 2013, §1, 74ff.). For example, the sounds /o/, /d/, and /g/ are in essence meaningless individually but when combined can sound out the ideas *dog* or *god*. Meaning and assignment are created through these combinations. The arbitrary nature of the signifier, either the word *dog* or *god*, is apparent when we consider that neither instance of combined sounds is suggestive of such creatures.[2]

Saussure was less concerned with the graphic representation of language than with the way in which language created meaning. For Saussure, all signs used in writing were linguistic signs; thus, even if a written sign signified an idea (*d-o-g*), the viewer would "hear" the word for that idea (*dog*) in their mind. For Saussure, the physical manifestations of spoken language—the materiality of writing and its physical context—held no value. In other words, whether the writing was of a certain color or font or was written on an obelisk or a piece of parchment was irrelevant to him. It was only the message transmitted through the choice and arrangement of written signs that held meaning. The value of a sign is relational with respect to other signs only per the code in which it is attested (its position in a sentence).

Peirce, Saussure's contemporary, adopted a different perspective. Like Saussure, he contended that signs were composed of a signifier, which he called the *representamen*, and a signified, or *object*; but Peirce added to his scheme an *interpretant* (reception of the signified) (Buchler 1940). Unlike the simple signifier–signified relationship, the signifier–signified–interpretant relationship takes into account the reader's reception of the sign.

1 Because the work of these two scholars and the fields of semiology and semiotics can be easily consulted in a variety of introductory texts, this introduction will review only those contentions that are pertinent to the studies that comprise this volume.

2 For alphabetic scripts, this observation would seem to be reasonable. The shape of the letter *a* is not imbued with any sense of *a*; however, as more work is done on the alphabet, as it is traced back to its origins, we may note that the shape of the letter *A* evolves from of the shape of an ox's head. At the time the alphabet was created, the word *ox* was pronounced leading with the /a/ sound.

Going back to our example above, in seeing (or hearing) the word *dog*, the reader (or hearer) might receive this sign as terrifying, soft, small, or large. The selection is endless. The interpretant, therefore, is always in flux and dependent.

Peirce also typed signs into three categories: *symbolic*, *iconic*, and *indexical*. Again like Saussure, Peirce theorized that signs could have an arbitrary relationship to their referent. These signs he called "symbols." As an example, the sign **+** signifies "moreover." In English, in a mathematical context, this symbol is read as *plus*; in a literary context, it is read as *and*, or possibly *more*, with a superlative sense. The sign **+** has no inherent qualities that might suggest the meaning *more*, so its signification can be known only if it is learned. Peirce also contended that signs could be iconic and indexical. Unlike arbitrary symbols, iconic signs have a visual or aural resemblance to that which they signify. For example, a placard indicating the presence of a garbage can bear the sign , which resembles a person putting trash in a bin. Regardless of the language system(s) known by the reader, as long as that person is familiar with the convention of putting trash in a bin, they would be able to decipher the signification of the sign; the correlation between sign and meaning would not have to be learned. Indexical signs are not wholly different from iconic ones in that they are also relational to that which they signify; however, they do not attempt to represent the concept but rather indicate it. For example, to denote the presence of a theater, the sign  might be used. The two masks refer to the two classical forms of theater, comedy and tragedy. This tragicomedy sign does not resemble either a building or a performance; however, the sign can indicate theatrical performance, which would likely take place on a stage. What one might notice in all three of these cases—namely, **+**, , and —is that each signifier could be read in *any* language as long as the given image has salience for the reader(s), be it taught or, in the cases of  and , observed in daily life. Additionally, because of its clear depiction of a bin, the  sign is then deemed highly iconic, or *motivated*—it looks like what it signifies. Conversely, the symbolic **+** sign is unmotivated or highly arbitrary. The  sign is both iconic and arbitrary. It is arbitrary in that a theater may be signified by any number of other images that might indicate a building, stage, or performance. It is iconic because it is a clear representation of two masks. So the more arbitrary the sign, the more necessary it is that both the writer and the reader be learned in the code used or that the reader be aided in deciphering it.

2. CHOICE, CONTEXT, AND MEANING

As noted above, the **+** symbol may be used to express the conjunction *and*. It is, however, not the only symbol that can be used to express this conjunction, nor, as mentioned above, is *and* the only possible reading of this sign. When using the symbol **+** to express the coordinating conjunction *and*, the writer is making a conscious choice. First and foremost, that person is choosing not to express the concept of conjunction using a spelled-out word, the sign *a-n-d*. Second, the writer is opting to use the plus symbol rather than the archaic Roman ligature, the ampersand (**&**). If the writer is writing by hand, this choice could simply be a matter of either poor penmanship or the desire to put thoughts down quickly and efficiently. Conversely, if the writer is typing, the ampersand may constitute the more desirable sign, for typing **&** and **+** take the same amount of effort on a modern keyboard but the complexity of the ampersand may give the impression of some

erudition on the part of both the writer and reader. It is also possible that a writer or typist might choose to use the ampersand rather than the plus sign to avoid the reader's choosing the wrong signification for **+**. As noted, depending on the context in which **+** is used, it might stand for the coordinating conjunction *and* but could also very well stand for the concept *in addition to*, which in itself could indicate either a mathematical context or a superlative one.

Because Saussure was concerned only with the linguistic message carried by the writing system, the issue of choice was not so much a matter of sign preference as it was of placement. Working within agreed-upon codes (language systems), cognition and therefore meaning were expressed through the placement of a sign (word) within a sentence. Just as meaning was expressed through the arrangement of phonemes into agreed-upon patterns of vocalization, so the position of a sign in relation to other signs affected its value *as per the code*. Visuality played no role here. For Peirce, meaning depended on the placement of the sign in relation to other signs while still working within a code, but also of critical importance was the reader's confrontation of the sign. Cognition resulted from the reader's bringing reception to bear on the encounter. Over the course of his many treatises on signs, Peirce concentrated more and more on the dynamism of the interpretant, the ever-manifesting and associating effects of one's encounter with signs. For the purposes of this volume, these increasingly complex experiences are less immediate. More helpful at this point is the work of Roland Barthes.

Somewhat surprisingly a student of Saussure and not Peirce, Barthes developed the theories of *connotation* and *denotation*. In this scheme, context and choice are seen as critical, as are the associations conjured by the experiencer of the sign. For Barthes, in his observations on certain popular images, each sign conveys three messages: the *linguistic*, the *connotative*, and the *denotive* (Barthes 1964). To return again to our example above, the word *dog* is the linguistic message: the word *denotes* the noncoded object, a furry four-legged creature, though what it *connotes* might be different depending on the cultural background of the person receiving the linguistic message, the code. In modern Western culture, the word *dog* might conjure a creature more akin to a family member. In cultures in which dogs are thought to carry disease, with the saliva of the dog thought to be a sort of poison, the word *dog* would connote a threat, or at least something unpleasant. It might also be the connotation for a Westerner who has had a negative experience with dogs or perhaps has been influenced by the negative press on pitbulls (or any other breed of dog thought to have violent tendencies). Expanding this example, contextualizing the image of a pitbull in a blue background or gauzy lighting, blue and gauzy lighting themselves being coded signs with connotations of serenity, might moderate for that person the negative connotations of the pitbull. Context, then, can guide the experience of the sign with any number of interpretants.

3. THE GRAPHS OF LOGOSYLLABIC SCRIPTS

The graphs, or signs, that comprise logosyllabic scripts fall into each of the three Peircean categories: symbolic, iconic, and indexical; however, not all logosyllabic scripts evolved similarly. Whereas Egyptian, Anatolian, and Mayan glyphs retained high iconicity throughout their lives, Chinese characters have lost almost all their iconicity over the millennia.

Mesopotamian cuneiform, on the other hand, transitioned to a far more abstract, symbolic script very early in its usage. As mentioned above, in the cases of all these script systems, with some exceptions, each graph, whether originally of the symbolic, iconic, or indexical sort, comes to function both as a signifier for one or more whole words and as a signifier for one or more phonemes. Because many of the graphs can signify more than one phoneme, they then take on a more symbolic aspect, with their multiple significations having to be learned. Because many of the graphs can signify more than one whole word or concept, context can be critical to deciphering the meaning of a graph. In Peircean tradition, this context would be deemed a referential one. The ancients, however, had a trick up their proverbial sleeve: the use of a type of graph referred to by modern scholars as either a *determinative* or a *classifier*.

Referred to traditionally as determinatives and more recently as classifiers, these signs are integral features of each of the four pristine logosyllabic writing systems: Mesopotamian, Egyptian, Chinese, and Mesoamerican. Classifiers are also fundamental to sign languages. Thought to serve primarily as disambiguators, classifiers are indexical graphs that might precede, follow, or be encased in their referents. They may take the form of simple phonetic indicators or, when serving to classify semantically, be signs that only visually inform a reader of the category indicated. Modest cuneiform examples, which were originally highly iconic, are the appending of the sign for wood, GIŠ, to the names of trees or KU_6, fish, to the names of aquatic creatures. More highly charged examples might be the Egyptian classifiers *negative* (a sparrow icon) or *aggression* (a man with upheld stick) (Goldwasser 1995, 87). Through their iconicity and application as classificatory agents, classifiers orient the reader while at the same time exposing to the outside observer cultural and environmental parameters, relationships to these parameters, and processes by which they were incorporated into the psyche. When serving as classificatory agents, classifiers, in essence, encode cognition.

4. CONTEXT AND MATERIALITY

As anyone who has picked up a pen, pencil, or other writing implement is well aware, writing is a physical process. Even before this activity is performed, writing implements, material on which to write, and even the location for that performance must be chosen. As this activity is undertaken, the writer is made keenly aware of presentation. First and foremost, graphs must be formed and ordered in such a manner that they follow agreed-upon scribal conventions—for without adherence to these conventions, what is meant to be conveyed may not be comprehended by the intended reader or, conversely, if writing is presented counter to convention, the reader may conclude that the writer has a low level of literacy or be alerted to subversion, an indication of an even higher level of technical scribal knowledge. Scribal conventions may be grammatical in that they require both the writer and the reader to be at least vaguely familiar with the tenets of the language transmitted through the writing. The reader and writer must also be able to recognize the sign signification system used to represent syllables, words, and sentences, and any graphs employed, alphabetic or otherwise, must adhere to form. With the reader in mind, a writer may employ additional visual tools in the presentation of the text. Layout, perhaps being the most helpful of visual guides, can optically orient a reader to written materials, most

obviously when signifying genre (e.g., formal letter, register, comic strip, or essay), while the size and font of graphs can affect a reader's disposition. If they are small and tight, a reader may be put into a state of concentration; if standard and less formal, a state of calm. The location of text, be it on a computer screen, paper, parchment, or clay, may also be conventional; however, writing can be placed on high cliffs to instill a sense of majesty or hidden away in caves to effect mystery—further, it may be accompanied by imagery to contextualize, bolster, or contradict written messages.

Although studies devoted to writing and writing systems concentrate mainly on the extent to and manner by which they perform glottographic transcription—that is, how they graphically convey or developed to convey the phonological units of spoken language (Gelb 1963; Coulmas 1989; Daniels and Bright 1996)—this emphasis has begun to change. A steadily growing contingent of scholars has begun to consider not only how writing fails to record the entirety of linguistic code but also how focusing on the manners by which writing may do so has led to the deriding or ignoring of nonlinguistic communications systems, independent, sympathetic, or underlying (Rotman 1993; Harris 1995, 2000; Derrida 2016). Instead, as Mesoamericanist Elizabeth Boone recently suggested, writing should be viewed as a self-sufficient communication system, whether transmitting phonological units or concepts. For all that can be read to be seen, she therefore offers a more open definition for the technology: writing is "the communication of relatively specific ideas in a conventional manner by means of permanent, visible marks" (Boone 2011, 315).

Boone, of course, recognizes the open-endedness of her suggested definition; however, because her work focuses on Aztec codices, works described as "semasiographic" rather than "true" writing, she has been forced to consider the deep relationship between image and text. Aztecs, she observes, did not separate art from writing—so much so that the verb *tlacuiloliztli* may stand for painting, drawing, or writing. To read an Aztec codex, one must be aware that "the syntax is fundamentally spatial, where meaning is created and directed by structure and by the principles of sequence, proximity, inclusion, and exclusion" (Boone 2011, 317). Perhaps unexpectedly, this awareness is also required when deciphering proto-cuneiform texts in which case delineation and sign clustering are the precursors to morphological indicators (Green 1981). Even today, spatial relationships continue to be relevant. Graphic designer Clive Ashwin, in his attempt to develop a theory of drawing, also turns to the field of linguistics, or more specifically semiotics, when he considers the indexical quality of drawing. Visual indicators such as arrows and the use of perspective serve a pragmatic phatic function. Just as spoken phatic utterances devoid of substance such as *uh-huh* and *sure* can prompt a speaker to continue with their narration (Brown and Yule 1983; Zegarac 1998), so the self-contained image of an arrow guides a reader's intake of information without signifying any lexical term per se (Ashwin 1984). A reader in this instance would not read the word *arrow* but would instead be directed to that to which the arrow is pointing. A similar form of visual escort is observed by Mesoamericanists Stephen Houston and Marc Zender in their work on early Mexican codices. In these codices, in certain instances, a text may be tethered to an image of its referent by means of a painted line (Houston and Zender 2018). This linking forces the reader either to consume text and image holistically or to visually link one to the other linearly, along the line.

Most recently, as discussions on the agency of objects have come more to the fore of ancient studies (Steadman and Ross 2010; Englehardt 2013), the effect of inscribed objects

on their environments and, concurrently, the effect of environment on our reception of object and text is being made clearer. Indeed, an entire series that focuses on these issues has recently been launched. The *Materiale Textkulturen* series invites scholars to consider the materiality of writing. Although most of the series's volumes take a predominantly archaeological approach that focuses on the more practical aspects of writing—how tools are made, materials are sourced, and persons are educated—several volumes contain chapters that recontextualize written objects by analyzing how "visual features can manipulate the potential beholder, such as writing surfaces, layout, iconic scripts etc." (Enderwitz and Sauer 2015, 9) and how spatial relationships between objects and their placement in both public and private spaces have impact (Berti et al. 2017). So when we interrogate writing, it is not simply Saussure's and Barthes's linguistic message that can offer meaning; the form and history of the signs with which the message is composed, the choice and framing of those signs into the message meant to be recorded, the effects of the message's context, and the purpose of its positioning also carry significance.

5. CONTENTS

Seen Not Heard opens with two studies that consider experiential writing. In "Text in Context: Relief and Hierarchy on Piedras Negras Panel 3," Claudia Brittenham demonstrates that the manner by which an inscription is carved matters, that physical presentation can dictate how it is received. Using the royal Mayan relief carved on Piedras Negras Panel 3 as a case study, she asks what kind of physical engagement is demanded by the art and by the text: Who could see it? Who could read it? Brittenham establishes that subtle and not-so-subtle hierarchies are revealed and performed through high and low relief. Contrary to Western art, where we anticipate that the most easily accessible must be the most important, that it must be the largest and boldest, Brittenham negotiates how on Piedras Negras Panel 3 the closest, most available figures are in the lowest relief. As though meant to denote the common viewer, they are devalued and obvious, yet the least embodied. In contrast, the most privileged information—royal first-person speech—is the least obvious. Also rendered in low relief, this technique is used to opposite effect. The word of the king is so precious, so ephemeral, that the carving of the text must impart this sense. The restricted nature of this text is further signified through diminutive graphs. The privileged nature of the text is then imposed on the body of the advantaged and disadvantaged viewer alike through size and depth of relief. Yet, as Brittenham demonstrates, this agency of text is not limited to obvious privilege, for the materiality of the text on Piedras Negras Panel 3 expresses even more delicate hierarchical social arrangements, depending on the genre.

Writing is not just manipulated to force physical and emotional responses, according to "The Iconicity of the Vertical: Hieroglyphic Encoding and the *Akhet* in Royal Burial Chambers of Egypt's New Kingdom," by Joshua Roberson; rather, it is made manifest. Focusing on the *akhet*-hieroglyph, Roberson demonstrates that the tombs of the kings of Egypt's Ramesside period were designed as elaborate, multidimensional expressions of this glyph. Not simply indexing the cyclical rejuvenation of the sun, these architectural spaces were meant to activate the signification of the signifier, the *akhet*. Through the use of horizontality and verticality, the sequential passage of the sun from day to night and back to day again, as recorded in the cosmological books buried with these kings

and depicted in their tombs, is given a deliberate multidimensionality. The king entombed within the *akhet*-hieroglyph could then access the path of rebirth. Roberson coins this hieroglyph-made-manifest a "hyperlogogram," which was both linguistic, signifying the term *akhet*, and participatory, functioning to transport the king to his afterlife.

Awareness of writing as a visual medium by scribes may be no more evident than in the visual plays that pepper Egyptian texts. Ironically, however, the evidentiary nature of this awareness is made possible only through continual engagement with a text and erudition. For as Andréas Stauder elucidates in "For the Eye Only: Aspects of the Visual Text in Ancient Egypt," it is only the learned reader who might have both physical access and training enough even to be aware of additional layers of transmitted information. In his chapter, Stauder lays out multiple manners by which Egyptian scribes engaged with their reader(s). Through enigmatic writings, scribes force readers to engage more fully with texts. Using selected glyphs, these writers demonstrate their own brilliance with visual puns and optically affirm linguistic messages contained in texts. While working within the constraints demanded by a writing system to convey this linguistic information, conventional readings are also shown to be visually subverted by scribes in an effort to jar their audiences into a more intimate connection with them and with their subject. Stauder's chapter, then, highlights both the joy scribes may take in their craft and underscores the privileged access to their sophisticated productions.

Moving past examples of how text may be manipulated to induce physical, emotional, and sympathetic experiences, the next set of chapters of *Seen Not Heard* targets the graphs themselves by considering encoded cultural, circumstantial, and cognitive information that may be accessed only visually. In the opening chapter of the section on classifiers, "Animal Categorization in Mesopotamia and the Origins of Natural Philosophy," Gebhard Selz proposes that the development of Mesopotamian classifiers counters the traditionally held belief that ranked arrangement of categories, *cladistics*, was invented by the Greeks. Arguing instead that a hierarchical classification of the southern Mesopotamian region is already in evidence in the cuneiform writing system, Selz contends that it is with the creation of this very system that the Sumerians first demonstrated scientific reasoning. Focusing on animal taxonomy, Selz considers two graphically realized classification schemes: *sign compounding*, in which the addition of taxonomic graphs to others may lead to suprasignifiers, whose verbal expression may contain neither original lexeme but whose visual expression reveals categorical information, and the more obvious *semantic* classifier system, which demonstrates an ongoing abstraction process. Selz's investigation then contextualizes these findings within the lexicon as a whole; he concludes that the evolving nature of Mesopotamian classification progresses toward the hyper taxon *breathing things* and is indeed comparable to Aristotle's concept of *animalia*.

The work of Selz is complemented by Orly Goldwasser's analysis, "Was There an 'Animal' in Ancient Egypt? Studies in Lexica and Classifier Systems, with a Glimpse toward Sumer and Ancient China." Continuing her work on the classifiers of the ancient Egyptian script system, Goldwasser, like Selz, searches for points of "supercategory" creation by arguing that awareness of changes to cultural categorization allows for insight into a culture's cognitive processes as they develop over time. Not evidenced by the phonological information carried through the text she mines, emic information about cultural perspectives is instead revealed by these graphic, seen-only markers. Through her investigation,

Goldwasser recognizes that higher registers do reveal themselves as the script is modified and thereby evidence new taxonomic systems; however, unlike the Sumerian system as laid out by Selz, the Egyptian one never quite manages a complete reduction to the abstract category *animal*. Comparing the two systems, Goldwasser finds that the Egyptian and the Sumerian mental maps are not the same, thus forcing her to conclude that the Egyptian lexicon offers no supercategory term higher than *ꜥwt*, "livestock" (domesticated and undomesticated).

Moving from ancient to modern reasoning, Zev Handel investigates the cognitive negotiation between modern cultural norms and inherited traditional thinking in "The Cognitive Role of Semantic Classifiers in Modern Chinese Writing as Reflected in Neogram Creation." Similar to the duration of both the Mesopotamian and Egyptian scripts, the Chinese writing system is one that has been in use for millennia; thus, its classification system can be antiquated and contradict modern categorization. Fortunately, as Handel notes, because the Chinese script, unlike the Mesopotamian and Egyptian ones, continues to be active, the salience of certain classifiers can be monitored for present-day users of the system. Employing recent psycholinguistic studies on Chinese script learning, Handel establishes that child learners build semantic-category models that replicate those mandated by the script, thereby suggesting a direct influence of writing *on* cognition. By charting the frequency of certain classifiers in the creation of new Chinese graphs (*neograms*), Handel further identifies thirty-nine classifiers that maintain a high degree of saliency for modern users and demonstrates how seemingly frozen classifiers may be promoted, such as the signifier for "steam," now associated with recently discovered gaseous elements.

The final chapter to address the categorizing function of classifiers offers a primer on their use in a purely visual language system, one never meant to carry glottographic information: sign language. Ultimately a demonstration of how sign language works with iconicity to deepen meaning and create new terms, "Iconic and Grammatical Dimensions of Sign Language Classifiers," by Diane Brentari, first clarifies the requirements of classifier use and then delves into the manner by which classifiers in sign language inherently bring life to their antecedents. In her discussion, Brentari explains that classifiers in this system may be chosen to define an object by size, shape, instrumentality, manipulation, or semantic class, thereby giving these antecedents categorical depth and identity. Classifiers may be further employed to impart the action of their antecedent, thus giving it movement and dimensionality. Sign language classifiers may, therefore, animate as they visually situate the audience within a chosen perspective. So, as integral features of a communication system, classifiers also carry and visually impart cognitive information while serving a grammatical function.

The concluding section of this volume is dedicated to script evolution, with studies that address how the graphic rendering of lexemes, phrases, and sentences provide information on cultural interactions, adoptions, and developments. In "Encounters between Scripts in Bronze Age Asia Minor," Elisabeth Rieken and Ilya Yakubovich scrutinize the Anatolian hieroglyphic writing system for script-to-script influence in Bronze Age Turkey. This influence, as they make clear, can be detected only visually; it would never have been made aurally obvious. In careful detail, the authors first introduce the complex multicultural, multilingual, and multiscript environment that provided the setting for this literal code-switching. Fascinated by the phenomenon, Rieken and Yakubovich provide evidence

for how certain Anatolian hieroglyphic texts could be embedded with words and phrases that were written following the conventions of an entirely different script system: Sumero-Akkadian cuneiform. When these sections of text were then mentally processed, they contend, readers would automatically engage in code-switching: they would read the embedded words and phrases as though they were written following the conventions required by the Anatolian hieroglyphic writing system, not the cuneiform one.

The penultimate study of *Seen Not Heard* addresses neither direct nor indirect script-to-script influence as such. Instead, in "Iconicity, Composition, and Semantics: A Structural Investigation of Pictures in an Early Writing Environment," Holly Pittman compares two graphic systems in concurrent operation serving to convey the same information through seemingly different methods. One of these systems is deemed semasiographic or artistic—archaic Mesopotamian seal impressions; the other, writing—proto-cuneiform administrative texts. By critiquing the imagery present in seal impressions in the light of logographic inscriptions, Pittman determines that when inscribed on seals, graphs traditionally thought to serve only an artistic function can take on semantic functions akin to those found in archaic inscriptions. Arguing for analogous purposes for both engraved seal scenes and inscribed tablets, Pittman, more than any other contributor to this volume, exposes the fine line between what we define as *writing* and what we define as *art* by probing what it means to read language.

Delving even further into aspects of visual code, this section on script evolution closes with Ilona Zsolnay's investigation of the compound graph ABxKU6. In "ABa and ABb, a Memoir—or, The Curious Case of Niĝin/Našše Signification," Zsolnay first lays out the conundrum: in the Archaic cuneiform corpus, as in later corpora, the foremost cities of southern Mesopotamia—Uruk, Ur, Zabala, Larsa, and Niĝin—are all signified with the AB graph. What is curious about this seeming consistency is that in the proto-cuneiform corpus the names of the cities Uruk, Ur, Zabala, and Larsa are all formed with the ABa variant of this graph. The name of the city Niĝin is attested with either the ABa or the ABb variant, phased out early in the development of the script. Uruk, Ur, Zabala, and Larsa are never signified using the ABb variant. "ABa and ABb, a Memoir" is both a survey of script standarization and a graphic history of a compound graph. The results of Zsolnay's investigation suggest that theological meaning can underlie visual choice in signification and confirm that as scripts are developed, adopted, and adapted to suit new purposes, even profound ideologies can be leveled in the name of convenience and progress.

The final chapter of *Seen Not Heard* offers Wang Haicheng's thought-provoking meta-response to the whole of the project. In dialogue with each of the sections of this volume, in "On the Visual Presentation of Writing" Wang first considers the historical breadth of layout and image use to communicate nonlinguistic information, even incorporating observations of the manner by which format and image are used to express meaning in the chapters contained within. Wang then turns to classifiers and their relationship to cognition, reflecting on their role in the "mental search for correct meanings." Focusing on the Egyptian and Mesopotamian contributions, he questions whether semantic classifiers were always silent or if it is their iconicity, their visuality, that holds the key to deciphering their role in the mind's computational process in clarification. Wang closes his response by introducing aesthetics into script analysis. The beauty of the East Asian and Islamic calligraphic arts, as well as that found in the Book of Kells, matters. Arguing that the

formation of writing can be as a visual poetry, as an art historian Wang is led to suggest that in the study of writing, art cannot be excluded. Indeed, the inclusion of art, he purposes, should be the next phase of metalinguistic study—when we consider what "we call art."

6. CONCLUSION

Each contribution in *Seen Not Heard* seeks to lay bare either explicit exploitation of visuality in scribal production or orientations informed implicitly through the optical quality inherent to writing systems, and together these chapters demonstrate that although writing may be heard, the fact that it can also be seen affects the reception and therefore meaning of any transported phonological units. Indeed, such phenomena as explicated in these chapters are in evidence today. One need simply notice the icons located on a Microsoft Word document. The icons for the desired actions *print* and *save*, though maintaining a high iconicity, are frozen images; they are archaisms. Being frozen, their signifiers, and the perspective of those who chose them, are fixed in time. The average young user of MS Word, one born after the year 2000, would be hard pressed to identify the *save* icon as an image of a floppy disc, an inserted physical object on which to save data. Where the *save* icon has a high iconicity for an older user, one who has used floppy discs, it has now only a symbolic, learned one for the younger user. The personal printer icon is perhaps more accessible to all users, but in due time it too will become a signification to be learned, not simply intuited. Following this line of thought, one might consider the image of a cloud as the modern *save* icon. Although the cloud icon signifies a particular manner of saving, how confusing it will be to later users once this manner of saving is also made obsolete. How perplexing even to those not trained in computing interface design will be the use of a polyvalent weather icon that may either index a data-protective function or signify an overcast day. But then one might ask, Are computer icons *text*? The answer: How can they *not* be, since when a mouse is positioned over an icon, phonological text is revealed?



Scribes recording military achievements. Tomb of Horemheb, Saqqara, Egypt, Eighteenth Dynasty. Image courtesy of Merja Attia (www.flickr.com/photos/130870_040871/21362435835/in/album-72157658107758199/).

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PART I

EXPERIENTIAL WRITING

1 Text in Context: Relief and Hierarchy on Piedras Negras Panel 3

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1. INTRODUCTION

The materiality of text matters. *How* a text is written determines how it is received: who can see it, who can read it, and what kind of physical engagement that act of reading demands. We know this all too well when it comes to matters of preservation—the perishable media such as amate fiber paper, deer hide, and cotton textiles on which the majority of ancient Mesoamerican inscriptions were written rarely survive in the archaeological record. But even monumental stone inscriptions shape their audiences through choices about format, scale, script style, orientation, depth of relief, and myriad other factors. Reading demands an embodied response, one that depends not only on the size and format of text but also on its legibility. When we study inscriptions primarily through line drawings, we risk losing valuable contextual information that helps explain how texts functioned in the ancient world.

Let us begin with a relatively simple example. From a distance, La Mojarra Stela 1, an Isthmian monument made near the Gulf Coast of Mexico during the second century CE, seems curiously off-balance (fig. 1.1). The left side of the stone slab represents a king dressed in elaborate regalia, but the right side of the monument appears blank. It is only when the viewer approaches that the text occupying the other half of the stela becomes visible. Even closer proximity is required to read the more than five hundred small glyphs arranged in neat columns, each glyph block only 2.5 cm wide (fig. 1.2). With just a handful of surviving examples, Isthmian script remains undeciphered (Houston and Coe 2003; Macri and Stark 1993; Méluzin 1992). All that can now be understood of this text are the two dates, rendered in the Mesoamerican Long Count system, which correspond to days in the years 143 and 156 CE (Winfield Capitaine 1988; see also Strauss 2018, 153–62, 233–48, 322–25). Based on analogy with later Maya inscriptions, it is likely that this long text details the exploits of the ruler depicted on the left side of the stela.

This embodied encounter with the stela is markedly different from the experience of a modern line drawing of the same monument (fig. 1.3). The line drawing is tremendously useful in recording all the intentional marks made on the surface of the stone slab. It even reproduces, albeit obliquely, later damage to the stela in the form of empty spaces within

the drawing.[1] Yet in its quest for legibility, the drawing sacrifices some of the most important aspects of the materiality of the stone monument. For while the image of the king on La Mojarra Stela 1 is carved in multiple layers of relatively deep relief, emerging from the flat plane of the stone, the inscription is only lightly incised, just barely scratched into the stone's surface. Text and image are clearly contiguous in terms of style and facture, products of a unified moment of artistic conception that engaged the entire front surface of this large stone slab. From the outset, then, the differences in how the text and image were experienced reinforced inequality: reading



Figure 1.1. La Mojarra Stela 1, 156 CE. Museo de Antropología de Xalapa. Photo by the author.



Figure 1.2. Detail of La Mojarra Stela 1. Museo de Antropología de Xalapa. Photo by the author.

1 See also Winfield Capitaine (1988, fig. 5) for a more complete accounting of the damage. For more on the role of illustration in Mesoamerican archaeology, see Pillsbury 2012.

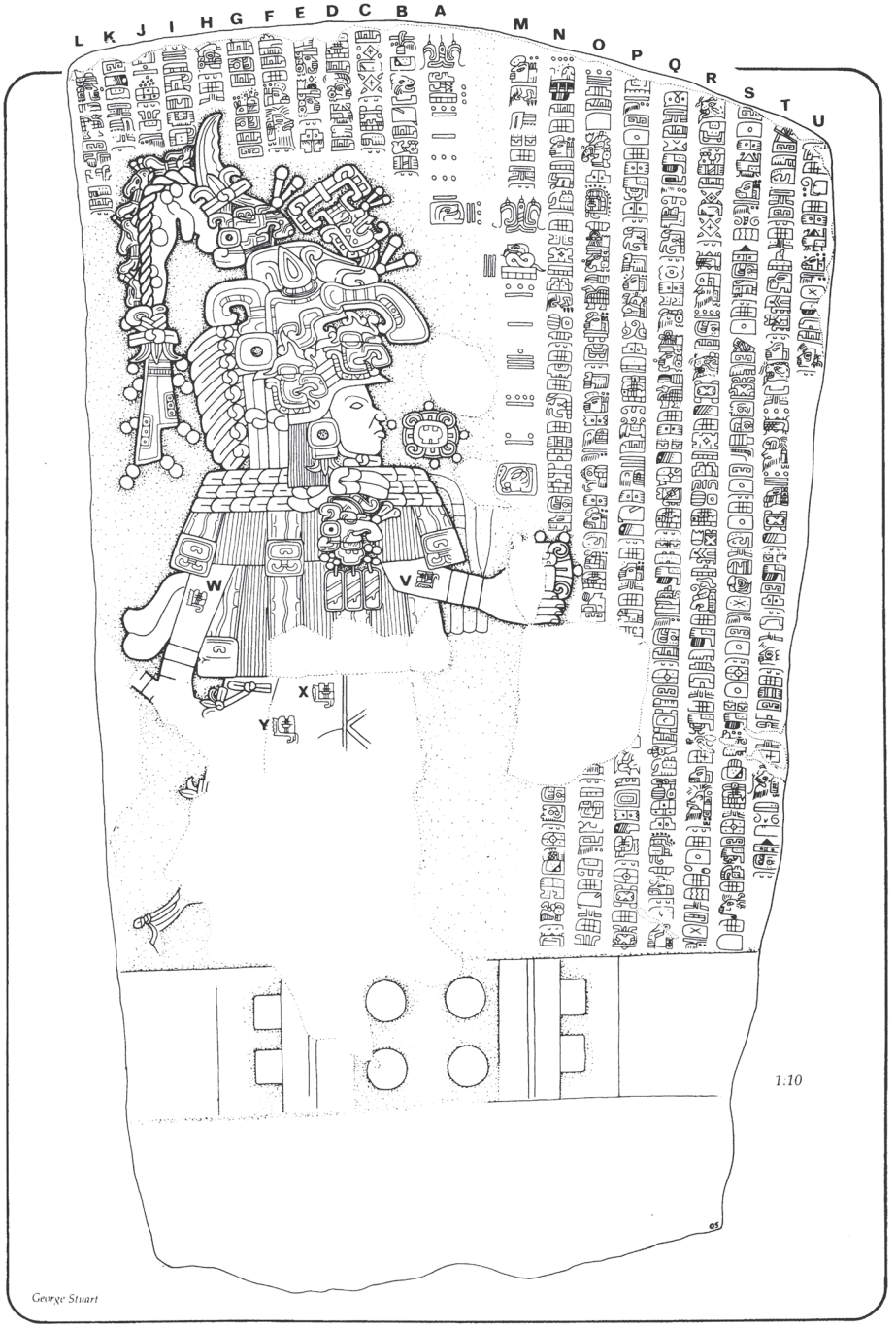


Figure 1.3. Line drawing of La Mojarra Stela 1. Drawing by George Stuart. Courtesy of the Boundary End Archaeology Research Center.



Figure 1.4. Piedras Negras Panel 3, 782 CE. Courtesy of Penn Museum, image no. 21138.

the text on the stela required not just literacy but also privileged physical access to the monument, while those who would have seen the stela from afar would have been able to witness only the image of the divine king, expressed through a format comprehensible to all.[2] Created in a period defined by the both the rise of divine kingship and the beginning of monumental public writing (Fahsen and Grube 2005; Guernsey and Strauss 2022; Houston 2004), La Mojarra Stela 1 offers an exemplary case of how the presentation of writing, and not just the information it conveys, can carry significant meaning.

2. PIEDRAS NEGRAS PANEL 3

Just how powerfully choices about textual presentation might shape interactions with stone monuments becomes even clearer centuries later in the Maya lowlands, where a range of script and carving styles were available to artists and multiple kinds of inscriptions frequently coexisted on a single stone. In the remainder of this essay, I examine the potential impact of these choices through a close examination of an eighth-century sculptural panel from the city-state of Piedras Negras, one of a number of competing polities that thrived in the Maya lowlands during the first millennium CE. Piedras Negras Panel 3 features four different kinds of inscriptions, which interact with one another—and with the image and the viewer—to create a powerful portrait of hierarchy at the royal court. My contention is that writing on Maya monuments such as Piedras Negras Panel 3 does not merely reflect or record social organization through the semantic content of its inscriptions but instead

2 La Mojarra Stela 1 was found in the Acula River, so there is no direct information about its original placement (Winfield Capitaine 1988, 1; for archaeology at La Mojarra, see Diehl 2011). Wherever it was located, the text could not have been read from afar, even if the lightly incised glyphs were highlighted with red pigment. Perhaps the text on the monument was intended to be read out loud, but even so, the right—and the ability—to access the text directly would have been limited to a select few.



Figure 1.5. Piedras Negras Panel 3. Reconstruction painting by Mary Louise Baker. Courtesy of Penn Museum, image no. 176733.

actively generates and reproduces hierarchy through the embodied encounters provoked by its conditions of visibility.

Piedras Negras Panel 3 features a king seated on a throne furnished with a jaguar pelt cushion, surrounded by standing and seated members of his court (fig. 1.4; see also Mary Louise Baker's reconstruction of the original scene in fig. 1.5 and Alexandre Safronov's line drawing in fig. 1.6).[3] It is an intimate monument, 126 cm wide and 62 cm tall, that may have been installed onto the exterior of Pyramid O-13 (fig. 1.7).[4] On the panel, the architectural space of the royal palace is only lightly suggested by the throne at the center, which strongly resembles actual thrones discovered at Piedras Negras; by the palace walls, just inside the framing text, with hints of curtains draped at the corners; and by the step in front of the throne. Together these forms evoke the familiar hierarchical space of the Maya

3 The bibliography on Piedras Negras Panel 3 (originally termed Lintel 3) is extensive. For the discovery, see Mason 1935, 548–50; for the reconstruction, see Baker 1936. Morley (1937–38, 3:220–29) summarizes early bibliography. Key recent works on the monument and its inscription include Clancy 2009, 157–60; García Juarez and Bernal Romero 2019; Herring 1999, 139–57; 2005, 151–62; Houston and Stuart 2001, 69–73; Jackson 2013a, 28–32; Martin and Grube 2008, 127, 148–52; Montgomery 1995, 57–120; O'Neil 2005, 200–234; 2012, 45–48, 154–58, 180; and Teufel 2004, 480–90. While the sculpture is often assigned to c. 795 CE, later in Ruler 7's reign, I follow O'Neil 2005, 218 n. 2, and Houston 2016, table 13.4, in supposing that the last event recorded on the monument occurred closer to its dedication, c. 782 CE.

4 Panel 3 was found in fragments on the upper terraces of Pyramid O-13 (Mason 1935, 548), but its original location with respect to the building is unclear. Early commenters assumed it was a lintel spanning a doorway (e.g., Morley 1937–38, 3:221), but this placement is unlikely given the shape and size of the panel. It may have been inset into an inner or outer wall of the temple, placed on an upper setback of the pyramid, or even set into the stairway (Jackson 2013b, 49; O'Neil 2012, 216 n. 18). Panels 1 and 2 were also found nearby and likely were part of a conjunctive display (O'Neil 2005, 217–22). For more on Pyramid O-13, see Escobedo and Alvarado 1998; Herring 2005, 186–87; Houston 2004; Houston et al. 1998, 17–19; 1999, 11–13; and O'Neil 2005, 223–34; 2012, 140–47, 153–82. For more on the visibility of the panel in its original context, see below.

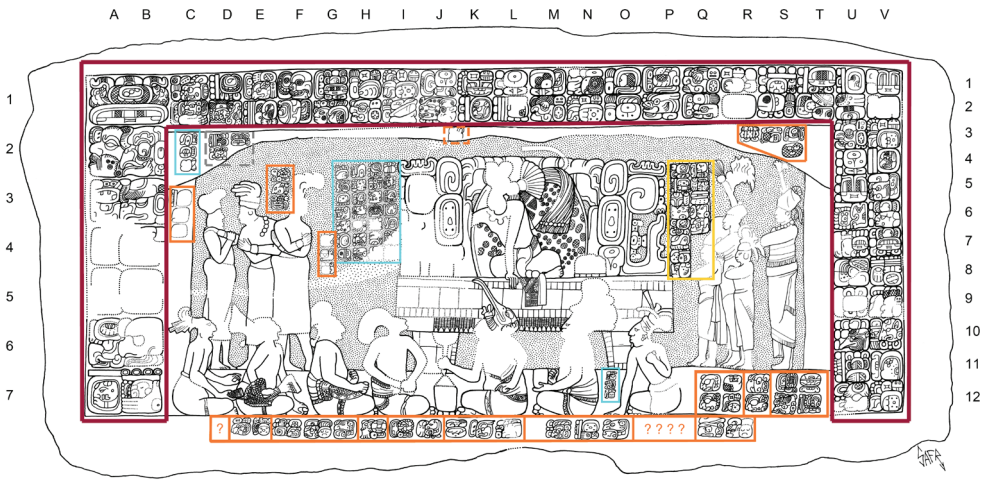


Figure 1.6. Line drawing of Piedras Negras Panel 3. The Initial Series text is indicated in dark red, the captions in orange, the sculptors' signatures in yellow, and direct speech in turquoise; a calendrical text of uncertain function is marked in gray. Drawing by Alexandre Safronov, with modifications by Amanda Chacón and the author.

court (Herring 2005, 158, 160; Jackson 2009; Miller and Martin 2004; Reents-Budet 2001). The sculpture is richly intermedial, demonstrating a dense engagement with other works of art: the scene is structured like a rollout of a polychrome vase, on which such courtly scenes are a frequent subject (see fig. 1.8; Herring 2005, 162; Houston and Stuart 2001, 69; Martin and Grube 2008, 149), but rendered into three dimensions, taking full advantage of the potential of the sculptural medium to grant a complex sense of space.

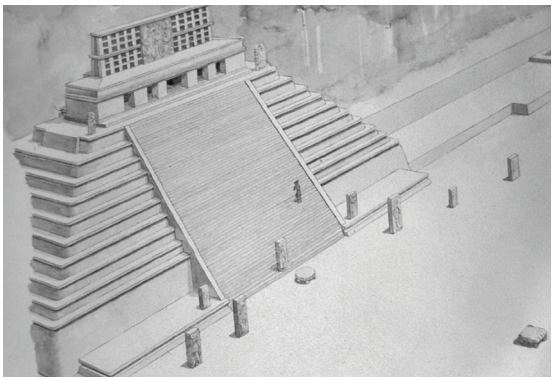


Figure 1.7. Piedras Negras Pyramid O-13, eighth century CE. Artwork by Mark Child and Heather Hurst, © 2004. Courtesy of Heather Hurst.

This courtly scene is exceptional in its inclusion of four of the major genres of Maya monumental writing within its confines: a dedicatory text, replete with historical information, frames the scene; captions label the actors within it; sculptors' signatures claim credit for the making of the work; and extremely rare examples of first- and second-person speech adorn the rear wall. Both texts and images are full of social nuance, with placement, size, elaboration, and proximity to the body of the king carrying rich information about power dynamics at court. Jointly with the figural rendering of royal and noble actors, the textual hierarchies of relief replicate, reinforce, and occasionally subvert the social hierarchies of the court that made them. Moving from the most visible to the least visible of the logosyllabic texts, I will examine what each passage demands of its reader, and then conclude by comparing the relative visibility of the image to the difficulty of reading its surrounding texts.



Figure 1.8. Rollout photograph of Maya vase with courtly scene, eighth century CE. Photo by Justin Kerr, K1453. (K numbers refer to Justin Kerr's MayaVase database, available online at http://research.mayavase.com/kerrmaya.html.)

2.1. INITIAL SERIES TEXT

The largest, most visible, and most public inscription on the panel is the narrative and calendrical text that frames the scene (see figs. 1.4 and 1.6). Full of conventional calendrical information, this principal text indicates that the panel is a retrospective monument, dedicated by K'inich Yat Ahk II, or Ruler 7 of Piedras Negras, around 782 CE, commemorating the deeds of his probable father Itzam K'an Ahk II, Piedras Negras Ruler 4, who ruled between 729 and 757 CE. At the left is the Initial Series calendrical sequence that typically begins Maya monumental inscriptions, an elaborate date corresponding to July 28, 749 CE in the Julian calendar.[5] Opening with an Initial Series Introductory Glyph spanning two columns, the text proceeds to enumerate the Long Count of days elapsed since the beginning of the present era, with glyphs rendered at nearly double the height and width of the subsequent glyphs.[6] This passage is immediately recognizable as the kind of date that so frequently opens Maya inscriptions. However, the content of the date is not so easy to decipher: the Long Count date is written with calligraphic and recondite head variants of the numerical glyphs, perhaps less accessible to the marginally literate than the more conventional bar-and-dot numeration (visible farther down in the Calendar Round dates at A7, E2, K2–L2, and V4–U5; for head-variant and full-figure glyphs, see Houston 2014, 102–23; 2021).

The date commemorated, the text goes on to explain, is the first *k'atun*, or roughly twenty-year anniversary of Ruler 4's accession to the throne. The event was witnessed by a lord from Yaxchilan, a neighboring (and sometimes rival) polity; this brief passage thus hints at political intrigues otherwise suppressed by the principal text.[7] Two days later

5 All dates are Julian, using the 584286 Martin-Skidmore correlation (Martin and Skidmore 2012).

6 Sylvanus Morley notes that the text gets smaller toward the bottom of the first column, with the Calendar Round date given less visual emphasis than the rest of the elaborate Long Count that precedes it (Morley 1937–38, 3:221 n. 286).

7 The Yaxchilan king who attended the event is named Yopaat Bahlam (Martin and Grube 2008, 149), but no record of a king by this name exists at Yaxchilan (Martin and Grube 2008, 127). There is a ten-year gap

there was a party: the king danced the macaw dance all day and all night, and everyone drank *kakaw*, or chocolate. The text moves on to record the death of Piedras Negras Ruler 4 eight years later, in 757 CE, and his burial three days afterward in 5 Flower Mountain, which is the name of a mythical place but in this context may refer to Pyramid O-13, where the panel was later displayed (Martin and Grube 2008, 150; Stuart and Houston 1994, 69, 77–79). The text then counts forward 8,881 days, or roughly twenty-four years, to a tomb-censing ceremony conducted at the tomb by Ruler 7 (for the decipherment, see Stuart 1998a, 389–93).[8] There is archaeological evidence for this event: Burial 13, the probable tomb of Ruler 4, was discovered by Stephen Houston and Héctor Escobedo in 1998 (Escobedo 2004; Houston et al. 1998, 18–19). It lay directly in front of the pyramid where Panel 3 was found, and the bones in it show signs of burning and disturbance, as though such a rite had been conducted. Although the text does not explicitly say that the panel was made and dedicated as part of the event described at the end of the inscription, it likely was, for many monumental Maya inscriptions conclude with a record of their own dedication (Stuart 1995, 99–100; 1998a, 374–75).

This kind of calendrical, historical, and (perhaps) dedicatory inscription is the most common kind of text on monumental Maya sculpture. If a public sculpture has only one kind of text, it will be of this genre. Here, although the Initial Series text does not directly interact with the scene it surrounds, the relationship between the two components is carefully scripted. The text is divided into three principal units: the Long Count date is rendered at double size on the left, the events of 752 CE are narrated on the horizontal span above the scene, and the sad events of 757 CE, as well as their commemoration, are sequestered in the right-hand columns. Thus the text directly above the scene relates most closely to what is being depicted, and the king's name is even positioned directly above the seated ruler at the center of the scene (see below). The text is planned not simply to convey information but also to frame the scene within it.

2.2. CAPTIONS

The Initial Series inscription is not the only text on the stone panel. Below the seated figures on the outer edge are a number of smaller incised texts, somewhat harder to see (see figs. 1.4 and 1.6). Unlike the principal text, they are not a continuous phrase but instead a discontinuous series of names and titles, which serve as captions for the seated and standing courtiers surrounding the throne. A few additional caption texts are scattered throughout the scene, written on the curtains draped in the upper right corner or lightly

in the monumental history of Yaxchilan between 742 and 752 (a period now known as the interregnum [Proskouriakoff 1964, 198]), which seems to have been a period of political conflict and uncertainty. If Yopaat Bahlam did indeed reign at Yaxchilan during this time, Bird Jaguar IV and later rulers may have destroyed all traces of his reign. The Yaxchilan prince pictured in the scene is likewise absent in records at Yaxchilan. For more on the Yaxchilan/Piedras Negras intrigues, see Herring 2005, 155–56; Houston n.d.; Martin and Grube 2008, 127, 149; and O'Neil 2005, 205–15; 2012, 156–58. It is important to note that a shell bearing Yopaat Bahlam's name was found in Burial 13, the likely burial of Piedras Negras Ruler 4 (Escobedo 2004, 279).

8 This occasion was an auspicious anniversary, 360 days after the death of Ruler 6 and 301 lunar months since the demise of Ruler 4 (Clancy 2009, 159; Escobedo 2004, 278).



Figure 1.9. Bonampak, Structure 1, Room 2, north wall, 791 CE. Reconstruction painting by Heather Hurst and Leonard Ashby, © Bonampak Documentation Project.

incised in a vertical line next to the Initial Series text on the left. Smaller than the glyphs of the Initial Series inscription, and incised into the surface rather than raised above it, the subsidiary nature of these texts is emphasized by their relatively modest form.

The practice of captioning figures has many parallels in Maya art, both painted and sculptural. In the mural paintings of Bonampak, dedicated in 791 CE, for example, the vast majority of the texts are precisely such captions, naming many of the figures in the scenes (Miller and Brittenham 2013, 72–85). These captions are also smaller and less graphically elaborated than the Initial Series dedicatory text painted in Room 1 (Miller and Brittenham 2013, 70–72). Most of the captions are simply personal names and titles; many include titles such as *anahb* and *sajal*, whose bearers also populate the court at Piedras Negras (Miller and Brittenham 2013, 79–80). As on Piedras Negras Panel 3, it is not always immediately obvious how to match captions with figures, especially in densely clustered groups where there are more figures than captions (or vice versa).[9]

At Bonampak, naming was a complex and varied practice: some figures were named on reserved spaces left for the captions amid the murals, while other captions were painted against the unreserved background, as though the right to a name were an afterthought. Conversely, in other instances prepared spaces for captions were left blank. The situation in Room 2 is especially illuminating. Like Piedras Negras Panel 3, the battle scene in Room 2 at Bonampak was a retrospective image, depicting events that took place five years earlier (Miller and Brittenham 2013, 64–54, 96–112; Miller and Houston 1998, 253; Rosas Kifuri 1988, 42). Here, a pattern of changes suggests that history remained mutable until brush was set to wall. On the north wall of Room 2 (fig. 1.9), the texts painted on reserved grounds name the king and the most important members of his court, including the *ch'oks*, or royal youths, and the women who stand behind him. The lengths of the texts indicate the

9 On Panel 3, the damaged state of both image and text makes a complete correlation challenging. Given the close spacing between the titles of different seated figures, where to partition the names is not always clear (see n. 11 for an example), and depending on how one draws the divisions, there are either more or fewer captions than there are figures. It is also possible that captions naming the outermost seated figures were effaced, either as part of the final episode of iconoclasm or earlier in the sculpture's history.

relative importance of these principal actors. By contrast, the warriors on the upper left have captions written directly against the blue ground, as though their names were later additions (Miller and Brittenham 2013, 75–77, 80–84). This part of the scene also features more repainting than any other part of the mural; in particular, the headdresses of many of the victorious warriors were reworked, seemingly to match the new identities inscribed on the wall. Perhaps the retrospective history recorded on Piedras Negras Panel 3 was likewise subject to contemporary political pressures.



Figure 1.10. Piedras Negras Panel 4, 706 CE. Photo © Peter Hess.

The varying degrees of relief possible in sculpture offered many ways to signal hierarchies in content. Across Maya monuments, captions are almost invariably at a smaller scale, in a less obtrusive style, and carved in lower relief than the Initial Series text, thus suggesting that the names of courtly actors mattered less than the unified narrative of royal deeds. For example, Piedras Negras Panel 4 has the names of the warriors and perhaps captives incised below the scene, in a smaller and less elaborate script than the principal inscription above (fig. 1.10; Clancy 2009, 42–45; Teufel 2004, 491–96). Hierarchy is further amplified on Piedras Negras Panel 2, made in 667 CE, by differences in caption size (fig. 1.11; for Panel 2, see Clancy 2009, 46–48; Martin and Grube 2008, 143–44; O'Neil 2012, 159–63; Teufel 2004, 474–79). As on Piedras Negras Panel 3, for which it may have served as a model (O'Neil 2005, 217–22; 2012, 162–63), an historical text frames the scene, with the date glyphs of the Initial Series in head-variant forms again rendered at double size in the leftmost columns. Above each of the kneeling figures in front of the king are name captions, all rendered at slightly smaller scale than the historical text save for that of the Piedras Negras heir; he stands behind the king, and his name caption, carved at the same size as the principal text, seems even larger for standing out so starkly from its surroundings. As is often the custom at Piedras Negras, the king is not named, as though his identity goes without saying (Clancy 2009, 46; O'Neil 2012, 160–61).

Captions on Piedras Negras Panel 3 comprise one of the fullest surviving portraits of Maya courtly roles. The seated figures bear titles, including *anahb*, *sajal*, *ti' sak huun*, and *itzaat*—all courtly titles, their meanings still contested, that also occur in the Bonampak murals discussed above, as well as in other images of courtly life (Houston n.d.; Houston and Stuart 2001, 61–63, 68–69, 72–73; Jackson 2013a, 10–15; Miller and Brittenham 2013, 79–80; Jackson and Stuart 2001; Zender 2004, 164–226, 322–26). Several of the standing figures, by contrast, bear the title of *ch'ok*, or royal youth, an appellation corroborated by their diminutive height (for *ch'oks*, see Houston 2009, 2012, 2018, n.d.). To the right of the throne when facing the panel (and thus positioned on the king's left, or less privileged side, on which see Houston 1998, 341–43) stands an individual named T'ul Chiik, labeled a *yok'ib ch'ok*, or