

---

# The Coming Classics Revolution

## Part I: Argument

COLIN WELLS

OVER THE PAST half-century, scholars in a variety of disciplines have drawn new attention to the cognitive and historical implications of alphabetic literacy. They include media critic (and darling) Marshall McLuhan, classicist Eric Havelock, social linguist Walter Ong, and anthropological historian Jack Goody. McLuhan became well known to the general public for oracular tags such as “the medium is the message” and for his famous cameo appearance in Woody Allen’s *Annie Hall*. His work on the consequences of communications technology included the impact of print starting in the fifteenth century, as well as the arrival of electronic media in the twentieth. Walter Ong and Jack Goody both made important contributions to our understanding of the alphabet’s consequences, along with Ian Watt. More than anyone else, however, it was Eric Havelock who put together the revolutionary new understanding of the alphabet’s origins and impact that goes under the name “the alphabetic thesis.” Havelock took alphabetic literacy back to its beginning, which lies in the classics, and which gives the study of classics a dynamic future, if one to which classicists have yet to awake.<sup>1</sup>

A British scholar who worked in North America, Havelock was at the University of Toronto with McLuhan, which is why they and their U. of T. coworkers on literacy, including McLuhan’s teacher Harold Innis, are often collectively referred to as “the Toronto school.” (McLuhan taught Ong at the University of St. Louis, bringing Ong into the Toronto fold intellectually.) Havelock also worked in the United States, where he chaired the classics departments of first Harvard and then Yale. He died in 1988, by which time, I

would argue, his work on the alphabet had done for the social sciences no less than what Darwin did for biology or Einstein for physics. It swept away previous theories of cultural evolution and replaced them with a coherent new explanatory model that accounts for the evidence from numerous disciplines, revealing deep connections among a wide range of apparently disparate phenomena.

Moreover, the alphabetic thesis is entirely falsifiable. Among other things, it asserts that only the alphabet has allowed us to articulate new ideas and to spread them widely, and so the existence of a single revolutionary idea that has been articulated and widely spread without the alphabet would effectively refute it. Yet it has not been falsified, and there does not appear to be any such idea.

Havelock's achievement and its sweeping implications have cut sharply against the grain of academic fashion, and this is an unfinished revolution. Still, the alphabetic thesis has begun inching across the social sciences in a way that emboldens me to make a couple of predictions here. Within a few years, the orality-literacy continuum will consolidate its place as the go-to metric for those who are interested in contextualizing cultures and civilizations. Along the way, this process will put the classics—and, willy-nilly, classicists—where they rightly belong: at the center of how we study humanity. There are scattered signs this is already happening, starting with Walter Ong's influential 1982 book *Orality and Literacy*, which did much to spread Havelock's findings to the wider academic world.<sup>2</sup> Yet despite these gains, there is still a long way to go in Havelock's rehabilitation, and he remains under an ideological cloud for many academics, not least classicists themselves. Scholars still tend either to dismiss him without argumentation or to ignore him ostentatiously.<sup>3</sup> I believe that this resistance is based on an inadequate understanding of Havelock's ideas.

Nobody, I suspect, has ever angered classicists of all political stripes quite as much as Eric Havelock, although he was one of their own. On the one hand, his insistence on what was

seen at the time as an unacceptably late date of around 750–700 BC for the invention of the alphabet, building on the work of Rhys Carpenter, popped the balloons of traditional highbrow conservatives, his elders, because it meant that the “Greek miracle” had sprung directly from a non-literate background. (The meaningful distinction between illiteracy, the state of not being literate in a literate culture—which carries connotations of backwardness—and non-literacy, the state of belonging to an oral culture, was not widely drawn before Havelock helped to delineate it.) On the other hand, he enraged the emerging academic left by proposing that the Greek invention of the alphabet dramatically broadened humanity’s mental horizons, which the politically correct (incorrectly) perceived as a slight to other cultures.

We may begin to address this misperception, perhaps, by noting a simple point that Havelock often made, which is that ancient Greece is unique. This is not because the Greeks were better than anyone else. It is because Greek literacy represents a historical experiment that has never been reproduced, nor can it be. Though the alphabet spread to other cultures over time, the Greeks remain unique as the only people ever to make the transition to what Havelock unfashionably called “the alphabetic mind” completely on their own, from scratch, as it were. The idea here is that literacy is not just about being able to read and write.<sup>4</sup> It’s about having a culture in which a relatively robust readership exists that can draw on a relatively robust body of literature. As we’ll see, one of Havelock’s central points is that earlier writing, because of its difficulty, was restricted to scribal or priestly elites, and that the alphabet allowed a recognizable readership to emerge for the first time. It took several centuries to build both readership and literature from nothing. All other cultures have had a body of alphabetic literature to draw on as they became literate. The ancient Greeks had to forge a body of alphabetic literature for themselves, which then became the basis for all others. To paraphrase Danny DeVito, that’s why we call them the ancient Greeks.<sup>5</sup>

The irreducible uniqueness of the Greek experience makes it terribly difficult for us to imagine ourselves into it, yet terribly important that we at least try. However, that effort is seemingly complicated by a moral obstacle. Havelock's most significant achievement was to show that not all writing is the same, but for many readers this claim has proven to be ideologically indigestible. The alphabetic thesis, they feel, is deeply unfair because (they assume) it denigrates the users of other writing systems as less intelligent.<sup>6</sup> The assumption that literacy is linked to intelligence, though almost universal, is a false and highly toxic one. With Havelock's prompting, I would read it as resting ultimately on the unconscious but pernicious and marked bias of literate people toward literacy and against orality. Although this is the very same bias that some of his critics attributed to Havelock, Havelock himself explicitly identified it in traditional interpretations of literacy and disavowed it with detailed argumentation. "It is a curious kind of cultural arrogance," he wrote characteristically in 1974, "which presumes to identify human intelligence with literacy."<sup>7</sup>

Throwing off such a deep and reflexive prejudice, even momentarily, takes a deliberate, wrenching, almost emotional effort of will and imagination. Some readers—and, as above, I use the word advisedly—will not be able to make that effort. Academics and trade book editors, in our culture among the most preciously literate, seem to have a particularly hard time doing so in my experience. Yet if there's any single idea that literate persons absolutely must grasp if they hope to understand their own literacy, it is this: a conversation about literacy is not a conversation about intelligence.

Havelock's critics have failed to take this and other central aspects of his thesis into account, which is what tempts me to say that they do not so much oppose him as they fail to grasp him. As Havelock saw, if we truly stop thinking of literacy as "better" (more intelligent) and orality as "worse" (less intelligent) our ideological anxiety melts away. Granted, asking contemporary academics to chuck prestige is a steep request.

Yet it is also a potentially liberating one, once we realize we don't have to chuck fairness with it. Havelock insisted over and over that oral cultures be taken seriously as cultures, a steadfast position that his critics must ignore (cognitive dissonance, anyone?) in order to uphold reflexive canards such as "Hellenocentrism."

Simplistic ideology aside—and there's the rub—evidence to support Havelock's assertion that writing systems differ in their efficiency is plentiful and consistent if we care to see it, and it can help explain much that may otherwise mystify us. A hammer is not "better" than a shoe, but it is better at pounding nails.

THE GREEK ALPHABET was based on an earlier writing system, that of the Phoenicians, which had signs for consonants but not for vowels. Like Hebrew, Phoenician was a Semitic language, and the Hebrews' writing, which also derived from the Phoenicians', similarly had consonants but not vowels. Semitic languages rely on vowel sounds less than Indo-European languages such as Greek, Russian, or English, so the Phoenicians' system sufficed for their immediate needs.<sup>8</sup>

The fact that the Phoenicians' writing apparently suited their needs is sometimes put forward to support the claim that it was just as efficient as the Greek alphabet. Even scholars of writing who count themselves sympathetic to Havelock often seem to assume some connection between need and efficiency. Yet this connection is spurious, and we should reject it emphatically. Writing is a technology, and to suggest any connection whatsoever between the short-term purposes for which a technology is developed and the technology's ultimate implications betrays a fundamental misunderstanding of how technology works. No one, including Alexander Graham Bell or Thomas Edison, could have predicted the implications of telephones or movies, which appeared to be little more than ephemeral curiosities even to their inventors. The impact of technology is never limited to

the uses to which people first put it, and the power of writing does not lie in filling anyone's needs. It lies in opening up emergent and entirely unforeseen possibilities, which are all the more exciting for being unpredictable. Like all technologies, writing systems come with hidden consequences.

Anyone not already familiar with Hebrew and Arabic, the two main Semitic languages used today, may be surprised to hear that they continue to make do without vowels in their normal written forms. They do have various ways of indicating vowels available: *matres lectionis*, "mothers of reading," are consonants deployed in both writing systems that do double duty as vowels, and both also use diacritic "points" for vowel sounds that came into use in imitation of the Greek model and are not commonly seen.

Most often such aids are used for beginning readers, which should tell us something about the inherent difficulty of consonantal writing. The signs themselves are few in number, so they are easily enough memorized, unlike in Chinese script, the other main branch of world writing systems, in which each sign represents a whole word. China's logographic script served a narrow and rigorously trained bureaucratic elite quite well (indeed, its rigorous demands may have contributed to the centralization of Chinese political and cultural authority) but its many thousands of signs pose frankly insurmountable problems of memorization for others. Since the Chinese Revolution, to attain wide literacy the Chinese have had to combine traditional logographic script with the *pinyin* system based on the Roman alphabet. I think we can safely assume they would not have done so had any other way presented itself of breaking through the great wall of literacy, which held rock steady at an estimated 10 percent despite a decade of concerted educational effort by the government.

The problem with consonantal writing lies elsewhere. It is highly significant, however, that the consequences of both kinds of writing are similar when it comes to novelty. With consonants alone, it's impossible to communicate a name that

the reader doesn't already know, a phrase from a foreign language, or indeed any new or unfamiliar word. If this impediment seems trivial, imagine learning to read without being able to sound out and acquire new words on your own as you go. Stretch a little further and try to imagine encountering even a familiar word that's being used in a new sense or a completely unexpected context. For that matter, imagine grappling with the unexpected context in the first place, without vowels. And for very different reasons, similar strictures limit logographic writing, in which there is no efficient way to render a foreign name or word, or readily to convey to a reader either the meaning or the pronunciation of an unfamiliar sign. Readers absolutely must be able to come to grips with novelty on their own. Yet even today the Chinese who can read Chinese script can't count on being able to look up a new sign in it, because logographic writing still has no satisfactory way to organize a dictionary (though I would think it likely that electronic media will circumvent that difficulty).

It does seem advisable, perhaps, to qualify any claims about the relative efficiency of scripts with some conjectural possibilities, particularly when it comes to the ways that writing interweaves itself with language. Language, writing, and indeed thought appear to resonate in ways that are suggestive, if difficult to pin down. In their cultural tradition, for example, the Chinese came at things from a wholly different standpoint from that of the Greeks, accomplishing great progress with technology—gunpowder, paper, and printing were among their achievements—but never bothering too much with theory or explanation. For the Greeks, it was the other way round. One possibility that Havelock did not seem to recognize is that language, itself a technology, may open or close various avenues of cultural evolution, on its own or in combination with writing. Though sophisticated and highly developed, for example, Chinese thought never took the uniquely consequential step of splitting matter from spirit, embracing them together in a holistic outlook that braided natural and supernatural together. Such an

outlook is characteristic of oral cultures in general, but is also consistent with the holistic approach of Chinese writing, which captures not separate sounds but whole meanings. Chinese holism goes clear down through writing to language, since Chinese is an uninflected and largely mono-syllabic tongue. A phonetic system would never suffice, other than as back-up, for a language in which each syllable has an average of an estimated six to ten meanings, and some many more. Havelock suggested that the Chinese give up logographic writing completely, but that seems as unworkable an option as relying on it alone.

The Greek propensity for analysis, we might conversely speculate, has roots that go through writing down to Greek's Indo-European origins. In the alphabet, the Greeks created not just a transcription device but a new theory of language in which heavily inflected multi-syllabic words can be phonetically broken down into their smallest component parts. It can hardly be coincidental that the Greeks' atomic theory of matter appeared shortly after this atomic theory of language. Nor was the analogy between letters and atoms lost on Plato or Aristotle, who dwell on it repeatedly.

AT THIS POINT, a cautious reader might agree that perhaps the alphabet had an impact, but might still object that the precise mechanism remains obscure. How *exactly* did the alphabet initiate the sweeping cultural changes ascribed to it? Surprisingly, there is a straightforward answer to that question. The alphabet revolutionized not just writing, but reading as well, and that's where the precise mechanism is found (although Havelock himself didn't articulate it in the way that I'm about to).

As is now well known to the experts on writing systems, people reading Hebrew or Arabic have to figure out the message first, and only then can they read the words. The consonants act as hints, but the reader has to fill in the rest. In academic terms, then, interpretation precedes decipherment: grasping the message helps readers supply the missing vowel

sounds. The alphabet reversed this hitherto traditional way of reading: for alphabetic readers, decipherment precedes interpretation. This simple fact has implications that the academics who acknowledge it have avoided like the plague. For example, in his article on “writing” for the current *Encyclopedia Britannica*, David Olson states the fact and hastily moves on to safer ground. Yet the implications are not only huge, they are—or, rather, they ought to be—also quite unmistakable, although I have seen no scholarship that acknowledges them.

To see how those implications play out, let’s look at some examples. First, read these brief passages:

W hld ths trths t b slf vdnt, tht ll mn r crtd ql . . .  
Nc pn tm thr ws lttl prncs . . .

There should be no problem interpreting and then deciphering. The process seems smooth enough.

Now read this:

Lncln hd grwn dslsnd wth Sthrn nnsts, sch s Rvrd Jhnsn f Mrlnd  
nd Thms J. Drnt f Lsn, whm h hd prvsl trd t cnclt.

This more challenging passage starts off well—the name Lincoln is a gimme, and clues the contemporary reader in to the general context readily enough—but ambiguity soon overwhelms. Southern . . . onanists? Reverend Johnson? Here’s the original, from a recent review of some new books on the Civil War:

Lincoln had grown disillusioned with Southern Unionists, such as Reverdy Johnson of Maryland and Thomas J. Durant of Louisiana, whom he had previously tried to conciliate.<sup>9</sup>

The consonantal version of this passage challenges but might perhaps be worked out with time. Yet notice that a definitive reading will remain elusive. Southern onanists, it seems, will always be with us. Havelock called this inherent limitation of consonantal writing “residual ambiguity,” and it appears inescapable with any but the most familiar messages.

Now try something even more difficult:

Ll ths thrs ssm—wth lttl r n rgmnt—tht fr ch lgcl pssbl sthte stndrd thr cld xst, s, cltr n whch ppl wld nj nd b dpl mvd b rt tht mt tht stndrd.

Other than the relatively conventional prepositional phrase “with little or no argument,” which may or may not allow a reader to backtrack and work out the opening clause, I suspect that for most this passage will remain consonant salad. Here’s the original, from David Deutsch’s (highly ap-  
posite) recent book, *The Beginning of Infinity: Explanations That Transform the World*:

All these theories assume—with little or no argument—that for each logically possible aesthetic standard there could exist, say, a culture in which people would enjoy and be deeply moved by art that met that standard.<sup>10</sup>

Now, I’m cheating a little by giving these “consonantal” passages in English, since Semitic languages like Hebrew and Arabic do lend themselves more readily to consonantal writing than Indo-European ones like English and Greek. The reason is that root meanings in those languages are determined by “consonant clusters” (usually three consonants, so-called “triradicals”) and the vowel sounds reflect merely grammatical rather than lexical differences. A common example given from Arabic is the group of words that can be formed on the triradical whose basic meaning has to do with writing, KTB: *katab* (“he wrote”), *katuhbu* (“they wrote”), *ketob!* (write!), *koteb* (“writing”), *katub* (“being written”), *kitab* (“book”), and so on. All are written KTB, and the reader will presumably figure out which one is meant.

However, this presumption is given far more weight than it can bear by Havelock’s critics, whose leveling prejudice requires them to further presume—implicitly, but often explicitly as well—that all texts are uniform in difficulty. If one message can be grasped in a given script, the conformist thinking goes, any message can be grasped. Otherwise, a mes-

sage in a consonantal script that's harder to grasp would, by definition, be harder to read. Yet, it is plain that in whatever script, the more conventional, familiar, or expected a message is, the easier it will be to figure out; the less conventional, familiar, or expected the message, the harder it will be to figure out. Without vowels, readers are hobbled in this cognitive process—even factoring in the linguistic head start of consonantal roots in Semitic languages. A curse in disguise, such roots do indeed allow conventional or familiar messages to be read in consonantal script with relative smoothness as compared with non-Semitic languages. But the role of the interpreter's expectations tends to be underestimated in the scholarship on both written and oral communication that I have seen, and not only by the anti-Havelockians.<sup>11</sup> The reality is that while consonantal roots in Semitic languages may make conventional messages readily graspable in a script without vowels, in practice they cannot reliably and consistently overcome the stumbling block to smooth decipherment posed by the utterly strange. It's not an accident, in other words, that Hebrew and Arabic, the two main surviving forms of consonantal writing, are *both* historically associated primarily with ancient religious scripture, which retails material that was already familiar in the culture and whose meaning must be constantly reinforced by group study and interpretation by elites. The burden is on those who would dismiss the alphabetic thesis to find a better explanation for this striking circumstance.

If a telltale of difficulty is the need to use crutches like *matres lectionis*, points, or *pinyin* for beginning readers, a telltale of precision is the capacity to write nonsense, which the alphabet alone allows us to do (some readers will no doubt find this to be the only point I'm successfully demonstrating). The capacity to write nonsense points directly to the alphabet's revolutionary nature: uniquely among all writing systems, the alphabet lets you read a message phonetically first, easily and automatically, and then go on to figure out what it means (if anything—hence the possibility of nonsense).<sup>12</sup>

This is what gave the alphabet its unparalleled capacity for novelty. By reversing the old way of reading, the alphabet gave us room to study the meaning of strange and difficult messages, thereby opening the door to the spread of new ideas and unleashing humanity's intellectual potential. As Havelock put it (in describing what Walter Ong called the "psychodynamics" of the transition from orality to literacy):

These theoretic possibilities were exploited only cautiously in Graeco-Roman antiquity, and are being fully realized only today. If I stress them here in their two-fold significance, namely, that all possible discourse became translatable into script, and that simultaneously the burden of memorization was lifted from the mind, it is to bring out the further fact that the alphabet therewith made possible the production of novel or unexpected statement, previously unfamiliar or even "unthought." The advance of knowledge, both humane and scientific, depends upon the human ability to think about something unexpected—a "new idea," as we loosely but conveniently say. Such novel thought only achieves completed existence when it becomes novel statement, and a novel statement cannot realize its potential until it can be preserved for future use. Previous transcription, because of the ambiguities of the script, discouraged attempts to record novel statements. This indirectly discouraged the attempt to frame them even orally, for what use were they likely to be, or what influence were they likely to have, if confined within the ephemeral range of casual vernacular conversation? The alphabet, by encouraging the production of unfamiliar statement, stimulated the thinking of novel thought, which could lie around in inscribed form, be recognized, be read and reread, and so spread its influence among readers.<sup>13</sup>

This was Eric Havelock's primary insight. And, as we shall see, especially in the second part of this essay, it will prove indispensable to the effort of imaginative reconstruction that is the coming classics revolution.

This is not to say that it's absolutely, 100 percent, flat-out impossible for determined and well-supported writers to record new information and new ideas in consonantal writing. Nor is it to say that all cultures with alphabetic writing

will necessarily generate revolutionary ideas with stunning regularity. None of the Greeks' eastern neighbors—Lydians, Lycians, Phrygians, and others—who took the alphabet from them produced a body of literature to rival theirs. Nor did many of their Western neighbors, including the Etruscans. It's a little more complicated than that. And the Arabs, after all, led the way in science for centuries during the Middle Ages, when little or no original work was being done in the alphabetic cultures further west. If prestige is the issue, the medieval scientists and philosophers working in Arabic deserve to be praised all the more for the progress that they did make (which of course was based on centuries of translation from alphabetic Greek). Clearly, then, it's not completely impossible to express a new idea in consonantal writing. But it is harder. And, far more importantly, it's much harder for people who aren't necessarily determined and well-supported to read such writing smoothly.<sup>14</sup>

So ancient Hebrews and Phoenicians were no less intelligent or sophisticated than ancient Greeks, but their writing technology lacked the resolution to push the horizons of their largely oral cultures in new directions. Oral cultures are constantly evolving in other ways, of course. All cultures change. Yet the Phoenicians—wealthy, much-traveled, and influential as they were—have left us precisely nothing in the way of literature. Though much copied by other peoples, their own writing itself ends where the alphabet begins, with chicken-scratch on a few artifacts. In a century or so, the Greeks were recording full-length epics. Havelock argued that only in the *Iliad* and the *Odyssey*, recorded alphabetically perhaps around the turn of the seventh century BC, do we see a faithful rendition of a truly oral original—faithful not in a word-for-word sense, since oral traditions are flexible and formulaic, but in resolving the full range of verbal expression.

In contrast, Havelock suggested, the best that writing without vowels can do on its own is to paraphrase more nuanced oral material. “Syllabic scripts,” he wrote in 1971 (among which for technical reasons he counted consonantal writing),

“would tend to produce paraphrases of oral originals rather than the originals themselves, and even to simplify somewhat their syntax and vocabulary.”<sup>15</sup> The only substantial body of consonantal literature surviving from antiquity is the Hebrew Bible, which we all know is filled with poetry, but the startling fact is that biblical scholars to this day cannot define Hebrew verse. There is little scholarly agreement even on which parts are verse and which are prose. There is no meter, for example. The main characteristic that scholars identify in Hebrew verse is “parallelism,” but there’s little agreement on precisely how to define that, either, although the scholars agree that repetition is a big part of it. Parallelism, not meter, is said to supply the rhythmic aspect of Hebrew verse, but again there’s little agreement on how exactly it works.<sup>16</sup> As with other, shorter consonantal texts that have survived, the language in the Hebrew Bible is predominantly paratactic rather than hypotactic, relying almost exclusively on coordination rather than subordination in its sentence structure. And finally, of course, cultural authority in societies that used consonantal writing was concentrated in the hands of scribal or priestly elites, and there’s no evidence that people outside those elites could read or write. All of this is consistent with the alphabetic thesis, if we understand that parataxis is a marker of orality and that the “verse” we see in the Hebrew Bible was decisively shaped by the nature of the available writing technology.<sup>17</sup>

I don’t wish to belabor the obvious comparison with Greek literary style, since what’s at issue is not the literature itself but the explanation of it. Suffice it to say that alphabetic writing didn’t simply allow writers to express new ideas and information without the sort of repetition familiar from the Hebrew Bible. It also allowed the rise of nonfiction prose with long and complex hypotactic sentences, in which ideas can be arranged and ordered with subordinating conjunctions, participles, and all the other devices familiar to students of classical Greek. And where the earlier writing systems had concentrated cultural authority, the alphabet diffused it. Writers are different from prophets, scribes, priests, or palace bureaucrats.

Consider this typical passage from *Ecclesiastes*, written without vowels probably no earlier than about 450 BC, and possibly several centuries later:

For the fate of humans and the fate of animals is the same; as one dies, so dies the other. They all have the same breath, and humans have no advantage over the animals; for all is vanity. All go to one place; all are from the dust, and all turn to dust again (3: 20–21).

As throughout the Hebrew Bible, a single basic idea (no difference between people and animals) is rhythmically reformulated over and over, as if putting it down once could not be relied upon to convey the author's meaning. This is what is meant by parallelism. Compare that with the following alphabetic passage from the first Greek historian, Herodotus, whose book of history, written around 450 BC, is the oldest surviving work of prose:

So these Phoenicians, including the Gephyraeans, came with Cadmus and settled this land, and they transmitted much lore to the Greeks, and in particular, taught them writing which, I believe, the Greeks did not have previously, but which was originally used by all Phoenicians (5: 58: 1, translated by Andrea L. Purvis, with minor changes).

Herodotus generously gives the Phoenicians credit, but it would have been an iffy proposition at best for a Phoenician to try to convey this same information in such a linear, precise, and literally prosaic fashion. Although he's writing at the very earliest dawning of alphabetic literacy, Herodotus does not need rhythm or repetition.<sup>18</sup> He can proceed to lay out new and detailed information in utter confidence that he will be understood the first time. The effect is one of agility rather than stately majesty. And even if you've never heard of the Gephyraeans before, you now know something about them and can, I trust, work out how to pronounce their name. At the very least, you could go ask more literate persons and they could tell you, even if they'd never seen the word before.

Just a generation after Herodotus, Thucydides would take subordination to excruciating lengths—but perhaps quoting

him would be overkill. While Herodotus wrote for “publication” by reading aloud, Thucydides is thought to have written to be read to oneself. It is ironic, perhaps, that Thucydides’ prose is generally least “oral” in the speeches. One of Thucydides’ many fascinations is that in much of his text he uses coordination as heavily as Herodotus does, for “routine” passages (the Athenians sailed along the shore until they landed at so-and-so and then they set up camp and the next day they engaged the Spartans at such-and-such a place). Then suddenly a smooth road gives way to the twisted, overgrown paths of a Funeral Oration or a Melian Dialogue, as if to draw attention to the scenery by slowing the reader down with obstacles. A curious student who took the well-known remarks of Dionysius of Halicarnassus on the tortuousness of Thucydides’ prose in light of Havelock’s thesis might see Thucydides as something of an early experimentalist in subordination and the other linguistic possibilities just then opening up to alphabetic writers. Such a student would perhaps find Thucydides’ experimental tendencies to be most spectacularly exemplified by the passage known as the Stasis in Corcyra, especially 3.82 with its famously convoluted and virtually untranslatable commentary on the corruption of language itself that resulted from Corcyra’s factionalism. She might even suspect that such experimental speed-bumps are consonant with Thucydides’ aggressively “rationalistic” self-presentation—and that of his generation as a whole, which included figures such as Socrates and Hippocrates (or whoever wrote the works commonly ascribed to Hippocrates). It’s as if Thucydides wishes to push the alphabet’s capacity for intellectual novelty and strangeness to its absolute extreme, making it virtually impossible to imagine him writing in a consonantal literary tradition.

MORE CONTROVERSIALLY, Havelock argued further that the alphabet prompted not just the dissemination of new ideas but the first purposeful articulation of ideas at all. Abstract concepts, he observed, are largely absent from human dis-

course before the Greeks. It's certainly true that there are varying levels of abstraction, and that precursors to self-conscious abstraction do show up from time to time in oral mythology and in the non-alphabetic writing that preceded the classical Greeks. "Justice," for example, appears in Homer and Hesiod, which led critics of Havelock's thesis to cry foul. But as Havelock pointed out, Justice in these early, orally-patterned texts is performative: it's always shown *doing* something. Like other personified agents that later became abstractions, it has no autonomous meaning beyond its colorful but often, to us, contradictory deeds. These deeds are strung together in coherent narratives, which helps oral persons preserve them in their memories.

As Ruth Finnegan and others have shown, Havelock was incorrect in asserting that the only way to preserve such narrative speech in oral cultures is to put it into poetic form. Finnegan showed this simply by reporting on oral cultures in which narratives have been handed down without benefit of versification. On some details at least, the evidence of orality is on the side of Havelock's critics, although in this case Havelock's claims may be readily defended in a less absolute form—by observing that poetic utterances are more easily committed to memory than non-poetic ones, even if non-poetic ones can be memorized as well.

When it comes to literacy, the evidence is more firmly on Havelock's side. In his seminal 1963 book *Preface to Plato* and in subsequent writings, Havelock reads authors such as Homer, Hesiod, the Presocratics, and the tragedians as illustrating transitional stages in the process of slowly and painfully freeing cognitive power from the continuous obligation of using narrative to assist memory:

The removal of pressure to memorize, registering slightly at first and very gradually increasing its force, had as its first effect some removal of the corresponding pressure to narrativize all preservable statement. This had freed the composer to choose subjects for a discourse which were not necessarily agents, that is, persons. They

could in time turn themselves into names of impersonals, of ideas or abstractions. . . . Their prototypes had occurred in oralism, but only incidentally, never as the subject of the kind of extended language allotted to persons.

Hesiod affords an initial example of a process which was to gather momentum later, when he chose the term *dike* (usually translated “justice”) as the formal subject of a “discourse.” The term occurs incidentally and not infrequently in orally preserved speech (as in Homer) but never as the topic of a formal discussion. The narrative laws of oral memorization would discourage such a choice. Having made his choice, Hesiod cannot conjure the required discourse out of thin air. We could easily manage it today, because we inherit two thousand years of literate habit. He, on the contrary, must resort to the oral word as already known—the only preserved word that is known. . . .

If he must do this, he will be forced to continue to utilize the narrative forms which control what he is borrowing from. He will still not be able to tell us what justice is, but only what it does or suffers. He has taken one decisive step toward the formation of a new mentality by inventing the topic to take the place of the person. But he cannot take the second step of giving his topic a syntax of descriptive definition.<sup>19</sup>

That second step could only be taken when the presence of the topic had gained a sort of critical mass in the culture. Havelock sees Plato as the pivotal author in this process. Narrative forms, and the performative matrix that contains them, lie at the heart of how collective oral culture works on individuals (rather than the other way round, as Parry and Lord demonstrated). Plato captured this matrix in the term *mimesis*, often pallidly translated as “imitation.” In the first part of *Preface to Plato*, Havelock recast the deceptively familiar personalities of early Greek literature as Plato’s predecessors, or rather collaborators, in a long struggle to establish a new cultural matrix to replace *mimesis*. At the heart of that emerging new matrix are the now familiar ideas we know as reason (“an accounting,” *logos* in Greek) and reality (“being,” *ousia* or *ta onta* in Greek). This process, Havelock argued, entailed a gradual shift of focus from doing to being. It was at least as much linguistic as it was in-

tellectual, and it cries out for closer examination by curious young classicists.

Along with drama, early philosophy may be the mother lode for future doctoral students, who could do worse than get ahold of Kirk and Raven, *The Presocratic Philosophers*, preferably the first edition, and read it cover to cover. It was while studying these texts as a young student under F. M. Cornford at Cambridge that Havelock was first struck by the jarring linguistic disparity between the Presocratic fragments and the later works in which they were embedded. That disparity and the curiosity it aroused would ultimately lead him to his insights about the alphabet, and to the long process of linguistic and cognitive innovation sketched in the first part of *Preface to Plato*.

In the second part of the book, Havelock interprets the *Republic* as Plato's sustained attempt to dismantle *mimesis*, the foundation of orality, and replace it with *logos*, the foundation of literacy. As with his take on orality, many of the details of Havelock's interpretation of the *Republic* are open to question—and particular aspects of it have indeed been widely and perhaps justifiably contested—but it seems hard to deny that the basic thrust of Havelock's argument agrees with the evidence that we have in the other dialogues. If Havelock is correct that forging a new discourse of being to stand against *mimesis* was Plato's self-appointed task, that goes a long way toward explaining why he and Socrates are always so concerned with definition and abstraction. In the *Republic* they ask the precise question that Hesiod could not: What is justice? The other dialogues, too, generally begin with an attempt at definition. What is the good? What is knowledge? What is the state? What are laws? And how are we to talk about these things? Now, however, the inquirers are being given the tools for the job.

So by the fourth century, the tools were ready at hand to describe what such notions *are*, not what they *do*, and to do so self-consciously. The necessary syntax, Havelock says, had emerged in the form of the innovative copula. Havelock

quotes the well-known passage from the opening of Aristotle's *Politics* on the nature of "man":

But by the time the Aristotelian passage was written, it had become possible to describe this "man" not by narrating what he does, but by linking "him" as a "subject" to a series of predicates connoting something fixed, something that is an object of thought: the predicate describes a class, or a property, not an action. In the idiom suitable for this purpose the verb "to be" is used to signify not a "presence" or a "forceful existence" (its common use in oralism) but a mere linkage required by a conceptual operation. The narrativized usage has turned into a logical one.<sup>20</sup>

Scholars who argue that this sort of activity is culturally determined—including Rosalind Thomas, one of the most prominent critics of the alphabetic thesis among contemporary classicists—fail to see that in addition to better accounting for reality Havelock's explanation is actually more genuinely value-neutral than theirs. If I understand it aright, cultural determinism is ultimately circular: at bottom it tells us that culture determines culture. When this circularity bumps up against the reflexive leveling of postmodern politically correct ideology, it's hardly surprising that a feel of cognitive dissonance creeps into the enterprise. If abstraction in Greek thought can only be determined by other aspects of Greek culture, then maybe those Greeks and their culture were intellectually superior from the get-go. Now there's a dangerous thought!<sup>21</sup> Better to deny the reality of Greek abstraction in the first place.

In her 1992 academic book *Literacy and Orality in Ancient Greece*, for example, Thomas indignantly asks, "So why are the Phoenicians never credited with a revolution in abstract thought?" Her prestige-based answer is "extreme Hellenocentrism and an unjustified diminution of the Phoenician contribution."<sup>22</sup> However, a couple of reality-based alternatives present themselves. "Because they didn't have one?" Or we might go so far as to hint at the actual existence of Greek literature, and the actual non-existence of

Phoenician literature, in which we see that revolution unfolding. And is it indelicate to observe that, when it comes down to it, she herself doesn't actually credit the Phoenicians with a revolution in abstract thought, either? Are her reasons different from everyone else's? Perhaps she could have shared them in a book with a less Hellenocentric title. But, let's face it, *Literacy and Orality in Ancient Phoenicia* would make for a rather slender volume, to say the least. Since asking this question, Thomas has gone on to become a professor of classics at Oxford University. As recently as 2007, her work was described as "profoundly insightful and soberly non-ideological" in a scholarly series of books which purported to study Greek literacy and which seems to have sunk without a trace.<sup>23</sup>

Greek literacy is clearly too big to ignore, but classicists' attempts to grapple with it so far have been vitiated by the obsessive academic fixation on cultural prestige. For complex historical reasons, politically correct reflexive leveling came with the bureaucratization of the university. Like all self-righteousness, sanctimonious outrage over violations of it is nothing other than a pressure-valve for ideological anxiety, which is why the description of Rosalind Thomas's work as non-ideological is such a hoot. And when they're not busy righting the wrongs of cultural imperialism, hegemonic discourses, and ethnocentric geezers (like the 2007 volume just mentioned), studies of ancient literacy have tended to focus on the futile and close-to-meaningless quest for hard numbers. Everything about literacy is relative, so findings about "literacy rates" are meaningful only as a rough indication of relative change over time (which is how I've used them in this essay).

There is much more to understanding literacy than chasing after prestige and numbers. Havelock points us to an understanding that acknowledges the reality of Greek abstraction and accounts for it without being circular or unfair to anyone. Intellectual activity is not determined solely by culture, just as the meals served in a restaurant are not determined solely by diners. Menus are also important. Cul-

ture no doubt plays a role in an individual's choices (I doubt that it determines much of anything), but the *range* of intellectual choices available to anyone in a culture is determined by writing technology (perhaps in combination with language), just as other sorts of technology widen or narrow other sorts of options. Ecclesiastes didn't say to himself, "Well, I could always pursue a sustained and systematic secular investigation into some aspect of the human past, but I'm a Hebrew, so I'll just jot down a few proverbs instead." He couldn't have written history if he'd wanted to. Historiography was not technologically available to him—despite his lively curiosity, skeptical intelligence, and clear secular bent (which were among the reasons I chose him for the comparison with Herodotus). When alphabetic historiography later did become available to Jews, some at least embraced it, though to be sure not without some cultural misgiving. No denying that culture has consequences, too, and part of the point is precisely that historiography was alien to Jewish culture. But it was alien for reasons of technology, not some notional kind of original preference. Among other things, the alphabetic thesis accounts for Josephus in a way that cultural determinism cannot.

Against cultural determinism and in favor of reality, Havelock's emphasis on the importance of new ideas fits very well with what I take to be the best modern interpretation of epistemology, that of Karl Popper, and with that of Popper's most effective contemporary exponent, physicist David Deutsch, from whose writing I took the last of the "consonantal" passages a moment ago. Deutsch's books, not only *The Beginning of Infinity* but also his previous book *The Fabric of Reality*, together make the Popperian case for the primacy of "universal" explanations in science and other branches of knowledge, assert the central role of novelty in improving such explanations, and argue further for the reality of abstract concepts. Deutsch's analysis of explanation can also be used to refute the charge of "Hellenocentrism." Relying as it does on the contingent development of technol-

ogy rather than on inherent and determining qualities of culture, the alphabetic thesis, too, is what Deutsch would call a “universal” explanation, not a “parochial” one that privileges Greek or any other culture—and this is precisely why it can put the ancient Greeks at the center of the social sciences without being “Hellenocentric,” though I expect this subtlety will be lost on some. (The poverty of cultural determinism may deny its adherents the means to dig beneath the superficial contradiction, but that’s their lookout.) This approach is also easily mischaracterized as “technological determinism,” but notice that technology determines not the choices themselves, but only the range of options available. Reality may or may not be fair, but our explanations of it always can be (and must be, Deutsch argues persuasively, but that’s a bit beyond our scope here). The problem lies in confusing the two. It’s impossible to make our explanations of any particular reality truly fair if we’re denying that reality in the first place. Reality may be unfair; the explanation of it may be unfair; but these are two different kinds of unfairness. Insofar as the politically correct are motivated by a wish to be fair in their explanations, they should welcome Havelock’s thesis, though the academic capacity to ignore reality should never be underestimated.

Contemporary evidence shows that Havelock’s basic insight holds as true for today’s realities as it does for the past. Hebrew writing is a special case, a consonantal script for a dead language that was brought back to life and modernized by European Zionists for use in Israel, where alphabetic script is also commonly used. But consider contemporary Arabic difficulties with literacy, science, and related areas, which are more extreme than many in the West realize. Few enough books are published in Arabic, but virtually none are translated into it (or ever have been, even when we figure in the government-sponsored translation work that began in ninth-century Baghdad). In attempting to explain such realities, doesn’t it make sense to focus on the kind of writing Arabs use, as well as on other historical circumstances faced

by Arab countries? John Halverson, in a confused article often taken as a definitive refutation of Havelock, would have us believe that the reason no original ideas have been expressed in consonantal writing is simply that the people using that writing never had any original ideas. If there's a theoretical framework under that bald assertion, it would appear to rest on some sort of cultural determinism, which would account for its circularity. The best that can be said of Halverson's argument, perhaps, is that it's refreshingly free of ideological anxiety.<sup>24</sup> But for those interested in fairness, a wide historical focus that takes in communication technology is certainly more promising than invoking "essential" or determining qualities of culture, religion, or race. Even in the currently embarrassed state of the publishing industry, alphabetic books generally have something new to say somewhere in their pages. But there's little point in translating a book that no one will be able to read anyway.<sup>25</sup>

HAVING MADE so much of novelty and abstraction, at this point I can almost hear the objections. "Forget about the Arabs! What about the wheel? There's a clear example of a revolutionary idea that came without the support of the alphabet! Your argument has a big wheel-shaped hole in it!"

But think about it for a moment. "The wheel" is an idea, certainly, but one that represents a piece of technology. What was actually articulated and spread was not the abstract idea ("the wheel") but the technology itself, in the form of various concrete examples of wheels. Individuals who encountered them could form abstractions on their own, possibly, but that's not the same as spreading the abstraction itself directly. Even if every once in a while someone did form such an abstraction, oral communication offers no way to spread it that could match the efficiency of an actual example. It's not that people in oral cultures can't think abstractly; it's more that it would be inefficient for them to do so. From their perspective, we're the ones with the funny way of thinking.<sup>26</sup>

Compare the example of the wheel with that of, say, natural selection, which laid out in alphabetic writing a powerful, challenging, and original new way of understanding nature, and which required sustained, systematic argumentation at a relatively high level of abstraction. In contrast, the use of technology does not require articulate abstraction at all, or even language. Chimps use twigs to get at termites, and may spread the practice by demonstrating it, but no chimp articulates and communicates an abstract idea of “the twig” to another. Oral cultures deploying wheels may appear *to us* as possessing an idea of “the wheel,” but that’s not the same as explicitly and self-consciously articulating the abstraction *as an idea*. All the evidence suggests that the Greeks were the first to do this, and that it was the alphabet—itsself a piece of technology—that allowed them to, even to the extent of using the definite article to indicate abstraction: “the wheel,” as opposed to a particular wheel. As Havelock pointed out, the very earliest Greek texts don’t use the definite article this way, but, fascinatingly, the surviving evidence of Greek literature reveals the language itself changing to accommodate the new ways of thinking encouraged by alphabetic writing.

This way of stating the alphabet’s role is important, since a frequent objection to the alphabetic thesis accuses Havelock and the others of putting forward a “monocausal” explanation—of saying that the alphabet alone “caused” the Greek revolution in abstract thinking. This is another version of the “technological determinism” objection, and like that objection it fundamentally mistakes the alphabetic thesis. No one says that the alphabet alone caused abstract thinking, which I would argue was already implicit, if hitherto unexpressed, in human cognition. You would hardly argue that an automobile causes the suburban family that owns it to decide to go out to a restaurant several miles away for pizza. That’s not how technology works. Instead of causing human activity, technology enables it, and that is also what the alphabet has done. An abstraction is like the

pizza joint several miles away. It's not impossible to get there without a car—you could always walk the distance—but the question is *why would you?* Nor did horse-drawn carriages encourage impulsive family journeys of several miles just to satisfy junior's urge for pizza, though such a journey couldn't be ruled out if the family were willing to invest the necessary time and resources. Of course, the modern residential suburb itself would not exist if people didn't have the increased mobility of cars in the first place. There were other things involved in the rise of suburban living, but the advent of the automobile made it not just possible but also attractive and convenient. So the whole picture would be different without cars, as indeed it was.

This analogy illustrates a point about technology, not prestige, or praiseworthiness, or intelligence. Havelock took great pains to affirm the sophistication and expressive beauty of oral cultures, and to discredit the wide assumption that only literate cultures can be thought of as civilized, or that more literate equals more civilized. Again, this part of his argument is ignored—or avoided—by his indignant critics. But owing to his work (and to the work of Ong and Goody, along with outstanding oralists such as Ruth Finnegan, David Bynum, and John Miles Foley), old anthropological dichotomies such as *savage / civilized* or *primitive / advanced* have largely been abandoned in favor of a subtler and less value-laden spectrum that can incorporate numerous kinds and various degrees of both orality and literacy. Attempts at other sorts of neutral terminology are a pious sham based on cognitive slippage, falsely linking circumstances that may (or may not) go together contingently but have no inherent relation. What distinguishes so-called “traditional” or “indigenous” cultures is their orality, not their adherence to tradition or their place of origin; literate cultures are no less traditional or indigenous for being so. Are the French not traditional? Are the Irish not indigenous?

In the new picture Eric Havelock drew for us, classical Greek civilization in the time of Plato, the late fifth to early

fourth century BC, represents the first time in world history that the right conditions came together to create a (relatively) wide readership. The results have always been right out in plain sight: in the Greek writers, finally, we can get to know numerous identifiable individuals who are not mythic heroes, priests, prophets, rulers, or palace officials, but autonomous intellectuals taking part in distinct literary traditions. These intellectuals were not better, or more civilized, or even necessarily more intelligent. Cognitively different does not mean cognitively better, nor, even less, does it mean more insightful or more profound. Insight and profundity abound in narrative oral mythologies from Homer to the *Bhagavad Gita* and beyond. Intellectual activity has less to do with such implicitly (narratively) communicated insights than with dexterity in handling explicitly formulated abstractions, which even for the best is a specific talent and for most merely a more or less superficial skill. This is not to say that successful intellectuals can't be more generally intelligent than others, only that they don't need to be. But, intelligent or not, intellectuals now existed, where they had not existed before.<sup>27</sup>

Where once a new idea vanished as soon as it was uttered, now it could survive out in the world and stand or fall on its merits. The refinement of explicit thought could take place across time and space, becoming a communal effort shared by participants who have never met and whose lives may be separated by hundreds of years and more. For the most part, the original genres of Greek literature are the ones that we still value today—including science, philosophy, drama, history, literary criticism, political science, biography, and even novels and tales of fantasy. It's astonishing not only how quickly they established themselves, but also how, despite prodigious innovation and expansion over time, they have nonetheless preserved their generic identities. They remain recognizable, even as they have been overlaid by the residues of numerous and widely divergent periods and cultures.

And judging by the energy with which they have now been taken up around the world, these generic engines of original

thought reflect not narrowly “Western” interests and aspirations but characteristically human ones.<sup>28</sup> It may be anathema to the politically correct, but classics is about more than simply “the Western tradition” or “Western civilization.” This is what sets classics apart from all other parochial literary traditions: German, Chinese, French, English, Indian, Italian, whatever. All very interesting, beautiful, and significant. Classics shares this sort of intrinsic parochial interest. It is breathtakingly gorgeous. And it does stand at the head of a breathtakingly gorgeous tradition. But classics also has uniquely global cognitive implications for the study of humanity as a whole, and it is this larger set of implications that distinguishes classics from everything else.

Mary Beard, who interprets classics to countless general readers, recently addressed the question “Do the Classics Have a Future?” in the pages of *The New York Review of Books*.<sup>29</sup> Her analysis is characteristically sensitive to the transformative role that highly literate people play as a resource for the larger culture, and she offers a trenchant dissection of hapless film producers who aren’t aware that the Penguin version of the *Agamemnon* doesn’t contain the Greek text. Yet she does not mention the alphabet or literacy, nor does she hint that the tragedies of Aeschylus might not be literary works in the same way that those of, say, Shakespeare or O’Neill are.

Havelock, who also focused on the *Agamemnon*, suggested in 1978 that Aeschylus’ plays are oral compositions as much as literary ones, and that they are transitional in a way unique to Aeschylus’ historical moment.<sup>30</sup> What distinguishes Havelock’s Aeschylus is not that he is a great writer, though he is, or that we should read him for his insights into the human condition, though we should. What sets Havelock’s Aeschylus apart is that his plays are singular trail-markers of humanity’s first solitary, pioneering foray into the kind of literacy that represents the common ground between Shakespeare’s culture and O’Neill’s (and ours). Taking our cue from Lyell and Darwin, we might call it deep literacy—

the kind of literacy that isn't limited to a scribal, priestly, or bureaucratic elite. Like Aeschylus, other Greek authors, too, beg for reinterpretation—linguistic and historical, as well as literary—against this larger backdrop. The course of Roman literacy, likewise, as the first hand-off (through the Etruscans) of alphabetic literacy to another culture will repay examination that goes deeper than “creative imitation.” One place to start could be the carefully thought-out thesis of Ernst Pulgram, who argued in 1975 for a sharp accentual split between spoken and written Latin, with spoken Latin evolving into the Romance languages and written Latin reflecting the overbearing influence of literary Hellenism.<sup>31</sup>

If the classics have a future, then, I would say it doesn't lie in beefing up the sheer number of people reading Greek and Latin in the traditional way, as if they were reading Shakespeare or O'Neill. That classics is clearly dying and few undergraduates will miss it, or even know it's gone. And why should they, as long as classics is presented as just another parochial body of literature, no different from the others except older and deader? Instead, the future of classics lies in the unexpected direction in which Parry and Havelock have pointed us: in tracing out the precise contours of the unparalleled and hitherto obscure linguistic and intellectual pathways by which classical writers reached the world's first readership. By all means, let's continue to explore these writers as writers and their texts as texts—only now let us also be mindful of their broader context, and in particular of the unique process they stand to reveal.

The recognition that classical civilization was a unique experiment in alphabetic literacy, already implicit in the work of Walter Ong, Jack Goody and other non-classicists, is what will put the new classics at the living center of the contemporary social sciences—the inevitable cries of “Hellenocentrism” notwithstanding. As Ong commented on the impact of Havelock's work, “The importance of ancient Greek civilization to all the world was beginning to show in an entirely new light: it marked the point in human history

when deeply interiorized alphabetic literacy first clashed head-on with orality.”<sup>32</sup> Nor is this a distant singularity, but an immediate one. As I’ll suggest in Part II, the diffusion of cultural authority celebrated in Redmond and Cupertino may run through Mainz and Venice, but it rises first in Ionia and Athens. Nothing is more alive for us today than these particular dead languages. Don’t hold your breath waiting for older classicists to accept it, but there is much exciting work to be done, just as soon as young classicists realize that the true subject of classics is alphabetic literacy.

FOLLOWING HAVELOCK and Ong, I take it as axiomatic that neither orality nor literacy can be adequately grasped by itself. One’s understanding of orality can only be as deep as one’s understanding of literacy, and one’s understanding of literacy can only be as deep as one’s understanding of orality. They must be studied in each other’s light.

The much-examined religious history of Greco-Roman antiquity offers a good example of how orality and literacy studies, if taken seriously in this way, can suggest new perspectives on big problems that have long puzzled historians and others. Consider the baffling rise of monotheism, once so anomalous and now so prevalent in the world. What could a revolutionary classics—that is, a classics properly informed by literacy studies—bring to, say, the *Euthyphro*, which in seeking to define piety clearly adumbrates a dawning sense of logical inconsistency in embracing many gods? It shouldn’t be too startling to suggest that polytheism goes with orality, or that as we shifted our focus from diverse personified agents to unitary abstractions, we also shifted it from gods to God, and from ritual, which enacts mythic narrative and is all about doing, to belief, which is about our internal stance toward what is.<sup>33</sup> YHWH appears in the Hebrew Bible with others of that ilk, telling you what to do so that he will reward you and your people in this world. God shows up in the New Testament, telling you what to believe so that he will reward you and your soul in the next

world. Not for nothing was the New Testament written in Greek. It was new.

In the fourth century BC, most Greeks remained polytheists, worshipping the old gods of Olympus and lesser gods of the natural world. Yet, as has been long recognized by scholars of religion, it was within this same Greek civilization that monotheism first appeared, in the work of philosophers such as Plato and Aristotle, whose thought—whose alphabetic writing, that is—had an incalculable impact on Jewish and, later, Christian theology.

Actually, as a look at the sources should demonstrate, this understates the case. There was no Jewish or any other kind of theology before the Greeks, for the simple reason that theological speculation itself is an alphabetic literary tradition that the Greeks originated along with all the others. What is often called Hebrew “theology” was like “the wheel”—as alphabetically literate persons, we may extrapolate theological principles from the concrete examples of prophecy found in the consonantal writings of the Hebrew Bible, but that doesn’t mean those writings are theological. Prophecy and theology are not the same thing. Prophecy may imply certain propositions about the divine, but theology is theology precisely because it articulates such propositions explicitly and self-consciously. Nowhere in the Hebrew Bible do we see an explicit statement about the nature or number of God, although we should certainly expect such a statement (which, like the appearance of any explicit abstraction for that matter, would falsify the alphabetic thesis) from the supposed founders of monotheism.

The comfortable but anachronistic and discredited ascription of monotheism to the Hebrews is stubbornly persistent, mainly because it has always so perfectly satisfied the rhetorical needs of Jews, Christians, and Muslims alike. Nowhere is this big lie stronger than among those who ought to know better. Where is the evidence which contemporary philosophers, say, would demand of other sorts of propositions? Take this random pearl of pabulum from Colin McGinn’s review of

Rebecca Newberger Goldstein's recent book *Plato at the Googleplex*: "Ms. Goldstein also outlines religious and secular responses to the existential questions of the so-called Axial Age, the period (circa 500 BC) when the key questions of human civilization began to be crystallized. When people began seriously to wonder what makes human life worthwhile, one group (represented by the Hebrews) conceived the idea of a single God to whom all human life matters, while another group (the Greeks) conceived of human life having meaning on terms internal to itself. As Ms. Goldstein observes, this fundamental choice is still being played out today: Do the Abrahamic religions have the right view of the good life for human beings or were the Greeks onto something better?"<sup>34</sup>

Crikey! Considering the importance attached to these ideas, you'd think we could be a bit more careful in attempting to explain their origins. In the meantime, just be grateful that one day people suddenly started wondering, like, what makes life worthwhile. And while you're at it, thank God for skeptical philosophers.

The Big Lie of Hebrew Monotheism notwithstanding, modern scholarship has long credited Jewish thinkers like Philo of Alexandria, a Hellenized Jew and Platonic philosopher who lived during the lifetime of Jesus, with introducing the idea of a unitary godhead into Judaism. "God is one," wrote Philo in alphabetic Greek, breaking with Jewish tradition in a way that explicitly echoes early philosophers such as Xenophanes. Up to then, Jewish prophets had exhorted Jews to worship YHWH alone, but they freely acknowledged other gods by name. Scholars often refer to the earlier Hebrew religious system as "monolatry" (from the Greek words for *only one* and *worship*) rather than monotheism (*only one god*). Only with the Jewish fringe movement that became Christianity do we first see the strict existential exclusivity, along with an unprecedented emphasis on miracles and the supernatural, that we associate with "faith."

But this development, too, says more about Greeks than it does about Jews. The Greeks were not only the first scien-

tists and literary intellectuals, they were also the first to become obsessed with the occult. Starting with Gilbert Murray and his student E. R. Dodds, scholars have traced the growing Greek fascination with the occult, and particularly with miracles, to the fourth century BC—precisely the same time that Havelock found the first wide readership in Greece. This timing is hardly accidental. Literacy made the Greeks self-conscious about what they believed—about what *was*, in other words, not just what was to be *done*—and Christianity would only become Christianity when it won followers among the Greeks. That was Paul’s achievement, and we have no direct knowledge of whatever came before. Like the rest of the New Testament, Paul’s letters, the earliest surviving Christian texts, were written in Greek, using the Greek alphabet (which, I should point out, is not quite the gratuitous qualification it may appear to be at first glance). The significance of these simple facts is so large that it goes unnoticed, as if they were no more than meaningless quirks of contingency. Faith itself, *pistis* in Greek, was already a familiar idea in Greek philosophy, though mostly as a term of contempt implying a sort of feckless credulity. Indeed, there is no equivalent word in the Hebrew Bible. Mainstream Judaism continued to be, as it is today, more concerned with what Jews did than with what they believed. Worship YHWH, thundered the prophets, who nowhere in the Hebrew Bible ever once show the slightest interest in the subject of belief. Obedience, yes; belief, no.

So I propose that we extend the picture put forward by Havelock and the others to include monotheism among the ripple effects of alphabetic literacy. The keystone of my argument here is the premise that the rise of abstraction, and of skeptical, scientific inquiry in particular, lay behind both pagan monotheism and Christian faith—but in different ways. Like baking powder, alphabetic literacy has had a “double action.” Or rather, as in Newtonian physics, its action has had an equal and opposite reaction. The new, schizophrenic fascination with natural explanation on the one hand and miracles

and mystery on the other created stark tensions in the polytheism that the alphabetic Greeks inherited from their oral ancestors. By spreading the recognition of what would later come to be called the laws of nature, science helped push people (Jews and Greeks alike) toward the abstraction of the divine as a single god who is in charge of everything. But those same natural laws leave little room for supernatural power, divine or otherwise. Recent scientific research amply shows that supernatural thinking is deeply ingrained in human psychology, and people resist the idea of ruling it out, especially when life-changing events are involved. Following E. R. Dodds, I would contend that historians of religion need to take account of this instinctive resistance, an identifiable and often hostile reaction to scientific explanation that we might call science shock, which shows up just as clearly in the pre-Christian ancient world (again, among both Jews and Greeks) as it does, all too commonly, today.<sup>35</sup> Such triumphalist supernaturalism may yet prove to be a residue or a reassertion of “nature” itself, that is of our “natural state” of orality—of the Many as opposed to the One, of subjects who take part in objects, of knowers who mimetically embody the known, rather than beholding it through the distancing lens of abstraction.<sup>36</sup> If so, it is also the memory of a place to which we can never return, an aching pull of the sort that later generations would identify as nostalgia.

In this way, the alphabet has put us in conflict, as yet unresolved, with some of our deepest instincts. Or, rather, it allowed a conflict that was already implicit in us to be explicitly articulated, crystallized, and thereby escalated. That conflict may remain unresolved, or it may one day be seen as humanity’s coming-of-age struggle. Regardless, uncovering its earliest expression in alphabetic literacy will the thrilling and important work of tomorrow’s classicists, who by definition will alone be qualified to undertake it. The job as a whole is far bigger than classics, but that’s where it needs to start. Shirking it to chase after chimeras like prestige would be worse than foolish. It would be negligent. In-

deed, a case could be made that it would amount to intellectual malpractice. But who would want to shirk it anyway? How fortunate tomorrow's classicists are to have this unexplored territory ahead of them!

In the expanded picture of literacy that I'm proposing, then, Christian faith evolved as a palliative for science shock, a supernatural counterweight to the scientific outlook that nature and nature gods simply could not provide. After all, that's the familiar role that religious faith seems to play today, and there's no obvious reason why it shouldn't have evolved to perform the same function in the first place.

If I'm right (which tomorrow's—not today's—classicists will decide), the tradition of exclusive monotheism in general is how our religious instinct has expressed itself when confronted by the tradition of free rational inquiry. The precise form it first took, Christianity, was the contingent result of Jewish ritual exclusivity adapting itself (through Pauline mutation) to the new Greek preoccupation with existence. Either way, I think we must recognize that both "faith" and "reason" are alphabetic literary traditions, and that they are psychologically complementary. You don't get one without the other. In short, faith is religion's answer to the challenge of reason—and both can be traced straight back to the alphabet.

WHEN WE trace the so-called clash of faith and reason to its primal origins in the rise of the alphabetic mind, a momentous but previously untold story begins to reveal itself. On one hand, it is the story of how humanity discovered the existence of reality. On the other hand, it is also the story of how, even as we have reached out to grasp reality, we have also instinctively recoiled from it. In his book *Mere Christianity*, the Christian apologist C. S. Lewis sums up the Christian outlook on the world: "Enemy-occupied territory—that is what this world is." In a neat reversal, a flight from reality becomes a righteous campaign to restore the true kingdom, a sort of resistance movement against science and its claims of sway over nature. This brilliant stroke, too, was Paul's achievement, and

its rousing success helps us understand why religious faith was, at first, primarily a Greek, rather than a Jewish, phenomenon. My point is that faith—a self-conscious abstraction if ever there was one—would not have been attractive, or even conceivable, in the absence of secular, skeptical inquiry. Nor would it have been possible without an alphabet to help Paul articulate this attractive new idea as “the assurance of things hoped for, the conviction of things not seen.” The alphabet gave us much, but it also split us, it would seem permanently, into reality-based and faith-based camps.

That terminology may be recent, but the division it reflects is not. Nor is it trivial. A long and often lethal contest has been fought, and is being fought, over the very nature of reality. The high-profile roster on both sides includes names such as Augustine, Aquinas, Galileo, Darwin, King, Dawkins, Hitchens, and even Bush (not to mention Palin, Bachmann, and Beck). They are the generals (or some of them, perhaps, the drill-sergeants), but the rest of us are the footsoldiers in this ongoing battle over reality, and their high profiles prove the urgency of the question. What grounds should belief about reality rest on—natural, or supernatural? Matter, or spirit? The world of the senses, as painstakingly filtered through the net of logic, or the notionally deeper unseen reality of a world beyond the senses and mere human logic? Our deepest identities, and much else besides, hang on how we answer this question, including how we interpret the last two and a half thousand years of Western civilization (which of course also happen to be the first two and a half thousand years of Western civilization).

It is this question, too, that in the past has fundamentally divided the alphabetic West from the non-alphabetic Rest—with the dividing line lying not in the answer to the question, for the West itself has often been bitterly divided over the answer, but in the posing of the question in the first place. With printed and now electronic media driving the spread of the alphabetic mind, along with what I propose to be its attending psychological polarization, this long contest has

taken on profound implications for recent global history, as well as for the future of humanity itself. We have been, and will remain, all too willing to spill blood—our own and others’—over the nature of reality. This is, and always will be, the biggest question. But without the alphabet to prompt it, it would have gone unasked.

The story of the alphabet is about much more than letters. The trail of evidence in that story has many twists and turns, as well as some surprising tributaries and a strong element of chance throughout. It spans the rise and fall of mighty empires and its heroes are ancient Sumerians, Phoenicians, Greeks, Romans, Jews, Persians, Arabs, and others. But this is also an evolutionary story, and as biologists are fond of pointing out, evolution is a tinkerer. It puts new shapes together from bits and pieces of old ones rather than designing them from scratch. So any synthesis should also trace the unexpected histories of those bits and pieces as well as revealing how they adapted themselves to the new mental environment created by a single technological innovation, the alphabet.

Still, the main thrust of such a synthesis could be stated very briefly. Without the alphabet, no science. Without science, no God.

How, then, did alphabetic literacy get started? How might we synthesize the broader changes that came with it? And how have those changes expressed themselves over the larger sweep of history? In the second part of this essay, I’ll offer an admittedly idiosyncratic sketch of where a classics revolution might take us, in the hope that it may present some possible openings for further inquiry.

#### NOTES

The writer wishes to thank Nicholas Poburko for his extraordinary editorial support in the preparation of this essay, including (but not limited to) substantive improvements in tone, content, and structure.

1. Literacy comes with considerable baggage. The study of orality, less hampered if not entirely unencumbered by contemporary ideological considerations, has fared better in the decades since Milman Parry’s well-known

work on Homer founded it. Adam Parry, who edited the *The Making of Homeric Verse: The Collected Papers of Milman Parry* (Oxford 1971), counts Havelock among those who have carried his father's work forward most significantly, characterizing the responses of Havelock's early critics as "trivial" (*xlvi*). Havelock's alphabetic thesis extends the elder Parry's discovery of orality into literacy studies; the work of Walter Ong and Jack Goody could be summed up as making the case that Parry implies Havelock. See Ong's *Orality and Literacy: The Technologizing of the Word* (London 1982) and Goody's *The Domestication of the Savage Mind* (Cambridge 1977).

2. See also, for example, Khosrow Jahandarie, *Spoken and Written Discourse: A Multi-disciplinary Perspective* (Stamford, CT 1999). A professor of communications, Jahandarie gets many details wrong, yet still gives a useful if now slightly dated summary of the state of play in academic discussions of orality and literacy across a range of disciplines. His strength lies in his generally perceptive and matter-of-fact assessments of the various scholars' not-so-hidden ideological agendas rather than in mastery of the disciplines themselves.

3. See, for example, Amalia E. Gnanadeskian, *The Writing Revolution: Cuneiform to the Internet* (Chichester, UK 2009) and Barry Powell, *Writing: Theory and History of the Technology of Civilization* (Chichester, UK 2012). The former dismisses Havelock's thesis without addressing his arguments (mentioning him only in a brief bibliographical note, 293), while the latter ignores him completely. Despite repeated assurances about how the alphabet "changed the world" (e-book location 1987), Powell, a classicist, offers no hint of how it did so other than asserting that its "closeness to speech" allowed the Greeks "to attain sublime heights of poetic expression, even to create what we think of as poetry" (e-book location 4869). Nor does he mention Havelock anywhere in his book.

4. Months of research were undertaken and an entire book was written on this misunderstanding. See Sylvia Scribner and Michael Cole, *The Psychology of Literacy* (Cambridge, MA 1981). Based on research among the Vai of West Africa, who have their own syllabic script, Scribner and Cole attempted to refute Havelock by showing that many of the supposed consequences of literacy in fact derived from formal schooling. In Havelock's view, however, formal schooling on the elementary level is necessary, even with the alphabet, in order for a culture to attain robust literacy. Rather than being a separate factor, education is an integral part of the alphabetic thesis. I address the subject more fully in Part II of this essay.

5. As Bergman in David Mamet's screenplay for *Heist* (2001): "Everybody needs money. That's why they call it money." The joke nicely illustrates the extraordinary slipperiness of thinking about language.

6. See, for example, Peter T. Daniels' chapter in David R. Olson and Nancy Torrance, eds. *The Cambridge Handbook of Literacy* (Cambridge 2009), "Grammatology" (25–45), in which Daniels writes: "The great difference between the Phoenician abjad and the Greek alphabet is that the latter includes letters for vowels, and this difference needs to be explained. Two hoary explanations are still found in the literature, both popular and even technical. The more pernicious one attributes the invention of vowel

letters to ‘Greek genius’ or even ‘Aryan genius’—the implication, sometimes even explicit, being that the ‘Semitic mind’ was too dull to accomplish such an achievement.” A note here points the finger solely at Havelock without citation or substantiation—for the very good reason that Havelock did not suggest any such thing. Daniels continues: “The other explanation, born more of ignorance than prejudice, claims that Indo-European languages (such as Greek) ‘need’ to write vowels, whereas Semitic (such as Phoenician, Hebrew, and Arabic) do not ‘need’ to write vowels. The reason is supposedly that in Indo-European, word roots contain vowels, but in Semitic, word roots comprise only consonants (three of them) and the vowels provide only ‘grammatical detail.’” A note here cites two obscure books as justification for asserting that this analysis, long accepted as a matter of linguistic fact, is “under challenge”—not overturned, as one might expect, but merely challenged. The more prepossessing of the two books is from 1934, so the challenge apparently hasn’t made much of an inroad. Daniels goes on: “The refutation is simple: such major Indo-European languages as Persian and Urdu have been written for centuries with Arabic script, making no special provision for notating vowels” (29). Yet (like other languages using Arabic script) both Persian and Urdu have incorporated a large proportion of loan words from Arabic. Estimates vary by context, but some surpass 50 percent and a baseline for Persian is 40 percent (18,000 words out of a working literate vocabulary of 40,000); moreover, as is also consistent with the alphabetic thesis, loanwords are thought to have entered through written rather than oral usage (*Encyclopedia Iranica online*, “Arabic Language v. Arabic Loanwords in Persian,” retrieved May 1, 2014 at <http://www.iranicaonline.org/articles/arabic-v>). See also note 11.

7. Eric A. Havelock, *Origins of Western Literacy* (Toronto 1976), 6. These four lectures, delivered in 1974 at the Ontario Institute for Studies in Education in Toronto, make a good introduction to Havelock’s thought, as does the similarly brief *The Muse Learns to Write* (New Haven 1986). They are reprinted along with other articles in his *The Literate Revolution in Greece and Its Cultural Consequences* (Princeton 1982). See also his *Preface to Plato* (Cambridge, MA 1963), 36–60.

8. As Havelock observed, however, this common presentation of a complex situation simplifies it perhaps beyond what is justifiable for intelligibility. The usual formulation holds that the Phoenicians invented consonants and the Greeks invented vowels. It may be more accurate to say, with Havelock, that the Greek innovation was to separate vowels and consonants conceptually, thus inventing both in their pure form. See Havelock, *Muse*, 60.

9. James M. McPherson, “A Bombshell on the American Public,” *The New York Review of Books*, November 22, 2012, 17.

10. David Deutsch, *The Beginning of Infinity: Explanations That Transform the World* (New York 2011), 356.

11. The anti-Havelockians, however, do seem to specialize in ignoring both the role of the reader’s expectations and the possibility that some messages may be harder to grasp than others. See, for example, Peter T. Daniels

and William Bright, eds. *The World's Writing Systems* (Oxford 1996), 26 ff., where Daniels apparently finds that in order to refute Havelock it is necessary only to quote him. This book is now a standard text. Among numerous unsupported assertions (including the scurrilous charge of anti-Semitism), Daniels writes that “each type of script entails about the same amount of effort to record the same amount of information . . . . Undoubtedly, average reading speed is uniform across script types” (26–27). On this view, the action in literacy lies with writing alone. All information is the same, and reading is merely the passive intake of texts, all of which are uniformly challenging. Meanwhile, nowhere that I could find does Daniels address, or even acknowledge, Havelock’s central contention: that the alphabet allows writers to articulate complex, difficult, and radically new ideas in an easily and automatically readable way, where other writing does not. Nor, for that matter, have I found any other critic of the alphabetic thesis who addresses it, either. For Daniels, as for many of Havelock’s critics, writing is writing is writing—whether a shopping list, a fairy-tale, an epic poem, a love poem, a newspaper article, a scientific treatise, or a book-length stream-of-consciousness experiment. See also note 6.

12. The relatively recent exception is Korea’s *hangul* writing system, which goes even further than the alphabet in breaking down speech, symbolizing sounds according to how they are made anatomically by the tongue, teeth, and palate. Invented at the command of the Korean ruler in the fifteenth century, it is said to be quite easy to learn. If the alphabet is an atomic theory of language, *hangul* is a quantum theory of language.

13. Havelock, *Origins* (see note 7), 49–50 (= *Literate Revolution* [see note 7], 87–88).

14. I address these considerations more fully in Part II of this essay.

15. Havelock, *Literate Revolution* (see note 7), 96. The chapter in which the quotation is found, “Transcription of the Code of a Non-Literate Culture,” was originally published in Havelock, *Prologue to Greek Literacy* (Cincinnati 1971).

16. See M. O’Connor, *Hebrew Verse Structure* (Winona Lake, IN 1997), chapters one and two, especially 4 ff., 21 ff., 29 ff., 42 ff., 54 ff., and 87 ff. The eighteenth-century Biblical scholar Robert Lowth, generally credited with discovering parallelism, further articulated the impression that the meter of Hebrew verse had been, in O’Connor’s words, “hopelessly lost”; O’Connor argues in this widely informed and highly stimulating book “that the regularities he and his successors regarded as phonological are in fact syntactic” (4). It will be interesting to see what O’Connor’s own successors make of the alphabetic thesis, and in particular of the possible consequences of consonantal writing for both phonology and syntax in Semitic and perhaps other language families. O’Connor includes thoughtful consideration of the work of Milman Parry, Parry’s continuator Albert Lord, and Walter Ong in his assessment of Hebrew verse (21 ff.; 42 ff.); somewhat surprisingly (given O’Connor’s impressive breadth), Havelock is absent from his bibliography. It is true that some of Havelock’s suggestive comments in,

e.g., *Muse*, largely came after the initial publication of O'Connor's book, first as a dissertation in 1978 and then in book form in 1980. In the Hebrew Bible, Havelock asserts in *Muse*, "the original oral model has been lost. What we have has already been remodeled as it has been placed in script" (48). "Such scripts tend to ritualize their accounts of the human experience and so simplify it and then make this simplified version authoritative. Primary orality by contrast controls and guides its society flexibly and intuitively, and its alphabetized version in Greek continued this flexibility" (91). However subtle, discussion of literacy remains limited if it cannot admit of differing *kinds* of literacy. Potentially, at least, Havelock's thesis seems to offer a solution to the mystery of the missing meter in Hebrew verse; comparison with Arabic verse would no doubt be enlightening in this regard, and may offer a corrective.

17. James A. Notopoulos, "Parataxis in Homer: A New Approach to Homeric Literary Criticism," *Transactions and Proceedings of the American Philological Association* Vol. 80 (1949), 1-23: "Parataxis in Homer extends beyond the style and characterizes the structure and thought of the poems" (7).

18. Ben Edwin Perry, "The Early Greek Capacity for Viewing Things Separately," *Transactions and Proceedings of the American Philological Association* Vol. 68 (1937), 403-27: "In regard to the preservation of parataxis in syntax and composition Herodotus, loosely speaking, seems to stand about midway between Homer and Isocrates, though in many respects he is closer to Homer" (418).

19. Havelock, *Muse* (see note 7), 101-2.

20. Note 19, 105.

21. Of course, the same danger exists for those otherwise inclined to support the alphabetic thesis. For example, Barry B. Powell, *Writing and the Origins of Greek Literature* (Cambridge 2002), 23: "A danger in tying rationality and science to Greek alphabetic writing is that such a bond, *if real*, might imply ethical superiority for alphabetic culture, on the thesis that science is good for humans and magic is not" (emphasis added). Only in an environment of anxiety can *real* understanding be thought of as ideologically dangerous. Yoking inquiry to ideology in this way invites anxious scholars not to examine and disavow false assumptions about what a given reality implies (difficult and still dire, as if such ideas are radioactive and handling them at all is risky) but instead to deny the reality itself (much easier, safer, and trendy to boot). To his credit, Powell doesn't go that far. "Still," he continues with characteristic vagueness, "one must retain sympathy for such claims in a general way." For a truly dramatic example of cognitive dissonance in action, see Niloofar Haeri's chapter "Language and Literacy in the Arab World" in *The Cambridge Handbook of Literacy* (note 6), 418-430: "Were it not for the truth of the famous saying that Arab readers have to first understand what they are reading before they actually read it . . . the script does not pose any more special problems for Arab children than other scripts like that of English" (424). A diligent researcher in a field with far too few adequate studies, Haeri determined that throughout

the Arab world, educated people find reading very difficult, don't like to do it, and do as little of it as possible—even the librarians (423). Her linguistic explanation (that the literary language of classical Arabic is difficult and alien) may be a valid observation so far as it goes, but she fails to account for obvious instances of similar diglossias in which the development of alphabetic literacy in vernaculars was not similarly inhibited (e.g. in Greek and the Romance languages), nor, conversely, does she explain why spoken Arabic vernaculars have failed to become written languages with robust and widely read bodies of literature in their own right.

22. Rosalind Thomas, *Literacy and Orality in Ancient Greece* (Cambridge 1992), 55–56.

23. Annette Tefeteller, “Orality and the Politics of Scholarship,” in Craig Cooper, ed. *The Politics of Orality (Orality and Literacy in Ancient Greece, Vol. 6)*, (Leiden 2007), 78. There is a further dimension to the irony of describing Rosalind Thomas's work as “non-ideological.” If Rosalind Thomas has been the leading anti-Havelock voice in classics, Brian Street has played the corresponding role in “new literacy studies” outside of classics, taking on Walter Ong and Jack Goody. Street has dubbed his approach “ideological” (an accurate characterization, though not exactly in the way he intends), and in *Literacy and Orality in Ancient Greece* Thomas explicitly advocates Street's “ideological” approach. One limitation of that approach is a narrow focus on the social “uses” of literacy at the expense of the intellectual content of literary traditions. The uses of a technology at any particular time and place tell us nothing about its efficiency, its potential uses for new purposes, or any of its other implications. Jahandarie (note 2) takes Street's measure quite briskly. To take just one example of a similar pose—the *faux*-judicious redistribution of prestige—see G. Woolf, “Power and the spread of writing in the west,” in A. K. Bowman and G. Woolf, eds. *Literacy and Power in the Ancient World* (Cambridge 1997), 84–98, especially 84–85.

24. Jahandarie, *Spoken and Written Discourse* (note 2), 22 ff., handily despatches Halverson, as does David Olson his contribution (“Why Literacy Matters, Then and Now”) to William A. Johnson, ed. *Ancient Literacies: The Culture of Reading in Greece and Rome* (Oxford 2009), 385–403.

25. It seems advisable to point out that, given the ubiquity of alphabetic writing today, the mere existence of consonantal or logographic texts that say something original, unconventional, or even revolutionary is not enough to falsify the alphabetic thesis. What *would* falsify it, however, is a conclusive demonstration that such texts have been easily and widely read by people who possess no previous familiarity with their contents whatsoever. Among other things, translation poses particularly challenging obstacles to understanding the dynamics of such inquiries, since an idea that was original and revolutionary when first put in writing in one language (such as natural selection) is not necessarily so to those encountering it in writing in other languages later.

26. Bronislaw Malinowski's work in the Trobriand Islands suggests that abstract categories, while cognitively available to persons in oral cultures, tend to be reserved for objects not useful enough in the culture to be named

individually. A medicinal plant, for example, has a specific name; plants that aren't useful may be dismissed as a bush or shrub. Anthropology offers ample evidence of the uselessly abstract ways that literary persons think, as viewed from the more practical "situational" perspective of oral persons. For examples that bear directly on questions of literacy and orality, see A.R. Luria, *Cognitive Development: Its Cultural and Social Foundations* (Cambridge, MA 1976) *passim* but perhaps especially 86–87. When asked to explain what a tree is, a non-literate "peasant from [a] remote village" sensibly replied, "Why should I? Everyone knows what a tree is, they don't need me telling them." The interviewer persisted, rephrasing the question with a different example: "How would you explain a car to someone who had never seen one?" The peasant wasn't fooled. "Everyone knows what a car is, there are cars all over the world. There are so many cars it just can't be that people haven't seen them." In *Orality and Literacy*, Walter Ong cites Luria's well-known interviews with non-literate and partly literate Uzbeks and others in Central Asia in the early 1930s. This edition of Luria's book represents the first time the interviews were published in English.

27. Havelock, *Muse* (see note 7), 115.

28. See the suggestive discussion of Sargon II's *Letter to the God Aššur* (c. 714 BC) in Joseph E. Skinner, *The Invention of Greek Ethnography: From Homer to Herodotus* (Oxford 2012), 11. Skinner argues persuasively for the curiosity of non-Greek peoples about other cultures as expressed not only in a text such as this "highly atypical" letter (which A. Leo Oppenheim, as cited by Skinner, has seen as intended for public recital) but also in non-literary archeological remains. As with ethnography, so also, I suspect, with science, history, philosophy and other areas of intellectual endeavor: the Greeks were not the first to wonder, but the alphabet allowed them to be the first to express their wonder, and to attempt to gratify their curiosity, in sustained and systematic literary traditions.

29. Mary Beard, "Do the Classics Have a Future?" *The New York Review of Books*, January 12, 2012, 49–54.

30. Eric A. Havelock, "The Oral Composition of Greek Drama," *Quaderni Urbanati di Cultura Classica* No. 35 (1980), 61–113. Reprinted in Havelock, *Literate Revolution*, 261–313. Havelock notes at the beginning, "An early draft of this paper was read to a colloquium held by the Institute of Classical Philology at the University of Urbino, Italy, on June 2, 1978."

31. E. Pulgram, *Latin-Romance Phonology: Prosodics and Metrics* (Munich 1975). For the influence of Greek metrical theory on Latin literary verse, see especially 88 ff., 125 ff., and 180 ff.. For a hint of the wider implications for comparative poetics, cf. M. O'Connor, *Hebrew Verse Structure*, reading out from 23 and 30, to which I am indebted for the references in Pulgram and much else besides (note 16).

32. Ong, *Orality and Literacy* (see note 1), 24.

33. Havelock hints at this several times but does not articulate it fully. See his *Muse*, 120 ff. and *Literate Revolution*, 227 ff.; part of what holds Havelock back from articulating the connection further might be his tacit accept-

ance that the Hebrews, too, were monotheists, a conception that more recent scholarship has rightly asserted arose from Christian propaganda. See the introduction to Polymnia Athanassiadi and Michael Frede, eds. *Pagan Monotheism in Late Antiquity* (Oxford 1999). For myth and ritual, Walter Burkert, *Greek Religion* (Cambridge, MA 1985) remains essential.

34. Colin McGinn, "Book Review: 'Plato at the Googleplex' by Rebecca Newberger Goldstein," *The Wall Street Journal*, March 7, 2014, retrieved online March 10, 2014 at <http://online.wsj.com/news/articles/SB1000142405270230377550457939528110261012>.

35. I discuss these ideas further in my essay "How Did God Get Started?" *Arion* 18.2 (Fall 2010), 1–27, which I have drawn on here.

36. Havelock, *Preface to Plato* (see note 7), 197 ff.