Silvia Ferrara, Barbara Montecchi, and Miguel Valerio, eds. *Writing from Invention to Decipherment* (Oxford: Oxford University Press, xv+349pp.,119 figs, 9 tables, hbk, ISBN 978–0–19–890874–6)

This book offers a range of perspectives on the creation of writing systems, and, for those that fell out of use historically, the ways in which we may try to 'unlock' their meaning.A short introduction explains its genesis in a series of online seminars, held courtesy of the ERC-funded INSCRIBE project (PI Silvia Ferrara). The remit lies in the phenomena of script invention (mostly ancient but with one modern example) and decipherment, ostensibly with a global outlook, with case studies from the Americas to the Pacific (though Africa is not strongly represented). However, a glance at the contents shows that the distribution of topics is uneven: of thirteen chapters, almost half (six) focus on the Bronze Age Aegean, which is the primary area of interest of the INSCRIBE project. This review will treat the Aegean material separately before the other chapters.

Of the Aegean papers, some ask and try to answer big questions while others are much narrower in focus. The first comes from Willemijn Waal (Ch. 4), who argues for an early invention of the Greek alphabet, before the eleventh century BCE, because of certain features of Greek alphabetic writing that look closer to pre-eleventh century Phoenician (such as variable writing direction and word dividers); she does not rehearse the palaeographic arguments usually cited in support. She revisits the old question of whether ‘perishable materials’ (i.e. ones less likely to survive like wood, parchment, and papyrus) might have been used during the Bronze Age and into the Iron Age, which could also mean that Linear B wasn't as restricted in its use as it appears from the surviving inscriptions (almost entirely on clay administrative documents). Waal adds a new dimension to this contentious debate by suggesting that the perishable documents in question were actually palmleaves. The claim is made so confidently that, even though there is no direct evidence to support it, by the middle of the article it is assumed that clay was used ‘exceptionally’ (p.79) and we have to postulate the Mycenaeans’ reasons for choosing it over their everyday palmleaves. The main weakness here is that the arguments are not really fleshed out well enough to judge their merit, perhaps because Waal has published these proposals at more length elsewhere (Waal, 2022).

The second Aegean-focused paper is by Judith Weingarten (Ch. 7), investigating the cat sign of Cretan Hieroglyphic, a script with a small corpus divided primarily between seals and clay documents. Weingarten uses the instances of signs representing a cat, which have a clear legacy in the *ma* syllabograms of Linear A and B, as a way into the thorny issues of phonography, logography, and ‘syntax’ in Cretan Hieroglyphic. Her argument that the cat and its syllabic value *ma* could stand for wool (represented by a monogram *MA+RU* in Linear A and B) and even be used as a sort of trademark by relevant professionals is quite ingenious. It is unfortunate that it rests, necessarily, on such a small basis of evidence, but it nevertheless raises some interesting possibilities for the ways Cretan Hieroglyphic signs may have functioned.

Giorgia Baldacci (Ch. 8) presents a persuasive case for seeing Crete’s most controversial object, the Phaistos Disk, as a genuine Minoan artefact. She focuses on factors such as the immediate archaeological context of the find, its fabric, and craftsmanship as impressed fineware, the discovery of one of its signs in a relief potmark and a sealing discovered much

later than the Disk—and briefly the parallels in text arrangement and sign shapes in a gold ring from Mavrospilio and a bronze axe from Arkalochori. The contextual approach allows a reconsideration of the dating of the Disk, which looks most at home in Middle Minoan IIB-IIIA. Baldacci's discussion goes some way towards reframing this exceptional object as one that is nevertheless not isolated, with formal and technical parallels despite its unknown function.

Barbara Montecchi's chapter (Ch. 9) proceeds from an overview of the relationships and shared sign repertoire of Cretan Hieroglyphic with Linear A and B to look more closely at the origin of signs in Linear A. Montecchi here looks at four signs that appear to be Linear A innovations (in as much as they have no known Cretan Hieroglyphic correspondence—though this is not a guarantee that they might not occur had we a larger corpus of Cretan Hieroglyphic). The likeness between AB 67 and the one-handled conical cup is uncontroversial, and likewise some relationship between AB 118 and weight measurement, and between A 321 and the sistrum. The argument presented for AB 46 (*je* in Linear B) is more bold: that it represents a pair of walking legs and borrows its value from a verb for walking, and furthermore that it is derived from the Egyptian Hieroglyphic sign D 54 (a semantic classifier or logogram related to motion) and its value *iw*—but with palaeographic confusion from a Hieratic variant of a completely different sign, G 17 (*m*) that happens to look similar. While knowledge of and interaction with Egyptian writing is not itself implausible, this particular interpretation, which starts out from a perhaps unwarranted assumption that AB 46 is supposed to look like walking legs, perhaps stretches credulity a little too far. However, the chapter as a whole gives valuable insights into possible processes of sign formation.

Sarah Finlayson (Ch. 12) starts by considering social, cognitive and archaeological perspectives on the act and process of reading, before going on to seek out readers of texts in the Bronze Age Aegean. She justly problematises the concept of literacy, pointing out that reading requires understanding of contextual factors as well as the conventional meanings of signs, and necessitates both access to and visibility of written objects. A clay sealing or nodule in Cretan Hieroglyphic or Linear A, for example, has very specific contexts of performance and meaning, and multiple potentialities for meaning-extraction by different individuals, while a religious inscription perhaps needs no human reader at all. For Linear B on the other hand, where we have evidence of administrators reading each other's work (whether to correct or amend, or to redact and summarise content), Finlayson suggests that the inward-looking administrative mechanisms meant that writers *did* write with the knowledge that they would be read.

The last of the Aegean chapters, by Louis Godart (h. 13), focuses loosely on the prolific writer Hand 602 (formerly Hand 2, identified palaeographically) at Mycenaean Pylos, labelled here as a master of finance because of their association with the recording of metals, taxation, and high prestige items. This administrator's activities then feature in a series of palaeographical and historical reassessments, partly arising from work on the new photography of documents from the site. The suggestion that undeciphered sign **63* could represent *sja*, based on a correspondence between the sequences *a-si-ja-ti-ja* and *a-*63-ta*$_2$, is an intriguing one, but it is difficult to see how the very wide sign **63* could fit in the damaged area of tablet relevant to the identification. Godart's somewhat provocative

argument for an early destruction of the administrative centre at Pylos will contribute usefully to the wider discussion of the chronology of Mycenaean palace culture.

The chapters surveyed above represent a quite varied patchwork of contributions to scholarship on Aegean syllabic writing, some new and interesting, others more contentious. We now turn to the papers on other areas.

Mattia Cartolano (Ch. 1) discusses the role of shapes (primarily simple geometric shapes and figures e.g. of animals) incised on or added to a range of portable items in the Pre-Pottery Neolithic (PPN) in southwest Asia (an area known as the Near East, p. 10). She helpfully surveys the evidence for social complexity and growing needs for communication in this period, both within localised group structures and more widely across areas of this wider region that are evidently interconnected as shown by traded items and materials. An overview of recent redefinitions of what constitutes 'writing', and scholarship on cognitive developments associated with visual communication, is used to support the interpretation the marks on PPN portable objects as communicating important information in response to social needs. This wider argument is very persuasive, but could be better illustrated. A case study of 442 objects is presented in a table of shapes/patterns by site (though we are not told how many of each are found at each site) and two figures depicting only thirty-four of the objects, along with some brief narrative on the overarching trends in the data.

The paper by Paola Demattè (Ch. 3) also looks back to the Neolithic (and Early/Middle Bronze Age) for the origins of writing, this time in China. The earliest well established and understood writing, the Oracle Bone Script (*jiaguwen*) and Bronze Script of the Late Shang, are argued to be too well established to have only just emerged, causing us to look for their origins in the longue durée. This is a useful and well-illustrated introduction to the material also covered by Demattè in her 2022 monograph (Demattè, 2022): marks found on a variety of items (particularly ceramic and jade pieces), grouped by geographical area in such a way that we get a sense of the spread of the phenomenon but also the degree of variation from place to place. There is some consternation over the question of when the marking systems become demonstrably glottographic—the Early-Middle Neolithic examples are 'not writing systems but signaries with pictorial and numerical notations' (p.53), but at which point between the Late Neolithic and Middle Bronze Age phonetization occurred is much more difficult to pin down.

Aaron Koller (Ch. 3) asks a pertinent question of the early alphabetic texts of the second millennium BCE: why are they so difficult to interpret? This seems especially relevant considering the way the concept of the alphabet is often cast as a revolutionary and democratising invention. Koller argues persuasively that we need to understand the early alphabet within its own context of use rather than applying potentially anachronistic values, and that certain 'benefits' of later alphabetic writing simply had not developed yet (visual simplicity of signs, vowel notation, word division, orthographic rules). This leads to a conclusion that the early alphabet was intended for phonetic writing, and not for reading: it was designed for 'the simple writing of short texts by people on the margins of society who otherwise could not write' (p. 69), primarily graffiti and dedications for a divine audience.

The chapter by Alex de Voogt (Ch. 5) is the only one that focuses on a writing system of recent history, the Caroline Islands Script, which he uses as a novel way into discussing

theoretical aspects of script transmission. The script, which was in use during the early twentieth century, is sufficiently documented to reveal details of transmission that might be considered unusual or unexpected. An initial stage with an alphabetic repertoire taught by a missionary was developed using syllabic values (representing open syllables despite there being no preponderance of open syllables in the language), while a second stage greatly expanded the repertoire of signs via mixed principles: for example through visual iconicity in signs that look like objects/figures (including the borrowing of sign shapes without their values from the Latin and Japanese scripts) alongside many shapes invented without obvious sources of inspiration. The context of development, for predominantly 'private' and non-administrative purposes in a non-urban island society, is also notable, as is the islanders' attachment to their home-grown script in the face of the later Latin orthography poorly designed for their languages by an outsider. De Voogt shows how the Caroline Islands Script can help us question common assumptions about historical script transmissions.

The paper by Ignasi-Xavier Adiego (Ch. 6), which focuses on the history of previous decipherments, is oddly the first in a section entitled 'The Future of Undeciphered Scripts'. He begins by stating that the term decipherment should only be applied to the establishment of the inventory of a script's signs and their functions and values, viewing linguistic interpretation as a second and separate step. But as even his own examples make very clear, linguistic analysis is inevitably an integral part of many, if not most, decipherments, which tend to proceed in stages of offering and testing hypotheses. Indeed, the *value* of a sign is usually dependent on the relationship between the script and the language(s) denoted, a fundamental principle of grapholinguistic research. Adiego goes on to survey a wide range of decipherments looking for common factors, from the existence of bilingual inscriptions, related scripts and attestation of personal and place names, to the methods and intuition of the decipherers.

The paper by Miguel Valério (Ch. 10) is itself a partial decipherment proposal aimed at Rongorongo, with very specific aims: to shed some light on the way the script encodes language, and to suggest some interpretations based on the best understood inscription, Tablet C (which refers to a lunar calendar). Valério proposes that Rongorongo works in a way analogous to Chinese writing, with combined logography and phonography and a high degree of lexical homophony enabling a rebus principle to be used—with the key difference that each sign would encode a *disyllabic* morpheme as found commonly in the Rapanui language. The interpretations offered are necessarily based on comparative reconstructions across Polynesian languages, since we do not have enough evidence for earlier stages of the Rapanui language—with the further problem that we also do not know when the script was first developed. However, the methodology is quite rigorous, and notably makes better use than most decipherment attempts of the late nineteenth century testimony of Metoro Tau'a Ure, a man who could understand the script and gave descriptions of some passages.

Finally, Christian Prager et al. (Ch. 11) present the ongoing work of the *Textdatenbank und Wörterbuch des Klassischen Maya* (https://classicmayan.org). This impressive project is in the process of releasing a huge amount of data and resources freely online, with a new update eagerly awaited in 2025 at the time of writing this review. Documentation of more than 10,000 Mayan 'text carriers' is a complex task and involves the amalgamation of thousands of older and newer photos and drawings and the development of a TextGrid

database to link a wealth of metadata concerning not only the inscriptions' content but also their contextual associations, materiality and provenance, as well as references, linguistic annotations and a reviewed sign list. For a still partially undeciphered script (58 per cent according to the team), this digitisation work faces challenges, but the possibilities it opens up are quite momentous—this will have a great impact on future Mayan scholarship and provide a paradigm for other script studies.

Aside from some oddities in the arrangement of chapters and noticeable unevenness in coverage, this is a valuable collection. The Aegean-focused chapters will perhaps be of most interest to scholars working within that field, especially those with narrow remits, but overall, there is much to benefit a wider, varied audience. We learn that decipherments are long and ongoing processes, not sudden watersheds, and that writing is not a monolithic technology but rather a conceptual tool that can be shaped to meet many human needs in different contexts.

References

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