The Shape of Script
How and Why Writing Systems Change

Preface

The Shape of Script—Views from the Middle

Stephen D. Houston

The middle is not discordant with the beginning, nor the end with the middle.

Horace, Ars Poetica, lines 147–148 (trans. H. R. Fairclough)

One of the main misconceptions about writing is that a particular system of script comes into existence, remains the same, and then “dies.” A student learns Maya writing or Chinese script, a scholar researches the nature of cuneiform, and it is presumed that systems of writing retain an integrity throughout their existence. Pedagogically, this approach works. It allows the student to navigate around interpretive complexities best left for specialists. But at the same time, it dehistoricizes systems of writing and sets them apart from human input and intention. We know now that scripts exist as fluid sets of practices, shifting in response to changing historical circumstances, conditions of learning, and arenas of patronage and use. To think otherwise is to fall into the “synoptic fallacy,” in which a system, though continuous through time, comes also to be seen as synchronically fixed (see Houston, chapter 8, this volume). This act of temporal leveling and analytical erasure leads to the mistaken perception of script “as homogeneous, its internal variation disregarded” (Irvine and Gal 2000:38, writing with respect to language). The stakes are elevated by the centrality of writing to most complex forms of human organization. Script—defined here as linked intrinsically to records of language—is, for some, a focal expression and disseminator of zeitgeist; it accords with the formation and consolidation of ethnic or group identity and operates, along with memory and strands of oral transmission, as a central tool of information storage.
This volume, resulting from an advanced seminar generously hosted by the School for Advanced Research, addresses how and why writing systems change. It builds on two projects that I supervised and edited (or coedited) on the origins and extinction of script traditions (Baines et al. 2008; Houston, ed. 2004; see also Houston et al. 2003). The impetus for the book arises in part, too, from a summary statement about the “archaeology of communication technologies” commissioned by the Annual Review series (Houston 2004c). For me, the SAR seminar and its ensuing publication represent a capstone to a long-term study of past writing systems. This project has been possible only because of necessary collaboration with specialists from related, scripturally focused disciplines (see below).

As a guiding framework, the book adopts what Brian Street has called the “ideological model of literacy” (1993:4; also Basso 1989), an approach that sees writing less as a technology than as a mode of communication, socially learned and culturally shaped or transmitted. To be sure, as a word, “ideological” conveys a certain blunt, driven desire for social control. Michael Silverstein (1979:193) and Judith Irvine’s (1989:255) views of ideology are more consistent with those of this volume, in that their formulations funnel down to the beliefs about what language and script are and what they do, according to those who use or perceive them—the proviso here being, naturally, that antiquity and loss make direct elicitation of such beliefs difficult for most of the contributors to this volume. Our access comes largely through cautious inference, excepting fully fleshed-out cases such as Arabic script or Japanese (in this volume, Beatrice Gruendler, chapter 4, and David Lurie, chapter 7). Street was well on target, however, in stressing that scripts flourish or wither in social settings, with meanings and performative activations that extend beyond the contents of writing (e.g., Monaghan 1990). His approach has been doubly helpful in that it frames changes in script as historically unique conjunctures and as exemplifications of shared human processes. Neither achieves intelligibility without the other.

Street and his colleagues have been less attentive to the detail that scripts are objects or materializations that intersect with systems of aesthetics and craft production. Scripts may also accord with local theories of reified, sacred meaning, as in Egypt and Mesoamerica (e.g., Assmann 1994). Nor have Street and his associates addressed the conditions of language change and diglossia (e.g., Hudson 1992), the condition in which several languages are used at one time, some with higher levels of prestige
A final, unavoidable difficulty stems from the task of discerning the multiple varieties of script ideology at any one time, that is, the variant views that seem to splinter according to sectional groups in society (Kroskrity 2000:12). These dimensions of belief and attitude involve subtleties beyond the range of much ancient evidence.

Scholars are close to conceptualizing how scripts emerge and pass into obsolescence. In the case of the former, we have found that the initial functions tend to be limited and fuller linguistic articulation often comes after a long initial period of development. In the case of the latter, demographic collapse or the withering of “complex cultural systems” and attenuation of their functions sign the death warrant for weakening script traditions; nonetheless, writing can show remarkable resilience, especially in its bonds to language (Baines 2008:354, 357–359; Houston 2004d:350–352). But we are still far from explaining how scripts maintain themselves over time or how and why scripts change when they do, during their “middle years.” My opening epigram, a quotation from a poem about historical exposition, asserts that the middle may not be discordant with the beginning or end. By an old adage, the child is father to the man, mother to the woman. Within an elderly human nestles the relict infant. Yet, these states and stages are not the same. In scholarship, there is rough monitoring of paleographical modifications but little attempt comparatively to understand the selective processes behind such transformations. This is a gap that needs to be filled. Writing is one of the central cultural productions in human history, yet its many modulations and shifts seem often to be taken for granted, as if they do not need explanation. This book enables anthropologists, philologists, and archaeologists to revisit a key form of communication that channels and conditions most discourse in complex societies. The study of writing needs to be brought back into the fold of anthropology, not as a marginal or recondite specialty but because it is an indispensable tool by which knowledge is transmitted.

**THE MOTIVATION FOR THE SEMINAR**

The guidelines for applications to the SAR advanced seminar program ask, “Why a seminar, why now?” As suggested above, prior experience suggests that the depth and richness of information about scripts are such that no one person can master the evidence. Comparative studies need regional experts to succeed, provided that a similar vocabulary and set of questions can be found and shared. For the seminar, these terms and concepts were
laid out in advance through circulated memoranda and were reinforced or reworked in subsequent communications among the participants. Most approaches to writing have been piecemeal, with brief encyclopedic sketches, as in Peter Daniels and William Bright’s *The World’s Writing Systems* (1996) or Florian Coulmas’ varied work (e.g., Coulmas 1989). In my view, further summations of this sort are not needed, no matter how wide-ranging. Instead, we should isolate and evaluate the individual settings and meanings of script change as a joint effort to encourage debate. Fresh evidence is available from much of the ancient world; many scholars have become intrigued, across disciplines, by the general nature of graphic notations of language. We are ready to talk.

**QUESTIONS TO BE ADDRESSED**

The book seeks to understand the social (interactional), cultural (semantic), and historical (sequential) forces that influence the course of writing systems. It focuses broadly on issues of transmission from one generation to another or the conscious decisions by which changes occur, along with the kinds of people implicated in a script’s use or reception. More specifically, it asks the following questions:

- What processes affect the formal change of script?
- What influences the use of script over time?
- What agents or actors are involved in such shifts, either actively or passively?
- How is literacy achieved, furthered, or deliberately restricted?
- How do script use and aesthetics shape each other?
- What influence do technologies have on script form?
- What relation, archaizing or contrastive, do scripts have with precursors and alternative systems at hand?
- What do formal, paleographic approaches tell us about more general developments at work in script?
- What are the links between images and script?

Some questions draw more interest than others, as became clear during the seminar and in later reworking of the papers.

**WRITING > TALK > WRITING**

For five and half days, from April 15 through April 19, 2007, the
advanced seminar members discussed the arc of writing from its time of inception to its disappearance. Participants addressed what took place between those points of birth and death in a wide variety of script traditions, including cuneiform (Niek Veldhuis, Berkeley), Egyptian (John Baines, Oxford), west Semitic (Kyle McCarter, Johns Hopkins), Latin and Italian scripts (John Bodel, Brown), early Arabic (Beatrice Gruendler, Yale), South Asian (Richard Salomon, Washington), Chinese (Kyle Steinke, Princeton), Japanese (David Lurie, Columbia), Maya (Stephen Houston, Brown), and Mixtec (John Monaghan, Illinois-Chicago), along with systems of quantitative notation (Stephen Chrisomalis, then of McGill, now at Wayne State).

At the outset, the group decided to reconfigure the usual arrangement of formal discussants into a pattern of prompt discussion during and after a brief presentation by each author. This change loosened the atmosphere and led to productive comment without the need for formal evaluation by a single respondent. The order of presentation was determined by chronology, with some attempt at regional grouping as well, so Houston and Monaghan, both in the New World, came near the end, followed by Chrisomalis on notational systems around the world. This organization reflected no ranking of evidence, only a convenient juxtaposition of scripts that had some direct historical connection. This general organization by time and region continues in the book. All papers were rich in data yet written for an educated audience, a combination of tone and substance that I endeavored to preserve for the final publication (although I did impose BCE and CE as temporal marks, in part because of sensitivities in Old World archaeology, certain branches of which disfavor a positioning in Christian time). The chapters reflect a week of discussion but also, in final form, an extended process of digestion and communication.

In chapter 1, Niek Veldhuis, focusing on shifts within cuneiform, demonstrates that this tradition of script—the oldest known, with Egyptian—experienced no steady state of change. Rather, it shifted sporadically and in some periods rapidly, often for social or political reasons, with much evidence of play between idiosyncratic innovation and the inertia of tradition. His emphasis on the organization and presentation of information within cuneiform points to the effects of different languages on script, changes in rhetoric, and the enlargement of intended readership, from primarily official to a broader usage. With Old Babylonian writing, a need to record Sumerian—an ideologically valued language—arose at the same time that political entities began to fragment, leaving a pattern of less
centralized control over script. For Veldhuis, there was, in fact, a revolution at about 2000 BCE. This was when “writing lost its almost exclusive link to officialdom” (Veldhuis, chapter 1, this volume). With a weighting of social setting and societal need, Veldhuis crafts a persuasive case that “deterministic theories predicting that a writing system will evolve toward greater efficiency or toward a more phonemic representation of the linguistic message are a bad fit.” Just as telling is his argument that “complexity [in a script] may be an asset rather than a handicap.”

John Baines charts the evolving and deep traditions of Egyptian script by examining links to pictorial displays within the comparatively uncommon pattern of alternative, differentiated scripts. (The concurrent existence of script forms proved to be an underdeveloped theme in the seminar, other than occasional comment on cursivization.) Functions proliferated when writing came into broad use, although, like Veldhuis, Baines places special emphasis on social needs, as in the wish to preserve and foreground “prestige forms [that] were privileged over mundane administrative ones” (chapter 2, this volume). The special heft of the Egyptian evidence, like Babylonian and Chinese, derives from its time-depth and copious data, especially for the Twelfth Dynasty (early second millennium BCE), in which significant expansion took place in the use and genres of what Baines calls “high-cultural materials.” A “classical style” coalesced and “remained normative thereafter.” As with cuneiform, change was not a process that erupted internally, as a product of ductus or scribal caprice. In the two main examples he describes, it occurred as an abrupt shift that reflected and buttressed shifts in discourse and, indeed, society itself.

John Bodel draws welcome attention to another feature of scripts, in this case applied to the writing of early Italy, by examining semantic, visual features that are frequently neglected by scholars. He coins the term “paragram” to characterize such features and uses them to probe the non-linguistic, graphic elements of writing that are not easily encompassed by an exclusively linguistic focus. Script may express an auditory world, but in expression it is palpably a thing that involves display (punctuation and the “order and regularity of script presentation” [chapter 3, this volume]). The shifts he details are just as revealing culturally and discursively as linguistic content and the finite ways of recording it.

Kyle McCarter was not able to contribute to the final volume, but his seminar paper warrants mention. He examined the so-called “national” (ethnically linked) scripts of ancient Syria-Palestine and found that the
technology of script production led to a specific set of manipulations within a “cursive” tradition that prized rapidity of writing. The theme of change through production resonated with some other participants, as witnessed by recurrent discussion in Santa Fe about the lack of cursivization (ligatured signs whose shape is propelled by rapid, efficient execution) that seemed to obtain in certain scripts, Mesoamerican ones in particular. As McCarter pointed out, inertial tendencies in early Hebrew seem to have disallowed some of this cursivization.

In chapter 4, Beatrice Gruendler looks closely at the effects of language and local concepts of language on Arabic script. She shows that an emphasis on vowels existed from the outset, that the prestige and abundance of Arabic language affected use of the script for writing other languages, and that oral performance continued to play a strong role. However, the script sometimes failed to exhibit close familiarity with linguistic elements of Arabic, especially in the matter of case endings. The script was flexible enough to conceal those “shortcomings” in a way that would bolster rather than fragment a community of faith. More than the other chapters in this volume, Gruendler’s discloses the degrees to which users of script fretted about these matters, about the “right and wrong of linguistic usage” (chapter 4, this volume) and the problem of confronting the disengagement between sacred word and colloquial expression—between, in her words, “oral performance and increasing written text.”

In an essay of generalizing intent (chapter 5, this volume), Richard Salomon examines script change from two vantages, that of formal change and a systemic, deeper level of such change. The wide cross-citation of this analytical distinction in other chapters indicates that it resonated with our working group. Salomon argues that formal changes—in stylus, stroke rendering, or degree of “economization”—often occurred gradually, in an unconscious or unintended fashion. More sweeping changes required stronger, exceptional (if sporadic) forces, particularly when a script was recruited to record an unrelated language. One such example was the shift in Aramaic script after its adoption by speakers of South Asian languages.

In discussing Chinese, Kyle Steinke focuses on a critique of two theories of script development. The first is that of William Boltz (1994), who invoked a notion of a “Chinese worldview-based ethical order” as a mechanistic explanation for change. The second is that of Qiu Xigui (2000), for whom script change occurs as a scribal response to the need for greater efficiency in writing. Steinke is dissatisfied with Boltz’s theory. He supports a
perspective that balances Qiu’s notion of efficient script change (“shortcuts”) with a consideration of script changes motivated by the writing’s display function, as when artist-scribes accented aesthetic features without sole regard for efficiency. The chapter echoes Bodel’s appeal for greater attention to, in Steinke’s words, forms “designed for beauty” (chapter 6, this volume). His other proposal is that such calligraphic products “mattered... to the state.”

For David Lurie’s part, he stresses both the difficult borrowings that characterized the adaptation of Japanese script from the Chinese system and the continuing emphasis in Japanese on logography or word-signs. Phonography, records of sound alone, had come into existence at a relatively early date. It had some impact in extending the use of writing, permitting, as he puts it, the appearance of “expressive effects” (chapter 7, this volume). Like all participants, Lurie draws attention to internal, mechanistic changes in script production, those resulting from the use of brush or print, but also “metalinguistic discourses” about the perceived role of script and its interpretive dependence on context. These comments sit well with the discourses and “anti-barbarism” treatises that Gruendler discusses. Along with Bodel and Steinke, Lurie insists that “writing goes beyond the transcription of speech sounds.”

The two chapters on Mesoamerica (8 and 9) share a predilection for social and contextual explanation. I review prior studies of script change in Maya glyphic writing and target “domains” of change (Houston, chapter 8, this volume) that include execution, transmission through guided participation in multi-authored works, and motivation. To explain episodic, non-gradual shifts, I posit “bottlenecks” or “founders’ effects.” In these, dramatic changes in society truncate the store of glyphic knowledge and result in major alterations to the signary. The greatest shifts took place at the end of Preclassic civilization, a time of profound demographic relocation and, in places, population decline. By the Late Classic period, beginning about 500 CE, a single polity centered on the city of Calakmul, Mexico, began to exercise a hegemonic sway, triggering the production of new signs and the reinterpretation of old ones. In the same period, a novel attitude towards writing materialized in the form of “pseudo-glyphs.” These glyph-like elements fulfilled the same display role as writing yet by definition failed to share in its content. Conceivably, the appearance of pseudo-glyphs came from heightened diglossia, especially the splits between speech and writing, along with the relaxation of sumptuary practices that had hitherto
restricted the use of writing. There may even have been a new, more inclusive notion of what script is and was.

In a similar vein, Monaghan presents his work (chapter 9) on the use of Mixtec and central Mexican script within social settings that demanded, over time, differing functions from script. Alphabetic and pictorial registers might coexist, but they conveyed different assertions about identity and links to the past. The backward-looking curiosity in Mesoamerica—in fact, a deeply felt fervor—underscores the need in some script traditions to reabsorb past practices and to highlight them in a marked manner as renovated norms, as the old that is new, the new that is old. Monaghan makes a more general argument that the systemic shifts detected by Salomon may well have taken place in periods of major disruptions, such as state reorganization or the turbulence that accompanies colonization.

In Chrisomalis’s study of numbers, he decries the excessively unilinear, evolutionary quality in most claims about change in numerical notation (chapter 10; see also his magisterial synthesis, Chrisomalis 2010). Actual change in such systems appears to have been rare, although with a perceptible increase of positional systems over additive ones during the past 5,500 years. From 1500 BCE on, variant systems declined with the growth of imperial, “globalizing,” and overarching economic systems. A general trend from cumulative and additive systems to positional and ciphered ones does not belie his main point, that these shifts take place for “a complex combination of cognitive, sociopolitical, and cultural factors” (chapter 10, this volume). Numeration will never reach an “end of history” or settle into final, perfect form.

In sum, the chapters identify joint themes, some well addressed, others not completely resolved: (1) the need to avoid concepts of telos or inevitability in script change yet to balance this wish against the recognition of the role of precedents in channeling subsequent shifts; (2) the desirability of devising typologies of change that reflect contact between languages and script traditions; (3) the central nature of cursive “technologies” or “fast writing,” with consequent simplification and other forms of problem solving; (4) the decisive clues afforded by the rhythm of change and the possibility of random processes, akin to evolutionary “drift,” some changes being random, others strongly motivated; (5) the role played by social differentiation of script, with close attention to practitioners and users; (6) the questions of why script change fails or achieves force and acceptance and why some registers affect others; and (7) the influence of aesthetics, display, and other
external functions on script change. The themes play out in conversation between the chapters, especially with respect to labels that need further review and definition, as in “simplification,” “efficiency,” “cursive,” legibility,” “register.” The nature of conservatism and resuscitations of earlier forms commanded interest, too, yet require more delineation.

As Chrisomalis doubts an “end of history” for numeration, it is certain that these conversations and explorations have no end. They will and must continue. Whether they should be molded by semiotic or structural theories of analogy, displacement, oppositional stratagems, or ethnogenesis (Irvine and Gal’s “fractal recursivity” [2000:38]) may be questions that are too sweeping or vague for some of the participants. They feel the pull of specific examples conditioned by culture, history, and society. A greater level of abstraction could systematize comparison; it could also disinvite those who belong in this dialogue but see little benefit to theories unmoored from context or historical setting. There do appear to be credible generalizations, however: that the fuller embrace of language and its manifold expressions forms part of the “middle” years of most scripts (the Maya case sees this expansion quite late); that a full range of genres develops slowly, with consequences for the shape of script; that broad institutional and political shifts trigger momentous change in script more often than not; that, conversely, close monopolization of writing and its forms tends to be unsustainable in the long term; that changes in the relationship between spoken and written language occasion the most careful attention to the nuances of writing; and that practice, execution, order, and an attachment to precedent repeal and restrain the more unruly experiments in the history of script. Even this: the “shape” of script has its own levels of analysis, from its minute constituents to its macro-setting on a temple wall or its position within community and cosmos. These levels deserve systematic review in each case of script development. The quantity of texts, users, and makers, or special diffusion of the same, may have affected the shape of script as well, but that is hard to gauge on present evidence. A banal but valid comment: an opaque text, made more recondite by script, is by its nature obscure and accessible to few; a text designed to be accessible, by form and content, will attain broader readership. But above all, a script takes shape because someone feels a need for it to look and read a certain way. The maker and user behind writing hold the keys to understanding formal and substantive change.
This volume has taken shape over a long and productive gestation. For their invitation to create this book, their sustained interest, and, above all, their patience for the eventual result gathered here, there can be only gratitude to the president of SAR, James F. Brooks, Vice President John Kantner, then Director of Scholar Programs Nancy Owen Lewis, Leslie Shipman, hostess and chef extraordinaire, and Catherine Cocks, then executive editor of SAR Press, along with Lynn Thompson Baca, current director of the Press, and Lisa Pacheco, the managing editor. Catherine also did a meticulous job with copyediting, to our great benefit. John Baines, a good friend always, gave suggestions for improved wording. Cassandra Mesick performed her customary miracles with initial copyediting. To them, we raise a collective toast of good vintage, in gratitude for a week of intellectual discovery and fellowship and for an opportunity to examine the middle years of past writing.