PREFACE

THE CRETAN HIEROGLYPHIC SCRIPT AND PROBLEMS OF DECIPHERMENT

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Cretan Hieroglyphic Script and Linear A

Three clearly related scripts were used in ancient Crete during the Bronze Age: Cretan Hieroglyphic, Linear A and Linear B. The earliest written testimonies date back to the third millennium BC. A few seals, presenting some fifteen different signs in all, have been found at three sites on the island: Archanes, not far from Knossos, Odigitria Monastery on the Messara plain and Pankalochori outside Rethymnon. They date from Early Minoan III or, at the latest, Middle Minoan IA levels (Table 0.1, cf. Civitillo, Ferrara and Meissner, this volume). The five signs incised on these seals, most of which are made of bone, seem to be precursors both of Cretan Hieroglyphic and Linear A signs and are known, as a whole, as the 'Archanes formula' (Valério, Civitillo, Jasink and Weingarten, this volume). The 'formula' we can read on these seals is more or less the same as we have on many Linear A inscriptions on libation tables from the Late Minoan period: if we apply the phonetic values of the correspondent Linear B signs to these inscriptions, the 'Archanes formula' will read A-SA-SA-RA-NE and on the Linear A libations tables A-SA-SA-RA-ME.

Two scripts are attested for the Protopalatial period: Cretan Hieroglyphic and Linear A. The former, though certainly of Cretan origin, owes its name to Arthur Evans who assumed a vague resemblance of its signs to the characters of Egyptian hieroglyphic script. The second was named Linear A because its texts are written in horizontal lines and because it predates another Cretan script which displays most of the same traits: Linear B. Until a few decades ago, all the Linear A texts of the Protopalatial period solely came from the ruins of the First Palace at Phaistos excavated by Doro Levi, Luigi Pernier's successor. In 1953, in a Middle Minoan II horizon, he was astonished to bring to light several dozen clay tablets which had been burnt by chance in the fire that left the royal residence deserted around 1700 BC. Recently, a Linear A tablet was discovered in a Protopalatial context at

Knossos.[1] At the time of the First Palaces, while the scribes of Linear A were keeping accounts, other literate Minoans continued the tradition evidently in use in Middle Minoan I and used the Cretan Hieroglyphic script for inscriptions on seals. Even so, because it is difficult to limit the scope of a script, once invented, the Minoans extended the use of Cretan Hieroglyphic to clay vases, offering tables and other objects made of clay (tablets, tokens, etc.).

It may seem strange that during their history the Minoans invented two writing systems, Cretan Hieroglyphic and Linear A. However, they were not alone in this. The Hittites, for example, also used two scripts: the cuneiform script which they inherited from the Assyrian merchants, and the so-called Anatolian Hieroglyphic script. The Hittites adopted the cuneiform script probably some time around the middle of the eighteenth century BC. This script was used for several centuries in the scribal school at Ḫattuša, the capital of the Hittite empire. Hittite cuneiform was the official script. The scribes used it to compile texts in the various languages of the empire. In order to write one of the languages of the empire, Luwian, the Hittites used from the fifteenth century BC, alongside the cuneiform script, the Anatolian Hieroglyphic writing system. This is based on signs representing, always in profile, certain animals, parts of the human body, domestic objects and numerous religious symbols. The documents in Anatolian Hieroglyphic include rock-carvings, commemorative steles, domestic objects and, in particular, a rich collection of personal seals and cylinder seals. The coexistence of two different scripts, whether in the Minoan or the Hittite world, was possibly connected with the differentiation of the messages to be transmitted. Since more than 98 per cent of the Minoan seals are written in the Cretan Hieroglyphic script, I do believe that at the beginning this sort of writing was first used to write messages on this sort of support, while Linear A was restricted to tally records as in the Protopalatial archives from Phaistos.

It is undeniable that new research on Cretan Hieroglyphic writing is very promising.[2] For instance, my last study of the scribes of the hieroglyphic documents discovered in the 'Deposits of the palaces of Malia and Knossos' can demonstrate four points: 1) the same scribe is the author of documents discovered in the palace of Malia and of Chamaizi vases unearthed in the *Quartier Mu*; 2) since the date of the *Quartier Mu* is certain (Middle Minoan IIB), it is obvious that the 'Hieroglyphic Deposit' found in the palace also dates from Middle

[1] Schoep 2007: 132–3. [2] Godart 2023.

Minoan IIB, which confirms the dating proposed by F. Chapouthier;[3] 3) there was coexistence between Hieroglyphic and Linear A in the 'Hieroglyphic Deposit of Knossos' as well as in that of Malia, because document KN #019 is written in a form of Linear A identical to that attested in the Phaistos tablet PH 7, document KN #048 presents logograms (*164 or *165) identical to logograms *AB* 180 attested in the inscriptions in Linear A MA 4 and MA 6 of the palace of Malia and to logogram *180 of Linear B present in tablet KN U 172 and, finally, tablet #068 published in *Scripta Minoa I* (P 120)[4] is in Linear A and not in Cretan Hieroglyphic; 4) finally, in order to note the hundreds, the same scribes responsible for the Hieroglyphic texts discovered in the palaces of Malia and Knossos could use either oblique strokes, or, as in Linear A, circles. This last point is due, obviously, to contact within the same archive rooms, between scribes using Linear A and scribes writing in Cretan Hieroglyphic.

The Decipherment of Cretan Hieroglyphic Texts

There are four basic, essential conditions for every decipherment:

(1) First, we need to have a sufficiently clear idea of the content of the texts.
(2) Next, it is essential that we have a specific idea of the system of writing used.
(3) Third, we must possess a starting point in order to propose a first working hypothesis.
(4) And finally, we should possess a large number of signs and sign groups so that we have the possibility to try out, on a large scale, the proposed hypotheses of decipherment.

We must remember that Michael Ventris, when he deciphered Linear B, had at his disposal all these preconditions. He knew that the Linear B tablets were economic texts, that the script was syllabic and, thanks to Evans' preliminary work, that some correspondences between some signs of the Classical Cypriot Syllabary and some signs of Linear B had already been established. Finally, he had the possibility to experiment with his decipherment method, by relying on a Linear B corpus of more than 25,000 individual signs.

Let us now assess which of these preliminary conditions are essential for the decipherment of the Cretan Hieroglyphic documents we possess.

[3] Chapouthier, Gallet de Santerre and Martin 1947: 405–7. [4] *SM* I: 148, 179 and Table X.

(1) We know that the message on the seals and the sealings is not merely administrative. The group of signs on this type of documents are probably either men's names, titles or the so-called 'formulae' (Civitillo, this volume). We also know that the tablets, clay labels, etc. are economic documents with logograms and that numbers were expressed in a decimal system. Finally, it is probable that the inscription on the libation table from Malia was a religious text. The first condition is thus fulfilled.

(2) We have a specific idea regarding the system of writing used. Broadly speaking, three graphic systems are encountered in all scripts. The first is known as logographic and each sign is called a *logotype* or *logogram* rendering an uttered lexeme and morphemes. The number of signs used in a logographic script such as Chinese increases excessively not only because the objects rendered are many, but also on account of the abstract concepts associated with them, if sentences including verbs, adverbs, adjectives and so on are to be expressed in writing. Every educated Chinese must be able to read and therefore write several thousand characters, all written in a different way. Thus, it is hardly surprising that Chinese dictionaries can encompass 50,000 different logograms. Other writing systems are *phonetic*, i.e. have as their base the phonological make-up of the word. Functionally these cover a broad spectrum. Particularly common are the *syllabic* and the *alphabetic* type. The difference between the syllabic and the alphabetic system lies in the fact that the phonetic element rendered by each sign can be, for the syllabic system, a whole syllable as it is pronounced, and for the alphabetic the phonetic realisation of a single phoneme, an abstract entity that cannot be pronounced as such. The syllabic system separates the words into syllables. For example, the word 'napoletano' in a syllabic system of writing would be rendered graphically by five signs, na-po-le-ta-no. The total of signs essential for a syllabic script is evidently much smaller than that for a logographic one. A language such as Japanese, which is rendered in a syllabic script and which consists, like Italian, almost entirely of open syllables – that is of syllables ending with a vowel – can quite easily be transliterated with a syllabic system, the *kana*, which comprises forty-eight signs and two auxiliary diacritic signs. The alphabetic system was created in the Levantine area and developed by the Greeks; it constitutes the system that has enjoyed the greatest success for it has been adopted all over the world. This success is due to historical reasons and not only to the ease of use and the small number of signs required: the English alphabet has twenty-six

letters, the Italian twenty-one and modern Russian, though arguably more complicated, still has no more than thirty-two letters. Cretan Hieroglyphic has fewer than 100 syllabograms.[5] Thus, we can be sure it is a syllabic writing system. The second condition is also fulfilled.

(3) We do not have even one group of signs common to Cretan Hieroglyphic and to a deciphered writing such as Linear B, to offer a starting point for a possible hypothesis of decipherment. The third condition is missing.

(4) Finally, the total corpus of Hieroglyphic consists only of fewer than 2,000 signs. We are a long way from the more than 25,000 signs Michael Ventris had at his disposal to achieve the decipherment of Linear B in 1952.

Along with its fascination, Cretan Hieroglyphic is condemned for the present to jealously guard its secret, but I have no doubt that new excavations and new discoveries in the near future will enhance our knowledge of this script developed by the first European communities. And this is also the aim of the present book. But I would not like to close on such a pessimistic note. Fortunately, new discoveries are enriching the corpus of the Cretan Hieroglyphic script. The *CHIC* edition completed by the late Olivier and myself in 1996 now requires a Supplement. It is necessary to collect in a new publication the texts that have come to light after the publication of *CHIC* and to update the index of words, logograms and fractions attested in the hieroglyphic writing system. Alongside the present volume, a *CHIC* Supplement, to be published in due course, will provide such a reference point, on which new paths of research in Cretan Hieroglyphic can be based.

[5] *CHIC*: 19.