The notes and the suggestions above, however, do not diminish the value of a work that has vividly resumed the debate about the fundamental topic of Hittite historiography, as well as indicated new paths for its study.

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Schrift und Schriftlichkeit: Die anatolische Hieroglyphenschrift. By ANNICK PAYNE. Wiesbaden: HAR-RASSOWITZ VERLAG, 2015. Pp. xvii + 232, illus. €68 (paper).

Annick Payne, a recognized expert in the Anatolian hieroglyphs, offers by far the most comprehensive treatment of the subject to date—comprehensive in two senses. First, Payne covers every conceivable aspect of the topic: structure, origin, and chronological development of the script itself; its use (by whom, for what purposes, and in what contexts, in terms of material supports, languages, and competing scripts); the role, social status, and training of scribes and the extent of literacy; and finally the nature of the extant texts (genres, literary structure, and diction).

Second, Payne employs multiple and complementary approaches: general principles of writing systems, relevant parallels from other ancient scripts, self-experimentation with writing materials and consultation with others who have conducted similar experiments; and an engagement with the applicable secondary literature that is generally thorough, up-to-date, and evenhanded (one exception will be noted below).

Another strength is Payne's due caution: she does not hesitate to make clear claims or choices among competing hypotheses, but always properly qualifies them and constantly reminds readers that the limited and skewed nature of the evidence (which future discoveries will only partially alleviate) makes all conclusions even more provisional than is usual in scholarly contexts.

The comprehensive, multifaceted approach and sober handling of the evidence enable Payne to make progress on several points:

1) She demonstrates (pp. 32–34) that the diachronic development of the mixed logographic-phonetic system of the Anatolian hieroglyphs is not, as previously assumed (for this system and more generally), a linear progressive one from entirely logographic to fully phonetic spelling; the use of a logographic "determinative" *plus* full phonetic spelling is the endpoint and the product of full phonetic spelling alone, not vice-versa.

2) She is able to make a very useful start on a projected full paleographical analysis of sign shapes, diachronic and diatopic (pp. 44–64). Even in this preliminary version, Payne can show that each sign must be treated separately without preconceptions and that easy generalizations are hard to come by: neither relative frequency, chronology, nor geographic distribution are consistently determining factors. The paleographic analysis also contradicts the notion of a linear chronological development (p. 64).

3) She offers further arguments (chapter 3) in support of other scholars that the Anatolian hieroglyphs are an autonomous creation within a Luvian-Hittite bilingual context and motivated at least in part by political, propagandistic aims; commonalities with other systems such as Cretan are structural, not the result of borrowing.

4) She supports with new evidence the claim of widespread use of wax-coated wooden tablets and cautiously argues for a large-scale (though not necessarily complete) complementarity of script and language in the late Hittite Empire: hieroglyphs and Luvian on wood and cuneiform and Hittite on clay (with both possible on other supports). In particular, based on comparative evidence and her own experiments, she seriously relativizes the notion of wax-coated wooden tablets as being too perishable to be suitable for long-term documentation.

5) Using excerpts from several inscriptions, but the complete versions of the related ÇİNEKÖY and KARATEPE 1 texts, she offers the first serious comprehensive analysis of the literary *structure* and diction of Hieroglyphic Luvian texts.

Needless to say, the sections on paleography and textuality are only first steps, but one could not expect otherwise in a work that seeks to cover all aspects of the Anatolian hieroglyphs. Each of these topics could easily merit a small monograph of its own.

Readability of the book is enhanced by the attractive typographical layout, excellent proofreading (typos are extremely few and self-correcting), and aptly chosen and well-reproduced drawings and photos. Weaknesses are few. The translations of textual passages are for the most part highly reliable, and the rare exceptions do not affect Payne's major claims. There are two serious missteps:

1) Payne is fully justified in her caution about recent claims for new values of the phonetic signs conventionally rendered as ta/i_4 and ta/i_5 (p. 8). However, there has been for some time no doubt about the fact that signs $ta, ta/i_4$, and ta/i_5 as a set are used contrastively with ta and ta and never interchange with the latter. Payne's failure to take this into account seriously distorts the discussion of the syllabary (pp. 29–31) and sign frequency (p. 46). The interesting question of whether the contrast is stable from the Bronze Age (Hittite Empire) to the Iron Age (post-Empire "Neo-Hittite" states) naturally is also left unaddressed.

Furthermore (pp. 119–20), the word ("*256")-*tà-sa-za* (*sic*!) in KULULU 2 §2 cannot be read as a complete word /tasan=za/ and equated with *ta-sa-* 'inscribed stone' (or similar) attested in KARKAMIŠ A6 §28. The new analysis by van den Hout of other words with the sign *256 as a determinative accepted by Payne suggests that the word in KULULU 2 also refers to some kind of grain supply or storage facility.

2) Payne presents (pp. 79–98) strong paleographic arguments for an early dating of the SÜDBURG inscription (to Suppiluliuma I), and a late dating of that on the ANKARA silver bowl (post-Empire). However, regarding the potentially very problematic implications of such dating for the content and textual structure of these inscriptions, the citation of secondary literature is uncharacteristically very one-sided for the first, while for the second Payne dismisses without argument the attractive solution of Durnford (2010) of a late inscription with an allusion to a much earlier famous historical event. The controversy over these two very difficult inscriptions will continue.

Further selected comments on other individual points:

1) Payne's rejection of the claim of Yakubovich (2010) that the heartland of Luvian speakers was in the "Lower Land" close to the Hittites is unjustified, entirely ignoring Yakubovich's strong *linguistic* arguments (2010: chapters 3 and 4) for profound *prehistoric* Luvian influence on the grammar as well as the lexicon of Hittite and the presence of Luvian speakers in Kanesh already during the Assyrian Colony period.

2) Very welcome is Payne's recognition (against many others) that aesthetic considerations (including a *horror vacui*) play a major role in the orthography and overall visual structuring of monumental hieroglyphic inscriptions (section 2.2.1).

3) Payne's properly qualified conclusion that only hieroglyphs were written on wood and cuneiform on clay is well-taken (p. 157), but when it is said in a *Hittite* cuneiform copy of an Old Hittite text describing a Hattic-based cult that it has been written *ANA* GIŠ.HUR=*kan handan* "according to a wooden tablet," I find it very hard to believe that an original Hittite text was first translated into Luvian and then translated back again. We would expect to find far more evidence of Luvian interference effects in such copies. So I find it unavoidable to suppose that there were at least some Hittite texts written in hieroglyphs (or far less likely that Hittite was written in cuneiform on wood).

4) It will be confusing to readers that on p. 177 the epithet of Runtiyas is correctly transliterated as *i-mara/i-si* in MARAŞ 1 §11, but in the translation and text there is still reference to an "IPA-Runtiyas" instead of correct "Runtiyas/Stag-god of the Open Country." See Hawkins 2004 for the correct reading of signs *462 and *463.

Payne is quite aware that all aspects of the present work are necessarily provisional and will remain the object of lively discussion. The author is to be congratulated for offering general readers an accurate, balanced, and remarkably comprehensive picture of the current state of affairs and other specialists new findings and the stimulus for further research and debate.

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REFERENCES

Durnford, Stephen. 2010. How Old Was the Ankara Silver Bowl When Its Inscriptions Were Added? Anatolian Studies 60: 51–70.

Hawkins, J. David. 2004. The Stag-god of the Countryside and Related Problems. In *Indo-European Perspectives: Studies in Honour of Anna Morpurgo Davies*, ed. John H. W. Penney. Pp. 355–69. Oxford: Oxford Univ. Press.

Yakubovich, Ilya. 2010. Sociolinguistics of the Luvian Language. Leiden: Brill.

Accent in Hittite: A Study in Plene Spelling, Consonant Gradation, Clitics, and Metrics. By ALWIN KLOEKHORST. Studien zu den Boğazköy-Texten, vol. 56. Wiesbaden: HARRASSOWITZ VERLAG, 2014. Pp. xxv + 716. €98.

This very ambitious attempt to present a comprehensive analysis of Hittite accent (primarily, but not exclusively, word accent) consists of parts of quite unequal size. After a short introduction setting forth his premises, working methods, and database, Kloekhorst treats in detail in five chapters comprising over five hundred pages the evidence for word accent provided by synchronic vowel length—which in turn is deduced primarily from the distribution of so-called "plene" and "non-plene" spellings. Three shorter supplementary chapters follow: chapter 6 discusses what may be inferred about Hittite accent from the effects of prehistoric lenition and fortition of consonants; chapters 7 and 8 treat aspects of accent at the clause level as reflected in the behavior of clitics and in poetic meter. The volume is completed by an "accentuated" word list of Hittite plus indices of words cited from other languages and of text passages discussed.

Space limitations preclude any remotely adequate engagement with Kloekhorst's many specific arguments and conclusions, and in any case serious differences in working premises would render any list of "hits and misses" so subjective as to be largely useless. The following review will focus on larger methodological issues with necessarily very selective illustrations. For a far more thorough review see Kimball 2015.

I begin with marked strengths of the work. First, the philological foundation is excellent. One may differ with the reading or analysis of a handful of examples, but I found virtually nothing that may rightfully be termed an error. Careful rechecking of the autographs and photographs of some examples also allows Kloekhorst to identify likely ghost forms. Second, the material basis for the heart of the analysis, that involving the spelling of vowels, is impressively broad, and it is unlikely that any further overlooked examples will materially change the picture.

Third, Kloekhorst is gratifyingly explicit about his assumptions regarding the relative dating of each example in terms of both the composition and the manuscript, something too often lacking in longitudinal studies of Hittite grammar. Fourth, the prose style is direct and uncluttered, and the argumentation linear. This is emphatically not faint praise: given the unavoidable density of much of the material (see, e.g., pp. 53–60 on the suffix $-\bar{e}s\bar{s}ar$), it is crucial that Kloekhorst constantly keeps the reader's focus on the point being made and its relevance for his larger conclusions. The interim summaries of conclusions are also helpful. In sum, one may disagree with or be skeptical of many of his claims, but one is in little doubt about what they are.

The strengths just enumerated enable Kloekhorst to make several original new contributions, such as: 1) in Hittite spellings of the type ${}^{o}u/u$ -e-eC and ${}^{o}i$ -e-eC the -e- does not mark vowel length, but