CRETAN HIEROGLYPHIC

Edited by

MATILDE CIVITILLO Università degli Studi della Campania 'Luigi Vanvitelli'

SILVIA FERRARA Alma Mater Studiorum, Università di Bologna

> TORSTEN MEISSNER University of Cambridge





Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi - 110025, India

103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge. We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781009490108

DOI: 10.1017/9781009490122

© Faculty of Classics, University of Cambridge 2024

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, with the exception of the Creative Commons version the link for which is provided below, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009490122 under a Creative Commons Open Access licence CC-BY-NC-ND 4.0 which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given. You may not distribute derivative works without permission. To view a copy of this licence, visit https://creativecommons.org/licenses/by-nc-nd/4.0

When citing this work, please include a reference to the DOI 10.1017/9781009490122



I N S C R I B E INVENTION OF SCRIPTS AND THEIR BEGINNINGS





Digital typeface ALPHABETUM developed by Juan-José Marcos. Freely supplied by the author for this book.

Digital typeface INSCRIBE developed by the ERC INSCRIBE team. Freely supplied for this book.

Digital typeface MINOS developed by Anna Margherita Jasink. Freely supplied for this book.

First published 2024

A catalogue record for this publication is available from the British Library.

A Cataloging-in-Publication data record for this book is available from the Library of Congress

ISBN 978-1-009-49010-8 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

CONTENTS

List of Figures	<i>page</i> ix
List of Tables	xiii
List of Contributors	xvi
Acknowledgements	xviii
Preface: The Cretan Hieroglyphic Script and	
Problems of Decipherment	xix
LOUIS GODART	
Cretan Hieroglyphic Script and Linear A	xix
The Decipherment of Cretan Hieroglyphic Texts	xxi
Introduction	
The Earliest Script on Crete: Semiotics, Lingui	stics
Archaeology and Palaeography	I
MATILDE CIVITILLO, SILVIA FERRARA, TORSTEN MEISSN	
Cretan Hieroglyphic: Purpose of This Volume	I
Chronology and Contexts	2
Problems of Definition	4
Epigraphic Supports and Their Relations	6
New Approaches to Cretan Hieroglyphic	7
Structure of the Volume	9
Cretan Hieroglyphic Sign Repertoires: Yesterd	ay, Today
and Tomorrow	13
SILVIA FERRARA	5
I.I Introduction	13
1.2 The Cretan Hieroglyphic Inventory: Problems	14
1.3 The Earliest Repertoire of Cretan Hieroglyphic Signs	
1.4 The Corpus Sign List	17
1.5 Recent Reassessments of the Sign List1.6 Future Prospects	20
1.0 Tuture Trospects	23
Origins and Interface with Iconography	25
MIGUEL VALÉRIO	
2.1 Defining Writing and Tracing Its Origins	26
2.2 The 'Archanes Formula' and the Primacy of Cretan H	
2.3 Invented or Borrowed?2.4 Seals, Graphic Codes and Writing: Cretan Hieroglyp	32 hic in Its
Macro-Regional Context	35
2.5 Developed from Images or Alongside Them?	38
2.6 Writing and Images in MM II	46
2.7 In Search of a Model for the Inception of Cretan Hier	roglyphic 50

I

2

Contents

3	Cretan Hieroglyphic Writing as a System of Visual Encoding: Iconicity and Graphic Communication GEORGIA FLOUDA	56
	3.1 Universal Features of Early Writing Systems as Forms of Visual Encoding	56
	 3.2 Prototypes and Visual Communication: the Conceptual Origins of Egyptian Hieroglyphs and Cretan Hieroglyphic 3.3 The Role of the Inscription-Support: Directionality and Graphic 	59
	Composition as a Basis for Deducing Inscription Meaning 3.4 Final Thoughts	66 72
4	Macro View: Uses, Social Practices and Ideological	
	Implications of Cretan Hieroglyphic Texts	76
	4.1 The Hieroglyphic Seals: Continuity and Innovation4.2 The 'Archanes Script' as an Antecedent of the Hieroglyphic	76
	Script	78
	4.3 The Cushion Seals	81
	4.4 Matrix Seals and Matrix Symbols	82
	4.5 Extended Implications of the Hieroglyphic Script	85
	4.6 Archanes, Cretan Hieroglyphic and Linear A4.7 Sealings and Hieroglyphic Sealed Documents	88
	4.7 Sealings and Hierogryphic Sealed Documents4.8 From the Multi-Faced Seal to the Clay Documents Typical of the Hieroglyphic Script: Bars, Lames ('Blade-Shaped') and	89
	Medallions 4.9 The Difference Between Hieroglyphic and Linear A Administrative	91
	Documents	93
5	Forms, Materials and Sequences	95
	5.1 Introduction5.2 Cretan Hieroglyphic Sequences on Different Document Formats:	95
	Distribution, Materials, Forms and Functions 5.3 Cretan Hieroglyphic Sequences on Different Media: 'Formulae'	96
	and 'Non-Formulaic' Sign Groups	103
	5.4 Concluding Remarks	117
6	Scribal Practices, Syntax and Morphology	119
	6.1 Introduction	119
	6.2 A 'Clay Turn'? Material Perspectives	I 20
	6.3 Text Layout, 'Syntax' and Cognitive Developments6.4 Looking for Morphology	124 129
7	The Relationship Between Cretan Hieroglyphic and	
/	the Other Cretan Scripts	134
	7.1 On the Nature and Unity of the Cretan Hieroglyphic Script	134
	7.2 How to Relate Scripts	137

Contents

	7.3	The Workings of the Cretan Hieroglyphic Script	140
	7.4 (Cretan Hieroglyphic and the Phaistos Disk	I42
	7.5 (Cretan Hieroglyphic and the 'Archanes Script'	146
	7.6 (Cretan Hieroglyphic and Linear A	148
		Fowards Further Identifications	154
	7.8 (Conclusions	162
8		estigations into the Language(s) Behind Cretan	
	Hier	coglyphic and Linear A	165
	BREN	IT DAVIS	
	8.1 \$	Step 1: Identifying Homomorphs	168
	8.2 \$	Step 2: Defining the Four Texts and Tabulating the	
	V	Word-Internal Pairs They Contain	169
		Steps 3a and 4a: Completing the Control Experiment	173
	8.4 l	Results of the Control Experiment: Discussion	179
		Steps 3b and 4b: Completing the Main Experiment	183
	8.6 I	Results of the Main Experiment: Discussion	188
9	The	Future of Cretan Hieroglyphs: Outlooks and	
	Traj	ectories	191
	JOHN	BENNET AND VASSILIS PETRAKIS	-
	9.I	Pioneers, Problems and Paths Forward	191
	9.2	Accommodating (or Rehabilitating) the Study of Cretan	
		Hieroglyphic (and Other Aegean Writing Systems) within	
		Grammatology: Some General Issues	192
	9.3	Grammatogeny on Crete: Its Context and Its Archaeological	
		Correlates	198
	9.4	Development and Relationship to Other Aegean Writing	
		Systems: an 'Aegean Family' of Scripts?	202
	9.5	Pictorial Seduction - Reading and 'Reading' Cretan	
		Hieroglyphic?	204
	9.6	The Sign Categories in Cretan Hieroglyphic	206
	9.7	On Seals and on Clay: Skeuomorphism, Patchy Evidence and	
		the Unity and Diversity of the Cretan Hieroglyphic Corpus	209
	9.8	Re-defining Signaries on MM I-LM I Crete: a Proposal	
		for a Radical Re-orientation	215
	9.9	Shut Down, Killed or Just Residual? Possibilities for the	
		End of Cretan Hieroglyphic	217
	9.10	An 'Aegean' Future for a 'Cretan' Script? Revising,	
		Rethinking and the Prospect of Decipherment	219
	Epil	ogue	222
	JOHN	G. YOUNGER	

Appendix	225
Annotated Index of Cretan Hieroglyphic Sequences of	
Two or More Signs	225

Contents

Indexes	251
INDEX I Typological Index of Cretan Hieroglyphic Documents	251
INDEX II Complete Index of Cretan Hieroglyphic Phonetic Sequenc	es
of Two or More Signs According to Writing Supports	255
INDEX III Cretan Hieroglyphic Sequences Attested More Than Two	
Times on Different Media	275
INDEX IV Sketch of Cretan Hieroglyphic Sequence Typologies of Tw	o or
More Signs on Seals: Formulae and Non-Formulaic Sign Groups	
(Disregarding Face Numeration and the Relative Position of the	
Sequences on Prism Faces)	283
Concordances	288
Bibliography	299
Analytical Index	325

INTRODUCTION

THE EARLIEST SCRIPT ON CRETE: SEMIOTICS, LINGUISTICS, ARCHAEOLOGY AND PALAEOGRAPHY

Matilde Civitillo, Silvia Ferrara, Torsten Meissner

Cretan Hieroglyphic: Purpose of This Volume

Notable progress has been made in recent years in our understanding of Cretan Hieroglyphic, a highly 'iconic' (image-based) script created and used on the island of Crete some 4,000 years ago. This is the earliest certain attestation of writing in Europe, and the earliest in the broad Aegean script family comprising Linear A, Cypro-Minoan and Linear B. Except for the latter, all these scripts are as yet undeciphered in the sense that the underlying language or languages is/are unknown – although a considerable number of Linear A signs are 'readable' with respect to their individual sound value.¹ Within this family, Cretan Hieroglyphic is the least well understood. This situation is due both to the small number of documents attested, and to the prevailing attestation of this writing system on seals, which has caused great difficulties in the understanding of its functioning and has even favoured its definition as 'decorative writing'.

However, as will become apparent, research has advanced in many respects. In the first place, a broader approach to the concept of 'writing' and proper appreciation of its social dimension has helped contextualise and understand Cretan Hieroglyphic much better, even if the linguistic message of the inscriptions still eludes us.² Secondly, a broad consensus as to the general nature of the script, or at least as far as its use for rendering elements of speech in a systematic way is concerned, has emerged. And thirdly, owing to the work done by Younger, Davis and others, considerable progress has been made in our understanding of the most immediate relative of Cretan Hieroglyphic, Linear A, so that many more links, but also differences, can be seen much more clearly than was possible even a generation ago. This partly concerns

¹ For a recent discussion, Steele and Meissner 2017.

² Civitillo 2016a and 2021b; Decorte 2017 and 2018a; Ferrara 2015 and 2021; Ferrara, Montecchi and Valério 2021a–c.

the language, but much more importantly, the development of the script, its uses and its limitations, and its relation to Linear B as well as to Cretan Hieroglyphic.

This has prompted the creation of this book, to unify all the different strands of research into the complex phenomenon that is Cretan Hieroglyphic writing, and to make available to the reader, for the first time and in a single volume, an up-to-date overview of all aspects of this script. While some of the aspects covered here can now be said to be well established and accepted, others are still very much in flux. It is with the intention of covering these grey areas that this book was conceived, and this updated perspective also gives us the opportunity to sketch out potential future paths of investigation.

Chronology and Contexts

The Cretan Hieroglyphic material edited in the *Corpus Hieroglyphicarum Inscriptionum Cretae* (*CHIC*) comprises around 200 incised and/or stamped clay documents, 136 seals and 16 miscellaneous items (incised and painted pots and an incised stone libation table), distributed across central and north-eastern Crete and produced between MM IA and MM III (2000/1900–1700/1600 BC, Table 0.1), with only few recovered outside the island.³ Clay documents come from magazines, workshops and 'deposits' inside or connected with the palaces at Knossos, Malia and Phaistos. In addition, there are concentrations of documents from a building of 'palatial' character at Petras and from an important building, probably connected to the palace, at *Quartier Mu* at Malia.

Newly discovered inscriptions come from Petras, comprising a dozen clay documents, five seal impressions⁴ and six seals,⁵ a fragmentary amphora handle and a vase from Malia,⁶ a vase handle from Pyrgos,⁷ a potter's wheel from Gournia,⁸ a fragmentary Chamaizi vase from Katalimata,⁹ a 4-sided prism from Vrysinas,¹⁰ an irregular cushion seal from Knossos¹¹ and an impression from Mikro Vouni.¹² Moreover,

- ⁷ CMS II 6, 230; Del Freo 2008: 200. ⁸ Del Freo 2017: 4. ⁹ Ibid.: 6.
- ¹⁰ Hallager, Papadopoulou and Tzachili 2011: 65-70, figs. 4-5.

³ For the two seal impressions found on Samothrace and the seal from Kythera, Matsas 1991; *CHIC*: 20–2, #267.

⁴ Tsipopoulou and Hallager 1996a; 1996b; 2010. ⁵ Krzyszkowska 2012; 2017.

⁶ Schoep 1995; Olivier 1999: 420; 2009: 188; Pomadère 2009; Del Freo 2012: 5–6; 2017: 6.

¹¹ Kanta 2018 cat. 305; Kanta, Palaima and Perna 2023.

¹² CMS V Suppl. 3, 343; Olivier 2010: 290, n. 13; Del Freo 2008: 201.

a clay lame from a MM IIB context at the extra-urban regional shrine at Kato Syme¹³ points to the presence of literacy in sanctuary contexts as well. The use of the script at sanctuaries is confirmed by a possible inscription on a libation table from Malia (*CHIC* #328) and by the above-mentioned 4-sided prism from the Minoan peak sanctuary at Vrysinas and is now further supported by the recent find of the alreadymentioned seal with the so-called 'Archanes formula' at a sanctuary near Knossos (KN S (4/4) 01). Seals come from the same contexts as clay documents but were also found deposited in graves. Unfortunately, as is expected, the precise find-spot of many of the inscribed seals is not known as many come from the antiquities market.¹⁴

The fact that seals were found in residential quarters at Malia suggests the possibility of a wider use of Cretan Hieroglyphic outside palatial centres,¹⁵ perhaps connected to heterarchical power structures, such as factions or corporate groups.¹⁶ This shows that writing was not confined to palaces and their economic workings only. Indeed, we have evidence of inscribed pots that were used in ritual and domestic contexts. Moreover, an incomplete inscription incised before firing has recently been identified along the rim of the fragmentary potter's wheel from Gournia mentioned above.¹⁷ This is a very important find as it demonstrates familiarity with the script among pottery manufacturers, pointing in the direction of a relatively widespread literacy across Minoan artisanal society.

The use of the script over the first two or three centuries of the second millennium shows that the development of a local, autonomous writing tradition was well rooted in different cultural settings. The Cretan Hieroglyphic script co-existed with Linear A for part of its life, and this is a problematic aspect that implies a complex interplay between two intertwined traditions. Epigraphic preferences may have been responsible for the eventual obsolescence of Cretan Hieroglyphic, which was perhaps sidelined by the more flexible and easier to use clay documents rather than the labour-intensive, specialised manufacture of seals. Considerations of a different nature too (linguistic, administrative) will receive attention in this volume (Civitillo, Steele, Jasink and Weingarten, Meissner and Salgarella, Davis, and Bennet and Petrakis).

¹³ Lebessi et al. 1995: 63-77.

¹⁴ For a list of the sites in which hieroglyphic seals were found, see *CHIC*: 21; Karnava 2000: 11, tab. 2.

¹⁵ Schoep 2002b: 19–21; Flouda 2013: 145. ¹⁶ Schoep 2002c: 117. ¹⁷ Del Freo 2017: 4.

Problems of Definition

The very definition of this writing system was a matter of debate until the 1980s. 'Hieroglyphic' as a term (used alongside 'conventionalised pictographs') dates to Arthur John Evans, who was convinced that it was possible to identify some points of contact in the graphic appearance with Egyptian hieroglyphic writing. In 1967, Maurice Pope proposed the definition 'writing of the First Cretan Palaces', because, in his opinion, 'to call the script "hieroglyphic" suggests a dubious analogy with Egyptian; to call it "pictographic" may be misleading and is certainly question-begging'.¹⁸ Pope's proposal never gained track in Aegean studies. Jean-Pierre Olivier¹⁹ later proposed to continue to use Evans' definition, with the caveat that the Cretan Hieroglyphic script should be considered a phonetic, logo-syllabic writing with no connection to Egyptian hieroglyphic writing²⁰ (Valério, Flouda, this volume).

Whatever designation scholars chose to refer to the script, its nature has been highly debated all along (Ferrara; Meissner and Salgarella, this volume). Ever since Evans pointed out that understanding the signs entailed a complex decoding process it has become clear that many of the signs engraved on seal faces might have been used as 'word-signs', to be interpreted according to a sort of 'free association play'.²¹ Also, some of these signs tend to be repeated in identical sequences – sequences which Evans named 'formulae'²² –, surrounded by ornamental motives which 'only bring out more clearly the fact that the signs themselves are introduced with a definite meaning, and are in fact a form of script'.²³

Along with the 'formulae', some other signs, attested in isolation (for which different interpretations have been proposed; see *passim* in this volume), were famously interpreted by Evans as 'chanting badges' expressing *cognomina* or the lineage of Minoan princes that would have then been added to these titles. Examples for these, according to Evans, are the lion head with a lily on the head (now recognised as a variant of the cat mask), the sitting cat,²⁴ the wolf/dog with its tongue sticking out, the fish, the dove, the spider and other zoomorphic signs. Evans assumed that these signs were not intended to be rendered phonetically – at least not necessarily or consistently – but might have expressed *cognomina* such as 'Leo', 'Wolf', 'Cat', or have been used as elements of compound names.²⁵ This interpretation is reflected in the standard

¹⁸ Pope 1968: 461. ¹⁹ Olivier 1989: 40. ²⁰ SM I: 241-3. ²¹ Karnava 2021: 241.

²² *SM* I: 260. ²³ Ibid.: 245–50.

²⁴ Probably a *pars pro toto* (face- or head-only) variant of the former: Younger 1996–7 [1998]: 387; Jasink 2009: 140; Civitillo 2018. For similar cases, see Valério, this volume.

²⁵ *SM* I: 264.

corpus, which excludes these signs from the sign list, as they are not attested on clay documents and appear to be intrusions in the formulaic patterns on the seals. Although recent years have seen a process of deconstruction of such formulae,²⁶ it seems clear that these signs *add* something to the sequences they accompany, as a logogram²⁷ or, conceivably, as a syllabic abbreviation or complement.²⁸ But this problem is far from resolved.

And even if these were the basic rules for 'reading' Cretan Hieroglyphic signs on seals, where a combined use of ideograms and logograms along with possible determinatives and decorative motives was to be assumed, the existence of another typology of Cretan Hieroglyphic documents on clay favoured the hypothesis that 'the phonographic element was also well represented by the Cretan hieroglyphs',²⁹ a conclusion to which Evans was also led by the observation that 135 different signs were too few for an ideographic system. Moreover, the view that 'a syllabic phonetic element, together with an ideographic one, had entered the Minoan hieroglyphic system'³⁰ was also warranted by two other observations: that on some sign groups (attested on seals and on clay documents) it was not possible to recognise a 'cumulative ideographic value' because of the disparate character of their 'content'.³¹ And secondly, that the 'linearisation' of some signs. so advanced that their iconic referent was no longer recognisable, could only be understood as evidence for a change of their use from a pictographic to a phonetic one.

Despite Evans' efforts, the persistent difficulties in understanding the sign composition on seals led Maurice Pope³² to argue in the 1960s that they were expressions, as a whole, of a 'dubious writing', concluding that 'we cannot tell whether the seal inscriptions communicated awe, prestige, or pleasure, but they are unlikely to have conveyed serious information.' Equally sceptical at first was Jean-Claude Poursat: '*mais est-ce bien de l'écriture?*'³³ One of the scholars who devoted some of his most important studies to this subject was, as is well known, Jean-Pierre Olivier. In 1978, he too stressed that the inscriptions engraved on seals were to be interpreted as purely decorative ('*nous n'avons sans doute pas affaire à une écriture stricto sensu, mais à une écriture orne-mentale*'). For this reason, Olivier was wondering if texts on seals were evidence of ''écritures ornementales'' *ou ''décoratives'' plutôt que de l'histoire des écritures stricto sensu*'.³⁴

²⁶ Jasink 2009, *passim*; Ferrara 2015 and 2018; Ferrara and Cristiani 2016; Decorte 2017; 2018a; 2018b; Ferrara, Montecchi and Valério 2021b; Ferrara and Weingarten 2022.

²⁷ Ibid. ²⁸ Civitillo 2023a. ²⁹ SM I: 247. ³⁰ Ibid.: 148. ³¹ Ibid.: 248.

³² Pope 1968: 461. ³³ Poursat 1978: 3. ³⁴ Olivier 1981: 113–14.

Leaving aside the notion of 'decorative writing', a more nuanced interpretation can be garnered since some sign groups found on clay documents also occur on seals. Therefore, from the 1990s onward, Olivier conceded that the signs engraved on seals could express 'true' writing, to be 'read' according to common sense. This is maintained in *CHIC*, which offers scholars a standardised 'guide' to reading Cretan Hieroglyphic on seals, distinguishing between writing signs and decorations (for a detailed account, Ferrara and the Appendix, this volume). However, this is where the consensus ends, and new interpretations have thrown light on some specific aspects of this writing system.³⁵ Indeed, the nature of the script on seals is still a topic of discussion and this book aims to offer current perspectives on this complex issue.

Epigraphic Supports and Their Relations

Even if the writing system used on these different media was the same, the constraints of the graphic support may have influenced its specific use on seals, which brings about the choice of medium-specific preferences for writing. Among these uses, we can count some possible expedients due to the need to write texts on small surfaces, such as abbreviations;³⁶ the possible use of 'diagrammatical signs'³⁷ or 'diacritic markers';³⁸ the presence of an iconic or symbolic apparatus;³⁹ and the insertion, in the same space, of decorative motives.

Until recently, the influence of the medium, beyond its formatting, and the combined use of signs with different semantic values had not received adequate attention. Post-Evans, the issue of reading hiero-glyphic inscriptions on seals was always tied to a narrow 'linguistic reading', equating writing with the graphic representation of speech. But before MM II, writing media were probably not conceived as mere bureaucratic tools, but as artefacts of prestige for the owner, with great symbolic value,⁴⁰ enhanced by the choice of materials and engraving techniques. On these, the non-linguistic message was probably as important as the linguistic one. This is evident in graphic combinations that mix writing and icons, symbols and abbreviations, as found on coins today, for instance.

For this reason, the framework we need to use should not be any less than an integrated interplay of different communicative devices, which can be interpreted as *meaningful* (though non-phonetic) in the context

³⁵ Jasink 2009; Karnava 1997; Ferrara 2015; Civitillo 2016a; Decorte 2017 and 2018b.

³⁶ E.g. Decorte 2018b; Civitillo 2023a. ³⁷ Ferrara 2015: 32; Ferrara and Cristiani 2016.

³⁸ Decorte 2017; Ferrara 2018. ³⁹ Civitillo 2016a. ⁴⁰ Ferrara and Jasink 2017.

in which they are used. All these elements can be combined with other forms of communication such as size, shape, colour, execution technique and configuration in general (Flouda, this volume). This is of particular importance for a more in-depth understanding of writing on seals, where different choices (apart from the linguistic codification of texts) from those found on accounting texts on clay documents must have come into play.

Differently from any ephemeral accounting document, seal inscriptions were meant not only to be read, but also to be *seen*,⁴¹ thus the harmony and consistency of the graphic composition was a very important concern. Different supports also imply different expected durability of the messages they conveyed, in accordance with the perceived value and significance that were attached to them. Indeed, the material used required specific artisanal skills, and may have had varying degrees of aesthetic resonance and prestige. Moreover, seals and inscribed vessels of ritual character (the Chamaizi vases, for instance) could be displayed publicly, as was the case for the monumental inscription on the Malia libation table, and might have been buried with their owners. By way of contrast, clay documents were, essentially, palimpsests, erased and rewritten, and repurposed multiple times.

New Approaches to Cretan Hieroglyphic

Over the last few years, multi-dimensional approaches have been proposed to frame the Cretan Hieroglyphic documentation within factors beyond seeing the inscriptions as linguistic records, such as the support materials, the tools used and the visual presentation of texts.⁴² These elements are as important as the texts because they constitute the 'prior knowledge'⁴³ required to correctly understand the written information, guiding the reader's perception even *before* reading the inscriptions closely; as such, they go hand in hand with the contents of the texts (Valério, Flouda, Civitillo and Steele, this volume). With regard to seals, for example, it is possible to identify a complex network of relationships between form and contents, i.e. seal typologies and sign sequences attested, that allow us to postulate different uses for *Petschafte* and prismatic seals respectively (Valério and Civitillo, this volume).

In the same vein, an adequate appreciation of the archaeological contexts from which the Cretan Hieroglyphic texts come is essential for a deeper understanding of the texts themselves and their intended uses.

⁴¹ Civitillo 2016a. ⁴² Flouda 2013; Finlayson 2013; Civitillo 2021b. ⁴³ Smith 2012: 73.

We have already seen how the find context of some seals and Chamaizi juglets from burials is crucial to the understanding of their function. No less important is the recent discovery of a seal bearing the so-called 'Archanes formula' from a sanctuary context at Knossos (KN S (4/4) o1).⁴⁴ This confirms the religious environment and use of this 'formula' that has frequently been suggested.⁴⁵

These finds invite a more in-depth consideration of the use of Cretan Hieroglyphic. Coming back to the second part of *CHIC*'s definition of writing (and reading) signs on seals, Olivier and Godart state: 'quand elle [Cretan Hieroglyphic writing] y figure, elle pouvait y être lue, mais à deux conditions distinctes l'une de l'autre, subordonnée l'une au support, l'autre aux utilisateurs : qu'il y ait bien eu message écrit (et non pas utilisation d'un ou de plusieurs signes de l'écriture à des fins décoratives) [...]; que 'les utilisateurs' (possesseur du sceau ou destinataire de l'empreinte) aient su lire (par contre, il n'est pas indispensable que le graveur de sceaux ait su lire : il pouvait exécuter un modèle ou varier plus ou moins librement sur un thème), sinon le sceau porte bien un message, mais un message d'identification et/ou de protection de la chose scellée, pas un message écrit.'46

Indeed, a distinction should be made between the reading of texts, restricted to fully literate readers (as scribes/administrators) and the 'perception' of written texts, i.e. the capacity of identifying signs of writing and attribute to them a special role even without the ability to read them properly (i.e. linguistically). This 'iconic literacy' may also have existed within the palatial social pyramid. For example, because of the repetitive nature of the 'formulae' engraved on seals, the owners and perceivers of these objects could have understood their significance without being fully literate. As for the engravers of seals, even if they are generally assumed not to be literate writers⁴⁷ but rather specialised craftsmen who produced non-hieroglyphic seals as well, they may have had special training in carving signs in a recognisable and consistent way,⁴⁸ with a good level of competence in handling the writing system.

Moreover, it seems safe to suppose that an inscription, being regarded as a prestige commodity (Jasink and Weingarten, this volume),⁴⁹ even if not closely readable, could have been perceived by a non-literate person as an indicator of status or as a sort of ceremonial or ideological 'marker'

- ⁴⁸ Younger 1990: 88–92; Karnava 2000: 229–31; Boulotis 2008: 78; Flouda 2013: 155.
- ⁴⁹ Schoep 2007: 56; Ferrara and Jasink 2017: 41–53.

⁴⁴ Kanta 2018: 251-63, cat. no. 305; Kanta, Palaima and Perna 2023.

⁴⁵ Civitillo 2016b with previous bibliography; 2020; Karnava 2016b; Weingarten 2022.

⁴⁶ *CHIC*: 12–13. ⁴⁷ But *contra*, Schoep 2010: 76.

on other inscribed objects, such as the Chamaizi juglets and the libation table from Malia. Thus, we can assume that different levels of reading skills and different degrees of specialised literacy may have co-existed in Protopalatial Crete.

Structure of the Volume

Our intention is to present, in this book, the debate on unresolved questions about Cretan Hieroglyphic, and the authors of individual chapters may not agree on a given issue. In such cases, different positions are expounded with due attention. Indeed, in our opinion, in a field where so little is clear and agreed, it is of unquestionable value to give space to different opinions in a constructive, dynamic conversation. This is the case, for instance, of the still ongoing understanding of the so-called 'Archanes script', thus named after its identification on six seals found in the necropolis of Archanes/Phourni and dating to ca. 2000-1900 BC. The definition goes back to Yule⁵⁰ and is used by scholars as referring, on the one hand, to the two sequences of Cretan Hieroglyphic signs it comprises (0042-019 and 019-095-052, **#1** and **13**, A-SA SA-RA-NE, by applying the phonetic values we have for the homomorphic Linear A/B signs) and, on the other hand, to the complex of motifs that occur intricately associated with them. After the publication of CHIC, however, the definition 'Archanes script' became restricted only to the five signs mentioned, which have ever since been known as constituting the so called 'Archanes formula' or 'inscription'.51 While according to Olivier and Godart⁵² and the bulk of the literature on this much-debated topic the seals bearing this 'formula' are considered as the first testimonies of the inception of Cretan Hieroglyphic script.⁵³ this interpretation is not unanimous. For other scholars, in fact, they are or may be written in an independent script, though related in some way to both Cretan Hieroglyphic and Linear A.54 Both positions are fully investigated throughout this book (Valério, Flouda, Jasink and Weingarten, Meissner and Salgarella, and Bennet and Petrakis, this volume). With this collective effort we aim to show not so much the consensus, but the current state of knowledge on Cretan Hieroglyphic and the prospects for future progress in understanding debated issues.

⁵⁰ Yule 1980: 171–2.

⁵¹ Karnava 2021: 246. ⁵² *CHIC*: 18, n. 59.

⁵³ See, for example, Grumach 1963–4; Grumach and Sakellarakis 1966; Sbonias 1995: 108; Younger 1996–7 [1998]: 380–1; Perna 2014; Flouda 2015b: 65; Karnava 2016a: 81; Ferrara, Montecchi and Valério 2021b; Valério and Flouda, this volume.

⁵⁴ Decorte 2018b; Schoep 2020; Jasink and Weingarten, and Bennet and Petrakis, this volume.

The volume is organised into three broadly defined thematic parts, each articulated into three chapters. The first three chapters focus on the sign inventories of the script, the harnessing of icons and their interplay with iconography. Attention is paid to the iconicity of the script and the icons selected to form the repertoire of the script. This is an important feature that can be compared to other image-derived writing systems (for instance Egyptian hieroglyphs) to gain a proper understanding of how the script was created, *vis-à-vis*, for instance, seals deemed to be purely decorative. A full iconological analysis is yet to be produced and this would be a major step in that direction, together with recent contributions on this topic.⁵⁵ The controversial issue of 'ornamental writing', i.e. the possibility that seals do not bear phonographic notation, is reassessed in light of new methodologies in 'reading' the signs, their visual configurations and combinations and iterations.

The bulk of the Hieroglyphic inscriptions comprises seals and clay documents, which differ in function, layout and word-sequences. These are discussed in detail in chapters 4–6. Also, the correspondences between the visual presentation of the seals (in terms of shapes and materials) and the sign sequences incised on their surface is investigated. Moreover, the patterns according to which the texts were arranged and the graphic norms adopted by seal engravers are discussed. Syntax, genres schemes, sign alignment and directionality along with the scribal conventions are part of the analysis. Furthermore, uses and social practices connected to Hieroglyphic texts are analysed, and attention is paid to the use of the script and its broader cultural and ideological significance.

The last three chapters (7–9) address the relationship between Cretan Hieroglyphic and Linear A, between writing and languages, and set the agenda for future research on Cretan scripts. The four-generation problematic overlap between Cretan Hieroglyphic and Linear A has not been explored to its full potential. Why would socio-cultural groups develop two parallel writing systems on the island? Are they created to mark a linguistic differentiation, or to designate two different epigraphic traditions, tied to social or ethnic differences? To what extent are the scripts graphically related? These questions are clearly deserving of in-depth exploration.

Our overarching aim with this volume, then, is not only to present a comprehensive introduction to Cretan Hieroglyphic, and the latest research focused on it, but also to show how this writing system, throughout its life, manifests itself as a flexible, articulated cultural

⁵⁵ Jasink 2009; Ferrara 2015; Civitillo 2016a; Decorte 2017 and 2018b and c.

Absolute dating (BC)		Crete		Cyclades	ſ	Mainland Greece		
3100								
3000			a-Pelo	Grotta-Pelos	ЕН І			
2900		EM I	Grott	EC I		EHI		
2800								
	Kampos							
2700			K					
2600	tial	EM IIA	Keros- Siros			EH IIA		
2500	Prepalatial							
2400	Р		dne	EC II	EH IIB			
2200		EM IIB	Kastrì group					
2300			Ka					
2200								
2100		EM III	Phylakopi I	EC III		EH III		
2000			Phyla	LUM				
		MM IA		MC I		MH I		
1900	tial	MM IB						
1800	Protopalatial	MM IIA		MC II	MH II		High chronology Crete Mainland Greece	
1700	Pro	MM IIB					MM III	MH III
1700		MM IIIA		MC III	ves	MH III	LM IA	LH I
1600	atial	MM IIIB		MC III	Shaft greaves	14111 111		
1000	Neopalatial	LM IA	Ak	LC I rotiri's destruction	Sha	LH I	LM IB	LH IIA
1500		LM IB				LH IIA		
	I.	LM II		LC II		LHIIB	LM II	LH IIB
1400	Monopalatial	LM IIIA1			LH IIIA1		LM IIIA1	LH IIIA1
1200	Mon	LM IIIA2		-		LH IIIA2		
1300	ial	LM IIIB				LH IIIB		
1200	Postpalatial			LC III				
1100	Ρí	LM IIIC				LH IIIC		
1000		Subminoan			Su	bmycenaean		

Table 0.1 *Aegean chronology (in light grey, periods susceptible to high chronology). Adapted from D'Agata and Girella 2023, p. 22, tab. 1*

phenomenon, not just a mere instrument of the bureaucratic machinery. In so doing, we challenge traditional discipline boundaries, with an inclusive approach that bridges archaeology, linguistics, epigraphy and semiotics. And while the focus is on Cretan Hieroglyphic, we hope that the same approach may be extended to other ill-understood writing systems and to the study of writing as a phenomenon in general. Emphasis on the articulation of cultural dynamics, interplays and symbolic expressions that underpin scripts and their creation is, we believe, an innovative and fruitful avenue of investigation, especially if the scripts in question are characterised by a pronounced relationship to images. It is in this spirit that we approach writing and its many facets, treating it as a filter to understand how, as human beings, we approach visual communication, to ultimately understand how we conceive, perceive, relate to the things we choose to write down for permanency and posterity.

Postscript, March 2024

We learn with great regret that the University of Kansas no longer hosts John Younger's seminal Cretan Hieroglyphic and Linear A websites, frequently referenced in this volume. Some of the content of the original websites has now been put in a different format and moved to John Younger's Academia page at https://kansas.academia.edu/ JYounger?nbs=user and the reader may wish to consult this for the time being. However, as it is hoped that the websites can eventually be reinstated at their original address, we have taken the decision to leave the references in this book unaltered.