

Chapter 1 The Importance of the Seal

In the Herakleion Museum in Crete there are many display cases filled with Aegean seals. The tourist visitor peers into the first case rather surprised at the tiny size of these artifacts, at their smooth shape and often pretty stone colours. She then notices that, beside each one, there is an impression and a picture, and she realises that the seal has made the impression and that the picture matches the design that the seal stone has pressed out. She studies one in detail. “What does it mean?” she begins to ask. Then it is on to the next case to ask, “Why are there so many?” As more and more seal cases stretch before her, the realisation comes that, if she spends time looking at each seal and trying to read its design, there will be no time to enjoy all the other wonderful pieces of art surrounding her. There is a pause a little later when she comes to the cases with the gold signet rings. How could one not stop and marvel at the shining beauty of these gems and the skill of the artistry! Then she realises that these signets are seals too, since there are again the impressions for each and the enigmatic little drawings. “What exactly is being shown here?” she continues to muse as she moves on. It would be the same with the other great collections of Aegean seals – in the Athens National Museum, the Ashmolean Museum Oxford, the Metropolitan Museum New York, the Cabinet des Médailles Paris, the Staatliche Museen Berlin. For the tourist visitors the thousands of seals on display are overwhelming, and even if they are left with a lingering question in their minds they must move on. So, why are there so many seals? What use are they? What do the seal images mean? Now, it is not only tourists who visit the Herakleion Museum and its counterparts abroad. Scholars from various disciplines like archaeology and art history come to the Aegean seal images in serious enquiry about the view of life that the seal artists have presented to us. Indeed, an international assembly of scholars of the Aegean world have been researching the seals over the past century, and much has been discovered about them through excavation and technical investigation, even while questions of the iconography of the seal images have received somewhat less attention.

Now, humankind has been using seals of various shapes and sizes to identify their possessions for some 10,000 years from the earliest examples pressed in clay in Syria down to those of recent centuries pressed in red sealing wax¹. The seals that so piqued the curiosity of the tourist visitors are but the Aegean usage of this most functional tool, a usage that extended across fifteen centuries from its beginning in Minoan Crete c.2700 BCE and that influenced contemporary cultures in the Islands and Mainland Greece. Yet it is not only the lengthy duration of the Aegean seal tradition that commands attention; it is what the seals can tell us of the life, art and culture of the Aegean peoples that makes them so important. The seals allow insights into the workings of palace economies and the tracing of trade and interconnections. The seals reveal the technical skill of the artisans and their interest in artistic innovation. Significantly, the seal images give the most extensive illustrations of life as it was lived and imagined in Crete and Greece in the Bronze Age. There are, of course, other art forms that hold images of Aegean life. The wonderful frescoes on palace and villa walls provide carefully detailed paintings of particular episodes, but they come late in the artistic record. Smaller items of gold and silver metalwork, ivory carving, relief vases and

¹ The International Seal Symposium to celebrate 50 years of the *Corpus der minoischen und mykenischen Siegel* (CMS) was held in Marburg in October 2008, and its papers covered the phenomenon of sealing usage from the Ancient World, through Classical times to the official seals of Church and State in Europe in the modern era. Published as CMS B8, it provides a fascinating record of the variety of seals and their images as well as granting a glimpse into the life of these civilisations.

jewellery show chosen subjects wrought in various designs. There are no remains of large-scale sculpture but some figurines survive. Pottery, which is the only other art form extending across the whole period, is regularly painted in the most delightful designs but the subject matter is limited: floral and geometric patterns predominate but animals are rare and human figures are not included until very late indeed. All these media participate in the same artistic repertoire as the seals, but it is the seal images that give us the fullest iconographic record for this fifteen-century time span.

In its own attempt to answer questions of iconography this book will explain why these tiny items possess a significance out of all proportion to their size, and how their images take us deeply into the lives of the Aegean peoples. This book requires no previous knowledge of the seals, their designs, their dating or the archaeology of the Bronze Age Aegean in order to study the seal images. It is written for the museum visitors who asked those many questions so that they can readily immerse themselves in the world of Aegean seals and come to appreciate their beauty and significance. It is written for the scholars in other fields to ease their introduction to the amazing creativity of Aegean seal design so that they may come to understand the art of the seals through comparing it with the art of other times and other places. It is written for the Aegean scholars who already know much of the archaeological detail, but who are now being given, in the following pages of illustration, description and interpretation, easier access to the information encoded in the seal images. For museum visitors and scholars alike, my aim is to have this book work for everyone. I trust that the tourist visitors will be able to move through the book with some ease as they meet with the seals. I trust that the scholars from other disciplines will find the following pages enlightening in their quest for comparisons. I trust that the Aegean scholars will discover new vistas in the seal images to complement their existing knowledge of the Bronze Age Aegean.

Enjoy the seals!

The Owner, the Artist and the Society (Plates 1.1 to 1.24)

A seal, by definition, is a unique piece, its detail proclaiming the identity of the owner, the marking of her/his possessions and the exercise of his/her ownership and/or authority. The seal is thus a precious item in the lives of first, the Minoans of Crete, and then of other Aegean peoples of the Islands and the Mycenaeans of Mainland Greece who came under Minoan influence. If there were no other reason for us to study the seals, the high esteem in which they were regarded by the people themselves would be sufficient cause. Let us look at the relationship of the seal owner with her/his seal, with the artist who creates the seal and with the society that recognises the significance of the seal.

As with so much in the Bronze Age we know little of the owner, certainly not his/her name. For the finest seals in semi-precious hard stones and the gold signets, the owner must have been one of the community's elite, but the presence of so many simple seals in common soft stones testifies that the desire to possess a seal was deep in the Minoan psyche from the very beginning of seal production to the end. The seals were important to the people themselves; prized possessions, statements of identity, to be worn proudly in life and to accompany them in death. Seals are individual, created by the owner-to-be commissioning the piece by deciding on the material, colour, shape and image. Each of these aspects represents a deliberate choice, a collaboration between the owner-to-be and the seal artist trained in the skills of seal carving or of fashioning gold signets. We are not sure in which order the choice might have been made – whether the owner-to-be first chose the material and colour, the particularly hued stone or gold, and then decided on the shape and design, or whether she/he had the design as the primary requisite and then approached the seal artist for advice on the material, colour and shape which would complement the chosen design. Then there are the questions of whether the owner-to-be is rich enough to access the finest material and the most renowned seal artists or whether perhaps he/she lives a humbler life and can afford only a plain soft stone and a local artist to create her/his seal.

We can now begin to look at the accompanying Plates which, throughout the book, present the seals for view and study while the accompanying text describes and eventually interprets. In choosing the material, where beauty of colour is a deciding factor, is the seal to be a bright white, as in the bone

of 1.1 or the hippopotamus ivory of 1.13 and 1.14, or even the shining transparency of the rock crystal in 1.23? Perhaps the rich dark blue of lapis lazuli will be chosen as in 1.2 or the solid green of jasper as in 1.17 and 1.22. Then there are all the stones of the red-orange-brown spectrum to explore, as in the carnelians of 1.8, 1.16, 1.24, 1.36 and 1.42 and the agates of 1.18 and 1.47. Maybe the owner-to-be is attracted to variegated tones, and so a piece of jasper will be chosen for its wonderful veining as in 1.3. When choosing the shape of the seal, which may provide one or more faces to hold the image, it could be figural as in a stamp seal like the animal head in 1.1, the little owl in 1.13 or a sitting monkey in 1.28. It could be a shaped stamp like 1.7 and 1.29 or a petschaft like 1.19 and 1.25 or a hippopotamus tusk segment like 1.14. It could be a geometric shape like the three-sided prism in 1.15, 1.16, 1.37 and 1.39 or the four-sided prism in 1.17 and 1.38 or the lentoid (lens-shaped) as in 1.8, 1.18, 1.22 and 1.24 or the amygdaloid (almond-shaped) as in 1.42 and 1.46. It could even be a great gold signet as in 1.6, 1.20, 1.21, 1.26, 1.41 and 1.48. In deciding the image to be wrought on one (or more) of the faces, is the subject to be a flower or an animal or a scene of human endeavour? In all these choices we cannot be sure of the desires of the owner. Is the seal her/his own personal identification or is it representative of family or clan identity? Perhaps it indicates an elite position in the community or the right to enter the palace or to control the commodities stored there. Now, there is not a full choice for any one owner at any one time. There are favoured materials in certain periods, there are favoured shapes and there are images appropriate to certain times but not to others.

Once the seal is created to the owner's specifications then it may be worn. The jewellery aspect of the seals with all its capacity for display should never be forgotten. The seals are, after all, a record of taste and fashion for the fifteen centuries we are observing. The earlier large seals were meant to be suspended, perhaps around the neck or possibly fastened to the belt at the waist. The suspension hole is clearly seen in 1.7, 1.19 and 1.25. The later, smaller seals were shaped smooth so that they could lie flat when tied around the wrist, as with the robed male figure in 1.4. In 1.5, the enlargement of the detail of 1.4 shows the positioning where the photographer's lighting for the black and white photo has caught the seal shape carved on the wrist². Sometimes the string hole through the seal was capped with gold finials as in 1.8 or the seal was set within a gold frame as in 1.43. The signet rings were, of course, worn on the hand with the back of the bezel shaped in a careful curve so that the ring could fit snugly down on the finger as in 1.20³. In 1.6 the detail shows a woman boulder kneeler holding out her left hand where she wears a signet ring on her index finger. For signet rings the bezel being at right angles to the hoop allows the owner to view the image easily with the hand at rest as in 1.26. The seal could delight its owner in various ways in the wearing. Stone when worn warms to the body, allowing the owner to feel his/her seal becoming part of them. A ring can be held out on the hand to show the design so that it can be admired by friends and peers as the light catches every detail wrought in the metal.

When the time comes to use the seal, the owner is even more closely identified with her/his seal. The item to be secured – a jar, a box, a folded parchment letter – is first tied with string, a blob of moist soft clay is placed on the item across the string binding and the owner presses the seal down into the clay to imprint the image, thus creating a sealing as in 1.10 to 1.12. The back of the sealing regularly shows the shape of the item secured and its binding, as with the packet sealing in 1.9⁴. It is likely that the seal or signet was taken off and held appropriately by handle, finials or ring hoop, so that a clear impression could be achieved. Was this act of impressing a private matter or was it a performance witnessed by others? It is unlikely that the impressing was ever a matter quite as private to the owner as for some

2 Other examples of wearing seals on the wrist include the male cupbearer in the Procession Fresco at Knossos, CM, Plate XV, reconstruction AWP, Frontispiece, and the female deity in the Cult Centre Fresco at Mycenae, AWP, Plate 24b. John Younger provides representations of jewellery, Younger 1992b, 257-293, LXIII-LXVIII.

3 Walter Müller discusses the wearing of gold signet rings, Müller 2005, KT, 171-176, XXXIV-XXXVIII. Ingo Pini discusses jewellery as he presents an array of beautiful non-sphragistic rings, Pini 2010c.

4 Walter Müller gives an extensive treatment of the sealing types with Tables 1-8 illustrating their different shapes, Müller 1999, CMS II.6, 339-519.

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European gentleman writing a personal letter a century or two ago. If the experience of other peoples with traditional sealing practices is any guide, then the different impressing situations are related to the position of the owner and the nature of the seal itself. Impressings simple stone seals in a family situation would be at one end of the spectrum while the impressing of a prestigious signet by its elite owner would be at the other, a statement of power before the witnessing group.

Now consider the life of the sealings such as those illustrated in 1.10 to 1.12. Once the impressing is complete and the sealing has dried, it takes on a life of its own but is never fully separated from the owner. This sealing is known to the worker who stacks the sealed commodity in the storeroom or to the porter who carries the sealed produce to its destination. When the sealing secures a letter then the messenger delivering it would be very aware of the importance of the small package being transferred. During this storing or transport process many eyes may see the sealing, thus recalling the original owner and the moment of impressing. Finally, the person retrieving the commodities from the storeroom or the person accepting the letter will break the sealing and open the item which has, until then, been so carefully secured. This action of receiving and opening brings the relationship with the original owner-impressor particularly close. Thus, the sealing has drawn in a whole group of people who have been involved in witnessing the wearing of the seal and its impressing, who have been entrusted with the care and transfer of the item, and who are the recipient seal breakers, and all this activity testifies to the identity of the original owner and re-enforces their identity and authority.

The seal artist, by training, is either a seal carver working in stone or similar material or a goldsmith working in metal and, we assume, crafting the seal image is part of learning their trade. Throughout this book, the seal creator is referred to as the artist. This is all the more appropriate because the subject of this book is the image and the seal artist is the creator of the seal with its image. At the point that the owner-to-be calls in the seal artist to commission the seal, who is this person and what have they done to be the one qualified to be chosen to create the seal? Each calling carries its own technical challenges. The seal carver must know their material. In the early days, the material would have been local stone like the steatite in 1.15 and 1.33 – perhaps pebbles collected in a river bed or on the sea shore where the water has brightened the colours and striations so that it has caught the eye of the artist. Knowing the relative softness (now registered as 1-4 on the Mohs Scale) of the stone and how to spot imperfections which might fracture the piece as it is being worked or as the string hole is being bored is gradually acquired over time. Training in using the chisels to shape the seal, the abrasives to smooth it, and the burins to cut the design requires a long apprenticeship appropriate for all the soft materials including the hippopotamus ivory, a precious commodity, when it became available in EM III⁵. All these early seals have a flat seal face which carries the design. A revolution for the seal artists occurred when they adopted the stationary lathe⁶ some time in MM II and it became possible to drill hard stone (Mohs Scale 5-8). This allowed them to carve more intricate designs because the hard stone takes finer detail. With these advances the seal face came to be shaped as a convex curve which can be held up to the rotating drill point in order to cut the design. To create the gold signet the goldsmiths, too, must know their material. The facility with smelting and casting the metal and the ability to use drills and hammers to chase and beat the design are also skills long acquired. Here the additional pressure of working with a very precious commodity would impose extra responsibility. Training for the goldsmith was early testified in the production of fine gold jewellery in EM III⁷, and it is also seen early in the seals with the gold petschaft in 1.19 and the gold four sided prism in 2.8. Somewhat later this skill was turned to the manufacture of gold signets which came into full favour in LM I when the designs on the bezels were worked with exquisite refinement, as seen in the detail of 1.21, and rings were decorated with elaborate granulation on the hoops, as seen in the slightly later example 1.20. However, as we have noted, the technical skill of the artist was not the

5 These dating terms such as EM, MM and LM are explained below.

6 For illustrations of the ancient lapidary lathe, traditional usage and modern equipment see AS 84, Figure 5.1.

7 For the gold jewellery from Mochlos see FLL, 131 A-B, 132 A-B.

only talent that was being assessed by the owner-to-be when commissioning the seal. There is also the creation of the image which was to represent the owner as his/her identity stamp. The artist must know the traditional designs and even, at times, be prepared to venture into new subject matter to please the owner. Then, as the seal artist prepares to fit the design to the seal face (more on this in Chapter 2), they must always vary the subject matter sufficiently to produce a unique design.

Consideration of these aspects of the seal artist's training and relationship with the individual owner who wears the seal brings us to view the wider scene, the society's view of the artist and the seal. As we have seen above, the Aegean peoples continued the seal tradition for some fifteen centuries, indicating that seals must have been seen as important. Seal usage already had a long life in Crete before the sealing of commodities and letters by LM palace administrators testifies to the usefulness of the seal in organising society⁸. In the palace storerooms sealings would always have been visible to the workers as part of their everyday lives⁹. The life of the sealing brings many other community members together, linking the owner-impressor with the transporter of the goods/packages and the receiver and breaker of the sealing. In all these aspects the Aegean experience parallels that of the sealing practices to the east. Yet there might be more to the significance of the seal in the Aegean. The community's appreciation of the artistic beauty of the seals seems to underlie the creation of the best pieces across all periods. The society underwrites the investment in the skill of the seal artist by recognising the length of time needed for training. The very early seal cutters might have been itinerant but in later times the seal artists were working in the palaces where appropriate workshop space was assigned¹⁰. Precious raw materials, many of them imported¹¹, were made available for the seals. Certain elite individuals appear to have been seal connoisseurs who made collections of the finest pieces, as evidenced in burials at Vaphio and Pylos¹². However, the community might have found the seal's most valuable feature to be the image created by the artist. The artist reflects the community's world back to its members. The artist encapsulates the community's values and gives them visual expression. The artist creates the dialogue between the members of the community in this world and the gods in the other world. The three examples 1.22 to 1.24 showing the natural world, geometric design and a human figure accompanied by lions remind us of the range of subject matter which we have already seen in the seals discussed above under different aspects. There will be more on the interpretive role of the seal artist in the following chapters as we explore the messages hidden in the seals and revealed on pressing out these wonderful images.

Recording the Seals: the Role of the CMS (Plates 1.25 to 1.27)

As we have noted, seals are important because they provide the largest visual record of art in the Aegean by virtue of their range of topics and their length of floruit. Aegean seals are, almost without exception, stamp seals, pieces of some hard entity shaped to have a surface, called the face, which features an image to be pressed down¹³. Taken together they may be referred to as glyptic art, or more generally as "the

8 See Weingarten 1986, 279-283 and 1988a, 1-25 and Anderson 2016.

9 The complicated sealing practices would require close observation of the images to check for the correct sequences. In later years workers might not have observed the design as carefully since they wrote Linear B signs over it. However, this may be another reflection of the diminished role of seal iconography in LH IIIB even as seals were still being used in Mycenaean palace storerooms.

10 As with the Seal Workshop at Mallia, Poursat 1978, 831-836 and CMS B1, 159-165.

11 For imported hippopotamus ivory and the hard stones of amethyst, haematite and lapis lazuli see Krzyszkowska 1990, 38-47 and AS, 12.

12 The elite burial in the Vaphio Tholos held 42 seals, CMS I, 219-261. The warrior burial in the Griffin Warrior Grave at Pylos held numerous seals with publication available for four gold signets, Davis and Stocker 2016, 627-655 and two agates, Stocker and Davis 2017, 583-605 and CANP, 293-299. See Plates 14.13 to 14.18 below.

13 In contrast to the cylinder seals of the Mesopotamian tradition where the design is carved on the circumference face and accessed by rolling out the cylinder across the soft clay.

seals” which is the all-encompassing name used here. The extant seals total some 12,000 pieces, giving us some 13,500 images since some seals have two or more design faces. This may seem a large amount of material but it is only about 3%, maybe only about 1%, of all the seals created across the many centuries of seal manufacture¹⁴.

In reading the section above on the Owner, the Artist and the Society, and on viewing the accompanying seal illustrations, readers will already have become aware that the body of material generally termed “the seals” actually comprises seals, signet rings and sealings as shown in all their aspects in 1.25 to 1.27. The seals are shaped pieces of stone or other material with at least one side smoothed to take the design which is carved *intaglio* into its surface as in the chalcedony petschaft in 1.25. The signets are usually gold rings with an oval bezel set at right angles to the hoop as in 1.26. The bezel is hollow, formed from two pieces joined together. The lower one may be shaped in a curve, the finger bed, to fit snugly over the finger, and the upper one carries the design which has been punched and shaped into the gold. Occasionally, the ring is of bronze, and some rings have round bezels as in 2.22. There are also examples of stone signets like the one made of red jasper in 2.24. The sealings, as in 1.27, are the original impressions made in clay in the Bronze Age and preserved when buildings burned, thus baking the clay hard and providing little relief sculptures for archaeologists to find some 3,500 years later. The original piece might have been a seal or a signet but it does not remain¹⁵. The sealing testifies to that original piece by providing the image that the seal held. It comes as somewhat of a surprise that the seals are so small. The seal face of the petschaft in 1.25 has a diameter of 1 cm, the bezel of the signet in 1.26 measures 2.35cm x 1.6cm, and the bezel of the original signet which impressed the clay sealing 1.27 is 2.5cm x 1.45cm. Thus, the images you are looking at on the Plate page here and throughout the book are about twice the size of the real gems. This small size, of course, places considerable restraints on the artist creating the design to carve/engrave on the seal face (more on this in Chapter 2).

Seal designs are standardly discussed by the impression their design yields when pressed into some soft material and so, for the extant seals and signets, a modern impression is made, usually in plasticine, as in 1.25 and 1.26. This reminds us that the design is actually a tiny relief sculpture and, in addition to discussing the length and breadth of the piece, its depth should always be recognised in any observations or analyses. A drawing of the impression or sealing is also provided for easy reference as in 1.25, 1.26 and 1.27. Note that the impression and thus the drawing is always the mirror reverse of the design actually carved on the seal face. The sealing image, of course, is already the mirror reverse of the seal image and it, too, may be recorded as a drawing. Thus, the drawing of the sealing is a parallel to the drawing of the impression made when the original seal is still available. When there are several examples of partial sealings from the one seal/signet it is possible to create a composite drawing which reveals the full design. However, fine points of explanation or meaning should not be argued from the drawings as they may not include every detail that is recorded in the *intaglio* carving or the resulting relief. The impressions must always be consulted, and where possible, the seals or sealings themselves.

The research institute responsible for classifying the seal material is the Corpus der minoischen und mykenischen Siegel (CMS) which worked in Marburg Germany from 1958 to 2008 under successive Directors, Professor Friedrich Matz, Professor Ingo Pini and Dr Walter Müller. The CMS then relocated to Heidelberg University, placing the extensive CMS Archives in the care of the present Director, Professor Diamantis Panagiotopoulos, and the Curator, Dr Maria Anastasiadou¹⁶. For over 50 years in Marburg the research team, to whom we are all deeply indebted, sourced the seal material in the major

14 I thank Ingo Pini for discussions on these numbers.

15 When the sealing has been clearly enough impressed it is possible to determine whether a soft or hard stone seal or a metal signet was used. The CMS entries note this feature.

16 Founded in 1958 by Friedrich Matz, the Professor at Marburg University, the CMS in Marburg was funded for over 50 years as an Arbeitstelle of the Academie der Wissenschaften und der Literatur in Mainz. Following the move to Heidelberg, the extensive CMS Archives are now housed in the Archaeological Institute at Heidelberg University. For a short history of the Corpus see Pini CMS B8, 3-10.

museums and private collections around the world and produced the standard publication of the seals, the *Corpus der minoischen und mykenischen Siegel (CMS)*. Each *Volume* in this publication records the seal collections at a particular site, usually a Museum like the National Museum in Athens or the Cabinet des Médailles in Paris. Within the *Volume* the material is generally ordered by find site and dating. The *CMS* publication numbers illustrate and describe each piece and thus provide the standard identification for each seal. The seal identification number is a composite of the *Volume* in the *CMS* Series (Roman numerals) and the seal's order within the volume (Arabic numerals) e.g. CMS II.1 18 labels the first seal illustrated as 1.1 here, and it places the seal as number 18 in *CMS Volume II.1*. The CMS number and the CMS-assigned stylistic date are used throughout this book. Most seals are already documented in *CMS Volumes I-XIII* and in the CMS Database and Website. There are additional seals not yet published by the CMS. Some of these seals are in the Herakleion Museum being prepared for publication, and there is a further group remaining in small private collections, while each year excavations in Greece bring new seals to light. Over the years the CMS has sponsored conferences and individual research into special aspects of the seals, and these are recorded in the accompanying series, *CMS Beiheft Volumes 1-10*.

In the *CMS Volumes* the seals are set out, one to a page, with photographs of the seal, its impression and a drawing of the impression as well as a text description of the image and details of the provenance. The early *Volumes* were edited by different scholars, and the descriptions of their images often vary for the same motif. This variation was somewhat corrected in the later *Volumes* edited by CMS staff where a more consistent descriptive vocabulary was employed¹⁷. The early *Volumes* also contain many seals listed as *gemmae dubitandae* since comparative material was not available. However, as the years of CMS study continued and more knowledge was gained, it became clear that these seals, once considered doubtful, would no longer be considered so¹⁸. Then there are some seals and signets whose provenance is debated, and so they are questioned by some scholars. Of these, the Minos Ring and the Nestor Ring¹⁹ are the most contentious although, again, further scholarship has established that they are authentic, to the satisfaction of most experts, and I accept them both as genuine.

The Seal Tradition across Fifteen Centuries (Plates 1.28 to 1.51)

To date the development of seals and seal designs we must turn to archaeology, relying on the dating of the pottery sequences, since, in the Aegean, we are in pre-history with no records naming rulers or events to provide a true history. These archaeological sequences give us a Relative Chronology for each area. Aegean Chronology uses the terms Minoan (M) for Crete, Helladic (H) for Mainland Greece and Cycladic (C) for the Aegean islands. A general term Bronze (B) is sometimes used when the reference cannot be more specific. The various periods are divided into Early (E), Middle (M) and Late (L) with further sub-divisions noted as I, II and III and further sub-divisions as A, B and C. For Crete the chronological sequence may also be named in longer eras by reference to the successive building eras and destructions of the great palaces. Prepalatial Crete EM I-MM IA refers to the time before the palaces were built. Protopalatial Crete MM IB-MM II refers to the time of the floruit of the first palaces and ends with the great seismic destructions at the close of MM II. Neopalatial Crete MM III-LM IB refers to the floruit of the second palaces and ends with the widespread destructions of major sites at the end of LM IB. Postpalatial Crete LM II-LM III refers to the time after most of the palaces were destroyed although for a time the Knossos Palace remained.

The Relative Chronology of the Aegean can be tied into historically dated contexts in Egypt and the Near East to achieve an Absolute Chronology giving numerical dates. A Chronology for the Aegean Bronze Age which uses both the Relative and Absolute Chronologies is provided above in the

17 Kryszkowska gives an overview of the *CMS* Series with guidance on the problems, AS, 341-348.

18 I thank Ingo Pini for advice on these matters.

19 The Minos Ring and the Nestor Ring are illustrated as 13.85 and 13.86 and discussed in Chapter 13 below.

Chronological Table, Aegean Bronze Age with Special Reference to Seal Iconography. As all dates are BCE only the actual figures are used here. Establishing Aegean Chronology is fraught with problems even as scholars draw on the disciplines of archaeology and radiocarbon dating. The above *Table* relies on the chronology for the Middle to Late Bronze Age Aegean advanced by Malcolm Wiener²⁰. It sets the key dates for the volcanic eruption of Thera at 1525, the Minoan destructions at the end of LM IB at 1440 and the final destruction of the Knossos Palace at 1350/1340. The iconographic chronology for seal images parallels this developed Aegean Chronology but allows for long periods of creativity since only five Iconographic Periods for the fifteen centuries, 2700 to 1200, are identified as below.

Seal manufacture began in Minoan Crete in EM II, say c.2700, and continued until the disintegration of the Mycenaean world at the end of LH IIIC c.1070. During the final century late Mycenaean seals were cut in soft stone. However, there was minimal interest in seal design and no use of sealing practices²¹. Accordingly, we will consider the great Aegean seal tradition to end when the Mycenaean palaces were destroyed at the end of LH IIIB, c.1200, and sealing practices came to an end. The period of some fifteen centuries, 2700 to 1200, is thus the focus of this book. During this long floruit there are two important points to note about stone seal cutting technique. The first is late in the protopalatial period, in MM II, say c.1800, when the stationary lathe was adopted, allowing seals to be carved in hard material rather than the softer materials chosen hitherto. The second is the cessation of the carving of hard stone seals by the end of LH IIIA, probably following the destruction of the Knossos Palace c.1350/1340. Thereafter carving of soft stone seals continued, particularly in Crete, although seemingly in diminished output. It is also of note that many of the sealings impressed in the archives of the Mycenaean palaces in LH IIIB appear to be made by heirloom pieces. For the first fourteen centuries of this fifteen centuries floruit the seal was the seminal art form, as will be argued here.

The dating of individual seals is a complex matter. How wonderful it would be if, in the Bronze Age, there had been a requirement to sign with a hallmark, as with European and American gold and silver manufacture of more recent times where the maker, the place and the year of its completion are recorded²². Alas, it is not so. In our Aegean era of pre-history, dating by pottery sequence is the regimen, and frequent shifts of motifs and styles make it possible to narrow individual ceramic pieces down to decades. The pottery nomenclature of Early, Middle and Late Minoan and Helladic with their numerical subdivisions is the dating scaffolding which makes it possible for scholars to navigate these centuries, and the seals, too, are given a date in this schema. How does one arrive at a such a date for a seal? When pieces have been carefully excavated the find place sets a date before which the seal must have been made in order to be deposited there²³. This does not guarantee the date of the seal's production since it may have been made many years before being deposited. The problem of heirloom pieces is always a possibility with beautiful and valuable seals. Yet, archaeological provenance cannot help with many seals as they have often come to light in various ways over the centuries – as curiosities, or for sale as antiquities, or even worn as charms. This was exactly the situation last century for Arthur Evans who found Cretan women wearing beads/seals which he recognised as carrying writing signs. He followed up this lead to find the site of Knossos and discover the Minoan civilisation²⁴. However, the seals without provenance can be compared with excavated seals. With so much careful archaeology over the last 50 years, scholars have a body of excavated seal material that can be dated accurately and can be the measure to date the

20 I thank Malcolm Wiener for his guidance in matters chronological and for the time he has unstintingly given to discuss dating and other issues with me over the years. This Chronology improves on the one provided in my earlier IAS volume.

21 For discussion of the late soft-stone seals see Dickers 2001.

22 Wylar 1971, 1-16, with special attention to early English silver and its hallmarks, maker's marks and date letters.

23 The "terminus ante quem" date is the date before which the event (or the piece) under scrutiny must have occurred (or must have been made).

24 The women were wearing the seals as charms to make their milk flow, the "galopetra".

many seals that have come to light from other, often doubtful, sources. The work of the CMS to gather seals into groups and sequences has been the defining research to allow a stylistic date for its creation to be applied to each seal. As noted above, during the long time period of the seal flourish, various materials and various shapes moved in and out of favour and the technical skill of the artist changed, first improving to allow finer definition of detail and then eventually losing that capacity. However, these changes may take centuries to evolve, and so the time periods for seal development are usually much longer than those for pottery and are less subject to minor divisions reckoned in decades. The mix of choice of material, seal shape, technical expertise and iconography, when linked to excavation information where available, allows a seal expert to place the manufacture of a seal within a date range. Using the pottery nomenclature, the CMS has assigned a stylistic date to each seal, and these dates are listed for all the seals discussed here in the text and illustrated in the Plates.

In her ground-breaking book, *Aegean Seals*, Olga Krzyszkowska takes readers chronologically through the Aegean seal tradition, explaining materials and technique and describing designs²⁵. The Plates 1.28 to 1.51 are provided here as a useful visual summary of Aegean seals in chronological sequence. In Minoan Crete, prepalatial seals (EM II-MM IA) are cut in a variety of shapes, as evidenced in the figural, stamp, signet, cube, cylinder and gable examples 1.28 to 1.33. These same seals show the range of materials favoured from stone and bone through to hippopotamus ivory, with some made of a composite material called the white pieces like the one in 2.49. Designs draw on geometric, animal, plant and fantastic subject matter, and there are some human figures. Note the lovely agrimi (wild goat) in 1.31. Protopalatial seals (MM IB-MM II) favour the petschaft as seen in 1.25, the stamps as in 1.34 and 1.35 and the three sided and four sided prisms as in 1.37 to 1.39. Soft stones like steatite continue to be carved but, after the adoption of the stationary lathe, hard stones like carnelian and jasper are worked increasingly. For designs, the interest in geometric, animal, plant and fantastic subject matter continues. Note the beautiful lilies with spiral stems in 1.36. There are more representations of human figures undertaking a variety of tasks as in 1.37 and 1.39. Cretan hieroglyphic script is carefully carved as in 1.38 and 1.39. Seals of the neopalatial era (MM III-LM IB) show superb craftsmanship and intricate designs as in 1.40 to 1.45. The favourite shapes are now the lentoid and the amygdaloid. Some are still cut in soft stone but hard stones like chalcedony, carnelian and lapis lazuli are favoured while glass is sometimes used as in 1.45. The gold signets continue the love of colour that is such a feature of Aegean glyptic. Subject matter loses the geometric motifs but expands to cover more naturalistic scenes and human activity as well as symbolic motifs. Two special sets of seals belong here: the talismanic seals²⁶ and the Zakros Fantasy group²⁷. The many sealings from the LM IB destructions expand the number of examples of seal and signet designs. Note the detailed sealing with the bull and leaper in 1.44. This is also the time of great influence on Mainland Greece and its uptake of the seal tradition (LH I-LH IIA). Postpalatial Crete and the Mycenaean ascendancy (LM II-LM III and LH II-LH III) see the manufacture of seals continuing with known shapes, stones and colours as in 1.46 to 1.49. Soft stones continue to be cut in Crete²⁸ but the Mainland uses hard stones. Note the fine lapis lacedaimonius lentoid with a hybrid man in 1.49. Some subject matter is lost and designs become more formal. By the end of LH IIIB the range of motifs is drastically reduced, and humans and animals are increasingly rendered in a schematic manner as in 1.50 and 1.51. Note the steatite lentoid with schematic human figures in 1.51.

25 AS is described by its author as “An Introduction”. It is much more than that, providing detail on every aspect of seal manufacture. It is vital reading for any who would seek to understand the Aegean seal tradition.

26 So called because they were thought to be used as talismans but now identified as a seal group exhibiting a particular technique, see AS, 133-137.

27 This group is identified by its particular subject matter of fantastic combinations, AS, 178-185. Judith Weingarten provides the initial research into the group, Weingarten 1983, and we await with interest the forthcoming book by Maria Anastasiadou.

28 Attempts to sort soft stone seals into a Cretan Popular Group and a later Mainland Popular Group have encountered some problems, AS, 234-235 and 327.

Iconographic Analysis, the *Icon* and the Phaistos Sealings (Plates 1.52 to 1.66)

Now, when iconography becomes the sole focus, the periods of development may be somewhat different. Certainly, the periods of iconographic development must follow the same trajectory as the overall seal tradition since the images are on the seals. However, the timing of significant iconographic changes may punctuate the fifteen centuries of the seal tradition at different points from the breaks in pottery styles and result in an iconographic sequence that has a momentum of its own. To investigate this we will need to observe the images closely.

Our first duty is to describe the content of the Aegean images accurately and systematically so that discussion can proceed on their presentation and, ultimately, on their meaning. For most artistic traditions, the terms for describing image detail come from the society itself and its oral memory and/or literature. Images from the Christian tradition can be described and discussed because the names and exploits of people and their worship are available in surviving texts and books and buildings and through the exposition of people living within the tradition today. One knows immediately who is a Christ figure and what a halo represents. For the ancient world the continuity of living testimony is broken, but written records and architectural remains similarly provide evidence of place and the names and deeds of gods and heroes. In Classical art one can easily identify Athena in her warrior garb and Herakles with lion cape and club. Moreover, in images created within the Egyptian and Mesopotamian traditions it was customary for textual comment to be placed beside and around the depictions. Thus the name of the Pharaoh or tomb-owner is known and their claim to fame carefully explained as well as their worship of gods like Amun and Re. On steles, cylinder seals and large walls, Mesopotamian kings and merchants proclaimed their exploits or begged divine help for their projects, as with Hammurabi establishing his law code as coming from the god Shamash. However, for the contemporary Bronze Age Aegean we do not enjoy the luxury of having such a ready-made vocabulary. Of the three main texts, Cretan Hieroglyphic, Linear A and Linear B, only the last has been deciphered, and it is in Mycenaean Greek, an early form of Classical Greek. Linear B comes into use with the Mycenaean ascendancy, but this leaves all the long development years of Minoan art in Crete without a text that we can translate or use to describe the images. So, we cannot find a vocabulary to describe Minoan iconography from the Minoans themselves. We will have to create one, and in this, we will need to be guided by the insights of iconographic analysis theory.

In 20th century iconography studies Erwin Panofsky was the most influential voice, particularly in his *Studies in Iconology* where he refers to the process of “iconographical analysis”. He categorises three levels of investigation: Pre-Iconographical Description, Iconographical Analysis, and Iconographical Interpretation²⁹. At Level 1, the Pre-Iconographical Description level, the components of the image are set out in a basic description. At Level 2, the Iconographical Analysis level, the overview can expand on the first level of description by probing the composition and using other artistic compositions from the same tradition to help explain the image under examination. Where the names of people, animals and things are available from the associated literature they may be used here. At Level 3, the Iconographical Interpretation level, an investigation into the meaning of the image is attempted not only by comparing other artistic usages but also by drawing on explanations in the associated literature. Subsequently, the addition of a fourth level, Iconological Interpretation, was suggested, where the meaning of the images in the artistic context is widened to include all aspects of the life of the people as understood from all other sources. The early exercises in iconographical analysis investigated western European art, particularly Renaissance art, where both Christian and Classical iconography could draw on extensive historical and literary sources, and Christian art even had a continuing tradition which could inform the iconographer. Panofsky’s method was widely adopted for the analysis of other artistic traditions, and, although later iconographic scholarship contested some of its tenets, it continues to be indebted to his ideas.

29 Panofsky 1962, 14-15.

For the study of Minoan art, the absence of textual and literary help negates some of this structured analysis. The expansive four levels proposed by Panofsky and his followers cannot be employed. Realistically, in the Aegean context there can be only two levels, and these two levels differentiate description and interpretation. The first level, which I have termed Iconographic Description, combines Panofsky's first two levels, Pre-Iconographical Description and Iconographical Analysis, and thus allows clear description of artistic motifs and compositions but does not move into meaning. The second level, which I have termed Iconographic Interpretation, mirrors Panofsky's Iconographical Interpretation and the later-proposed Iconological Interpretation levels and allows the exploration of meaning both within the artistic context and out into the understanding of the society. The whole exercise I term Iconographic Analysis to differentiate it from the Panofsky paradigm.

Now, Aegeanists have always known of this problem of not having any textual or literary gloss to the Aegean images, and some researchers have noted its attendant difficulties. Lyvia Morgan speaks of it as a "special challenge to the iconographer"³⁰ while Anne Chapin believes it confronts the iconographer with a labyrinth to be negotiated and that all enquiry must "apply methods that directly address the lack of textual sources"³¹. I call it the Aegean silence. Indeed, I am not sure that we Aegeanists as a whole have ever really confronted what that text/literature lacuna means for a proper iconographic and artistic discussion in the Aegean. We have, to date, used our own European languages, and various descriptions have evolved. In English we have an inherited vocabulary from the early years of Aegean archaeology for some of the motifs like "horns of consecration" and "sacral knot" and "priest-king" which, in their very names, take us into the next level of Iconographic Interpretation without actually acknowledging that we have done so. We leap intuitively to identify a deity without defining what the criteria are for recognising an immortal as contrasted with a mortal, and again we are blurring the Description/ Interpretation divide. We use terms from later eras like "kouros" and "baetyl" and "cavalier perspective", but using anachronistic terms brings further problems of understanding when the meanings attached to the later terms are brought across to these very early Aegean images. It is time to realise that although we have spent over a century observing Aegean art we still do not have an agreed comprehensive vocabulary of defined terms. We need to face the limitations imposed by the Aegean silence and courageously proceed to develop a standard vocabulary for discussing Aegean art and iconography. This will mean, among other things, that we must set aside colourful and emotive epithets and anachronistic terms which may, by their very nature, mislead the viewer even though they have become familiar through usage. However, the gains of using an agreed standard vocabulary include the precision it provides, the ease of conducting artistic dialogue and the security of knowing that conclusions are based on the hard evidence of the images themselves. Creating a standard vocabulary will also mean much more reliance on the seal images which provide the overwhelming number of examples of all the subject matter across the whole of Aegean art. Fortunately, the careful excavation and publication of the seals across recent decades provide the basis for a more extended standard vocabulary than was previously available. The IconAegean Vocabulary and IconAegean Classification comprise my attempt at just such a comprehensive, nuanced vocabulary and they find their exposition in the IconAegean Databases. The IconAegean Vocabulary and IconAegean Classification (in English) have their source in my reading of Minoan art as the desire of the seal artists to create a memorable image within the small compass of the seal face. The memorable image I have termed the *Icon*, and it is the core of iconographic and artistic composition. The *Icon* and the IconAegean Vocabulary, Classification and Databases are explained fully in Chapter 2 below, but I need to introduce them here because that will make it possible to establish the iconographic sequence.

Using the method of Iconographic Analysis and employing the IconAegean Vocabulary and Classification for accurate presentation of the iconographic content, we can survey the seal images across the fifteen centuries from the beginning in Crete c.2700 to the end of sealing use in Mycenaean Greece

30 AWP, 34.

31 Chapin 2016a, 9-26. She acknowledges the work of Panofsky but sees his divisions as not entirely suitable for Aegean art. In recommending various avenues of enquiry she sees progress as being slow and incremental.

c.1200. One iconographic pivot point is immediately clear: the Phaistos Sealings c.1700. It is not often in the Aegean that we have such a clearly dated artistic inflection point, but here it is! The Phaistos Sealings comprise a sealed and dated deposit of material from the First Palace at Phaistos, most being found under the floor of Room 25. The Sealings have been known since their careful excavation by the Italian School in 1955 and their full publication in 1970 as *Volume II.5* in the *CMS* series, and now they are posted on the CMS Website. While the deposit is securely dated to the destruction level at the end of MM IIB, thus dating most of the sealings to MM II, some of the seals used were made earlier, some possibly as early as EM III-MM IA. The many Sealings reveal to us the use of 326 seals, some being used only once or twice, some several times. Examples 1.52 to 1.66 show the variety of subject matter and compositional detail which can be seen across the Sealings. In examples 1.52 to 1.57 one sees the way content is routinely organised in these early years, with the artist always striving to present the *Icon*, the memorable image, with the utmost clarity within the confines of the small seal face. Floral, foliate and spiralforn elements are regularly displayed as in 1.52 to 1.54. Local animals comprise sole subject images, always with the most characteristic feature of the creature emphasised, as with the bristles standing up on the sturdy back of the boar in 1.55 and the hound head panting with lolling tongue in 1.56. Exotic animals and fantastic creatures also feature as memorable images, again with the essential characteristics stressed. The griffin in 1.57 assembles the body parts of lion and eagle and already has a curled crest, while the lions in 1.58 already show the body and upraised tail quite clearly even in the heraldic rampant pose. For the few human figures that appear in the Sealings, they too are clear in outline and stationary in pose, as with the couple in 1.59. Yet there is a group of Sealings with animal subjects that are quite different in the way they create the memorable image. These animals explode in action and you, as the viewer, are there to see it all. In 1.60 two hounds leap up to hold a great agrimi at bay while in 1.61 a collared hound courses through a rocky landscape with plants in abundance. Examples 1.62 to 1.64 are animal attack scenes where the predator crunches down its prey. In 1.65 the angry bull charges its barriers, all lowered head and pawing hooves. Even when the animal is quietly standing as with the lion in 1.66, it is shown within a landscape of flowering plants and rocks, thus paralleling the craggy rock of 1.60, the plants and rocks of 1.61 and the barriers of 1.65. All these images take us into a new style of art where the movement of living creatures and the sense of place become so important that a whole scene is needed to express them. So it is that we see in the Phaistos Sealings the very moment when this pivot in artistic creation occurred. Earlier artists had endeavoured to portray the characteristic form of the inanimate item or of the living animal but these were isolated static representations. At some time before the end of MM II, while designs depicting the single static animal or thing were still in use, some enterprising seal artists at Phaistos took the whole scene as their eidetic image and re-envisioned the *Icon* to depict the essence of the activity and the essence of place³². This artistic revolution influenced seal design (and design in the other media) to the end, even as developments within the new *Icon* concept marked the different periods of art. Accordingly, the fifteen centuries of seal iconography (EM II to LM IIIB/LH IIIB) are divided into five periods.

The Iconographic Sequence across Fifteen Centuries (Plates 1.67 to 1.102)

The five periods are the *Early Seal Period*, *Experimentation Period*, *Minoan High Art*, *Legacy Period* and *Late Period*. These Periods are set out in the Chronological Table³³.

Early Seal Period (Plates 1.67 to 1.75)

The Early Seal Period (EM II-MM II) lasts for at least 1,000 years from c.2700 to c.1700. It takes us

³² The importance of the Phaistos Sealings for understanding artistic and iconographic development in the Aegean was argued by Crowley in CANP, 19-46.

³³ The iconographic periods parallel the trajectory of the Chronology proper but for the seals, precision within a few decades is not crucial. The sequence and the length of the periods are the most important features.

from the beginning of the seals down to the seismic destruction of the first palaces and incorporates prepalatial seals and protopalatial seals. This is the *longue durée* of seal iconographic development, and the observations of Fernand Braudel are applicable here³⁴. Seals in this Period are dated EM II, EM III, MM I (MM IA and MM IB) and MM II. Defining groups of seals for this Period are the Mesara tholoi prepalatial seals³⁵ and the Mallia Workshop protopalatial seals³⁶. The earliest seals display geometric patterns as with the linear crosshatching like wickerwork in 1.67. The interest in floral/foliate designs accelerates and begins to incorporate spiraliform features as in 1.68. The delight in order and pattern is ever-present as seen in the all-over design of quatrefoils in 1.69. Animal life is portrayed in static poses as in 1.70 to 1.73, sometimes repeating the plan view to make a pattern as with the scorpions in 1.70, often placing statant animals in profile as with the agrimi in 1.71, as well as introducing fantastic creatures as in 1.72 and sea life in 1.73. By the end of the Period the life of humans becomes a more important subject as with the ship in 1.73, the archer in 1.74 and the potter with his ware in 1.75.

Experimentation Period (Plates 1.76 to 1.78)

The Experimentation Period (end MM II Phaistos to early LM IA) lasts for about 100 years from c.1700 to c.1600 and covers the time of the initial re-building of the palaces. This renewal of life after the earlier catastrophic destructions is interrupted by further destructions which put an end to the Period and, unfortunately, destroy much of the evidence for this vibrant creative era. The Period begins with the iconographic innovations at Phaistos which can be traced, and dated, in the Phaistos Sealings. Thus, its naissance actually belongs late in MM II but its effects play out in the ensuing era of rebuilding the palaces at the beginning of the neopalatial period. Artistic periods are often not tidy in advising their beginnings or ends but one must try to understand the creative mind! Seals in this Period are dated MM III and MM III-LM I. Defining groups of seals for this Period are the seals from the Hieroglyphic Deposit and the Temple Repositories at Knossos³⁷. Following the Phaistos awakening to the full possibilities of *Icon* composition, this Period enlivens animal activity as in 1.76, broadens the repertoire with more sea life as in 1.77 and begins to provide much more detail in human figures as in 1.78.

Minoan High Art (Plates 1.79 to 1.90)

The Minoan High Art Period (developed LM IA-LM IB) lasts about 160 years from c.1600 to c.1440. It begins some time into LM IA when the rebuilt palaces are flourishing, encompasses the Theran volcanic eruption c.1525 and the recovery of life after that on Crete and ends with the widespread destructions of Minoan sites at the end of LM IB. This Period covers the peak of Minoan artistic endeavour during the great second palaces of Crete and includes the strong influence of Minoan art on the Mainland at this time. This is the artistic period most acclaimed for its beautiful creations across all artistic media, and it is certainly true of seal iconography where complex images abound. Seals in this Period are dated to LM I (LM IA and LM IB). Seals dated LM I-II and LB I-II are also included in this period since their features identify an initial LM I or LB I identity. This period also covers the emerging interest in seals on the Mainland and so includes seals dated LH I and LH IIA. Defining groups of seals for this Period are the sealings from Hagia Triada, Zakros and Knossos³⁸ and the finds on the Mainland of the Shaft Graves and the Vaphio Tholos³⁹. The iconographic repertoire is expanded to show animal and sea life in lively

34 As a leader of the French Annales School of historiography, Fernand Braudel argued the concept of the *longue durée*, that slow change over long periods informed the movements of history, particularly in his 1973 masterpiece, *La Méditerranée et le Monde Méditerranéen à l'Époque de Philippe II*.

35 AS, 57-58, 63-70.

36 AS, 93-95.

37 For a discussion of the dating and motifs see Gill 1965, 58-98 and CMS B0, 30-36, also Weingarten TRANSITION, 39-52.

38 CMS II.6, II.7 and II.8.

39 CMS I, 219-261.

action as in 1.79 to 1.81. Symbols like the eight shield, double axe, vase and double horns abound, as in 1.82 to 1.84. The activities of humans encompass war, the bull games, everyday work and ceremony as in 1.85 to 1.88. Fantastic creatures and hybrid humans manifest a supernatural world, as with the Dragon Lady in 1.89 and the birdwoman in 1.90.

Legacy Period (Plates 1.91 to 1.99)

The Legacy Period (LM II-LM IIIA and LH IIB-LH IIIA) lasts about 140 years from c.1440 to c.1300. It refers to the time after the LM IB destructions when Mycenaean control and influence were in the ascendant both in Crete and on the Mainland. From this time on we can no longer see the iconography as purely Minoan or even as shaped strongly by Minoan dictates. Mycenaean preferences are to be expected in subject matter choice and execution. By the end of this period the cutting of hard stone seals had ceased. Seals in this Period are stylistically dated to LM II, LM IIIA (LM IIIA1 and LM IIIA2), LB II, LB III, LH II (LH IIB), LH IIIA1 and LH IIIA2. Defining groups of seals for this Period are the seals from Mainland chamber tombs. Animals and fantastic creatures like griffins remain a staple of the iconographic repertoire, as in 1.91 to 1.93 and 1.98. Human figures show mortals involved in ceremonies as in 1.94 but also continue to represent deities as in 1.95 to 1.97. Formal artistic conventions like the antithetical group of 1.97 and 1.98 continue. Human hybrids are favourites as with the bullman in 1.99.

Late Period (Plates 1.100 to 1.102)

The Late Period (LM IIIB and LH IIIB) lasts about 100 years from c.1300 to c.1200. It covers the era of the full expansion of Mycenaean power on the Mainland and also the later troubles that were to engulf the great citadels at the end of LH IIIB. For iconography there are increasingly schematic renderings on soft stones in Crete and the Mainland even as the Mycenaean citadels continue to use heirloom hard stone seals in their recording practices until they were destroyed. Seals in this Period are stylistically dated to LM IIIB, LH IIIB and LB IIIB. The iconographic repertoire becomes drastically reduced. Animals remain as in 1.100 and 1.101 but are summarily treated. Human figures, too, are schematic as in 1.102.

The Format of This Enquiry into Art and Meaning

So, we have come to recognise that the seals are important for many reasons. When surveying the other art forms for their value in revealing the life and culture of the Aegean peoples there is none that can reveal as much as the seals. Pottery is the only other art form that is so long-lived, and it has even more examples. However, the designs on pottery show restricted subject matter, particularly since it has very few human figure compositions. Ivory carving, relief vases, metalwork and jewellery have a limited number of examples. Fresco comes late along with some wall reliefs. No large-scale sculpture remains and only a very few small-scale sculptures in the round exist. Glyptic is one of the two longstanding art forms. It has a vibrant tradition of some fifteen centuries, which in itself demands recognition. It gives the widest range of subject matter of all the art forms remaining to us. It is of singular importance to the people themselves – to wear as their identity in life and to be buried with in death. Moreover, in this enquiry, we are about to see that it is the art and iconography of the seals that drives the art and iconography of all other Aegean media.

Leaving aside for the moment this latter claim, and just taking the overwhelming evidence of the other arguments, why is it that the seals have not hitherto received the attention that they deserve? There may be many answers. No doubt the sheer size and complexity of the seal material constitutes a formidable barrier. Aegean researchers may find that they do not have time to encompass all the seal data in addition to the data of their own speciality. When they do make forays into the glyptic world they encounter specific problems with the material which are often very different from the problems that they are used to encountering in other research fields. This has led to glyptic being seen as the province of seal experts, as a narrow speciality and not really the business of the wider research community. Yet, I would contend that in the Aegean, the seals are everybody's business. Fortunately, the publication of

CMS Volumes and the posting of the CMS Database on the CMS Website make accessibility of the seals possible as never before, and more researchers are taking up the challenge.

The huge amount of glyptic material and its complicated nature aside, there may be other reasons for past neglect, and these reasons may lie in the biases of the modern era. The seals are small – and for many people that means insignificant, not to be regarded as important when measured against great architectural accomplishments and grand wall paintings. Yet this was not, apparently, the view of the Aegeans themselves who held this miniature art form in the highest regard. The seals are personal adornment – jewellery – and there is likely to be a modern gender bias against the seals because of this. Jewellery is perceived as a female interest, not nearly commanding such status as weapons and armour. This may be a particularly 20th and 21st century view where, on dress occasions, a man is allowed a dark suit relieved by a carefully judged tie and wristwatch. However, that was not the case in previous ages when the rich and the royal wore the most sumptuous jewellery. One has only to think of the Elizabethan aristocracy in England, the Ottoman potentates or the Indian princes who regarded their personal presentation of immense importance and expended vast amounts on their jewellery and on the artists who created it. Then there is a telling example from the Bronze Age under discussion here, from Egypt. The jewellery of the Pharaohs is of breathtaking effect for both the richness of the material being worked and the skill of the artists working it. Thus, we need to reflect afresh on the values of the Aegean peoples who expended so much effort on personal display, both in hair styles and clothing⁴⁰, and in adornment like the seal jewels. All of this brings us to the bias of artistic assessment. Western European aesthetes, have, since the time of the rediscovery of the Greek and Roman traditions, consistently placed sculpture and painting at the pinnacle of art⁴¹. Museums, art history books and university lectures perpetuate this by referring to them as the Major Arts. All else is relegated to the Minor Arts with a corresponding lowering of importance. These biases do exist, although rarely are they addressed. So, I make a plea to set them aside and look anew at the seals with eyes that see them as important, as the Bronze Age Aegeans themselves undoubtedly did.

As we now turn now to the organisation of this book some prefatory comments are in order. In ensuring that the focus in this book remains on the seals, discussion of some areas of research interest has necessarily had to be curtailed. Much of the iconographic argument in recent years has been conducted through reference to fresco/wall painting and other media. Where pertinent to the seals, this research is cited in the *footnotes* but otherwise is acknowledged in the extensive Bibliography. For the same reason of concentration on the seal images, there is no systematic comparison with art in the other media in use in the Bronze Age Aegean. To comment on parallels at each point where the seal iconography is discussed would make the book impossibly long. As a recognition of this, at the end of each of Chapters 4 to 10 and Chapter 12, there is a list of five pieces from the other media which share the particular seal iconography discussed in that Chapter, and these act as examples of the myriad other parallels. Then in Chapters 13 and 14, reference is made to the wider artistic scene, and a selection of fresco images is discussed in relation to the seal tradition. Nor does the book attempt a systematic treatment of texts. Mention is made of Hieroglyphic, Linear A and Linear B signs where there is an artistic overlap. The contents of Linear B texts are consulted in some of the interpretation passages. The word, palace, is used as a convenient description for the centres of power in both Crete and Mainland Greece. Minoan and Mycenaean are used throughout simply as convenient summary terms for the two different artistic points of view.

To address the art and meaning of the seal images the book is divided into five sections, and for each section the Plates are an integral part of the exposition and argument. While a whole variety of seal images is included in the Plates, in some cases a particular seal design will be used several times. This

40 Clothing/textiles pieces do not remain for us to study, but the art provides testimony to the fabric detail and to the personal grooming of elaborate hairstyles.

41 In his 1568 work Giorgio Vasari declared the pre-eminence of architecture, sculpture and painting.

is because many seals carry complex compositions with much information encoded within, and each of these details needs discussion at the appropriate point in the appropriate Chapter. The Front Pages open the book with a Preface, Acknowledgements, Abbreviations, two Maps and a Chronological Table. The End Pages complete the book with five Appendices, a Bibliography and an Index. The text sections are as follows.

INTRODUCTION THE AEGEAN SEAL TRADITION

In Chapter 1 the importance of the seals to the Aegean peoples themselves is explained. The seal tradition across fifteen centuries is placed within the wider Aegean Chronology, drawing on the work of the Corpus der minoischen und mykenischen Siegel (CMS). The particular difficulty of studying art in the Aegean – the absence of translated contemporaneous texts accompanying the images – is then addressed. The use of Iconographic Analysis theory is outlined, and the concept of the *Icon* composition in Aegean art is introduced. The five Iconographic Periods are summarised.

PART 1 THE ART OF THE AEGEAN SEAL

Chapter 2 takes a detailed look at the technical aspects of the art and explains how the exigencies of seal creation shaped the iconography. The *Icon* theory of art is set out in detail, and readers are introduced to the terms of the IconAegean Vocabulary and IconAegean Classification and to the IconAegean Databases which use these terms to describe the Aegean seal images. Chapter 3 describes the advances in artistic design made so early by the Minoan seal artists and discusses the nature of Minoan art within its Bronze Age milieu and within the span of world creativity in art.

PART 2 INTERPRETING AEGEAN SEAL IMAGES

This Part begins the iconographic enquiry proper. In Chapters 4 to 12 the seal images are investigated. Each Chapter takes a single theme and analyses the images which portray its various aspects. First comes the description section where characteristic images are illustrated as examples of these aspects and then discussed in detail, taking care to show the changes in their iconography across the seal sequence. Following this, the text moves to the interpretation section which concentrates on Minoan iconography down to the end of LM IB.

PART 3 UNDERSTANDING THE AEGEAN WORLD

The iconographic investigation continues, taking an holistic view. Chapter 13 discusses what has been learnt of the Minoan world view from the Iconographic Analysis and Interpretation of the seal images down to the end of Minoan High Art. It seeks to define the essence of the Minoan character as revealed in its innovative and idiosyncratic artistic outpouring. Chapter 14 turns to the Mycenaeans and gathers the insights of the Legacy and Late Periods set out in the description sections of Chapters 4 to 12. Changes in the iconography suggest an emerging, and distinctive, Mycenaean point of view.

CONCLUSION THE PRIMACY OF THE SEALS

In Chapter 15 the book ends with a summary of the results of the enquiry and a statement of the value of this book in giving an integrated view of the iconography of the seals. It addresses the role of the seals in the creation of an Aegean artistic koine and the relationship of Aegean art with the long-standing traditions to the east. The significance of the *Icon* composition is revealed.

The Importance of the Seal

Plates 1.1 to 1.102

The Owner, the Artist and the Society

Commissioning the Seal



1.1 – bone
(II.1 18/EM II-EM III)



1.2 – lapis lazuli
(II.2 286a/MM II)



1.3 – veined jasper
(II.3 340/MM III-LM I)

Wearing the Seal



1.4 – red jasper seal
(I 223/LB I-II)



1.5 – b&w detail of 1.4



1.6 – gold signet, detail of 1.21

Impressing the Seal



1.7 – steatite stamp
(II.1 418/MM II)



1.8 – carnelian lentoid
(II.3 64a/LB II-LB IIIA1)



1.9 – packet sealing
(II.7 1/LM I)

The Life of the Sealing



1.10 – sealing, Chania
(VS 1A 142/LM I)



1.11 – sealing, Chania
(VS 1A 175/LM I)



1.12 – sealing, Agia Triada
(II.6 11/LM I)

The Importance of the Seal

The Owner, the Artist and the Society

Carving the Ivory and Soft Stone



1.13 – hippopotamus? ivory figural stamp
(VI 7/EM III-MM IA)



1.14 – hippopotamus ivory stamp cylinder
(II.1 385/EM III-MM IA)



1.15 – steatite three sided prism
(VI 34a/MM II)

Drilling and Shaping the Hard Stone



1.16 – carnelian three sided prism
(VI 96a/MM II)



1.17 – jasper four sided prism
(II.2 316d/MM II)



1.18 – agate lentoid
(VII 102/LB I-LB II)

The Skill of the Goldsmith



1.19 – gold pectus
(II.2 226/MM II)



1.20 – gold signet, hoop with granulation
(VI 336/ LB II-LB IIIA1)



1.21 – gold signet, bezel
(XI 29/LM I)

Creating the Art and Iconography



1.22 – butterfly, dragonfly
(II.3 237/LM I)



1.23 – wickerwork
(III 127/MM II-MM III)



1.24 – Mistress of Animals
(I 144/LB I-LB II)

The Importance of the Seal

Recording the Seals: the Role of the CMS

Seal



seal

Signet Ring



ring bezel and hoop

Excavated Sealing



seal face (d 1 cm)



bezel seal face (l 2.35 cm, w 1.6 cm)



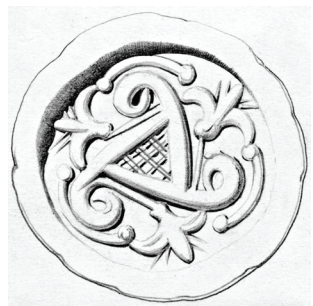
impression



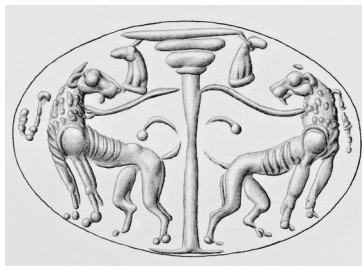
impression



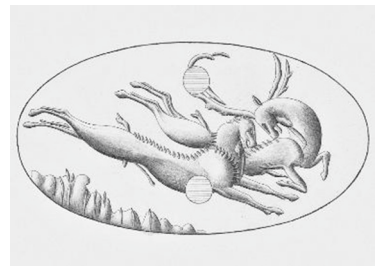
original clay sealing (l 2.5 cm, w 1.45 cm)



drawing of the impression



drawing of the impression



drawing of the sealing

1.25 – chalcedony petschaft
(II.1 122/MM II)

1.26 – gold signet
(VI 364/LM I)

1.27 – clay sealing
(II.6 70/LM I)

The Seal Tradition across Fifteen Centuries

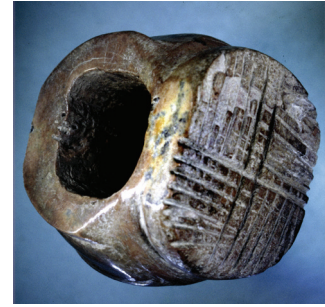
Prepalatial Crete – EM II to MM IA



1.28 – ivory figural stamp
(II.1 249/EM III-MM IA)



1.29 – chlorite pear shaped stamp
(II.1 156/MM I)



1.30 – bone signet
(II.1 179/EM II-EM III)



1.31 – ivory cube
(II.1 64b/EM III-MM IA)



1.32 – ivory stamp cylinder
(II.1 300b/EM III-MM IA)



1.33 – steatite gable
II.2 310/EM III-MM IA)

Protopalatial Crete – MM IB-MM II



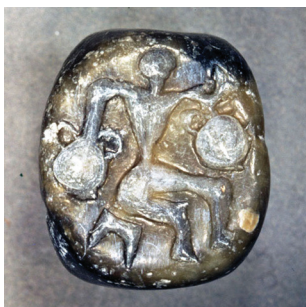
1.34 – chlorite stamp
(II.1 349/MM II)



1.35 – steatite pear shaped stamp
(II.1 418/MM II)



1.36 – carnelian half ovoid
(VS 3 41/MM II)



1.37 – steatite three sided prism
(VI 44a/MM II)



1.38 – jasper four sided prism
(II.2 316b/MM II)



1.39 – jasper three sided prism
(VI 92a/MM II)

The Importance of the Seal

The Seal Tradition across Fifteen Centuries

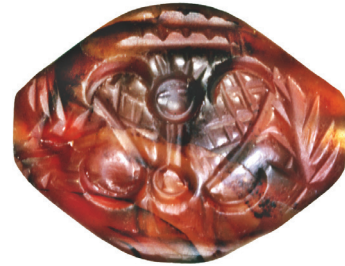
Neopalatial Crete – MM III-LM IB (and influencing the Mainland LH I-LH IIA)



1.40 – chalcedony ring stone
(III 150/MM III-LM I)



1.41 – gold signet
(XI 28/LM I)



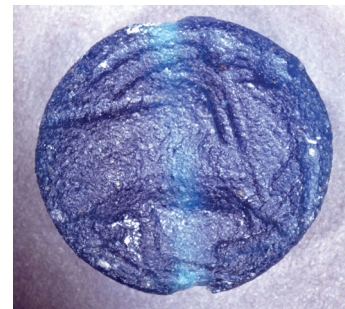
1.42 – carnelian amygdaloid
(VS 1B 275/LM I)



1.43 – lapis lazuli lentoid
(II.3 24/LB I-LB II)



1.44 – clay packet sealing
(II.7 36/LM I)



1.45 – blue glass lentoid
(VI 262/LB I-LB II)

Postpalatial Crete and Mycenaean – LM II-LM III, LH IIB-LH III



1.46 – jasper amygdaloid
(III 375/LM II-LM IIIA1)



1.47 – agate lentoid
(I 167/LB II-LB IIIA1)



1.48 – gold signet
(I 102/LH II-LH IIIA1)



1.49 – lapis lacedaimonius lentoid
(VII 123/LB IIIA1-LB IIIA2)

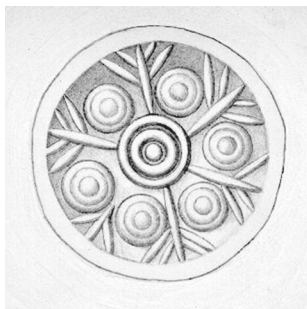


1.50 – steatite lentoid
(I 27/LH IIIA1-LH IIIB)

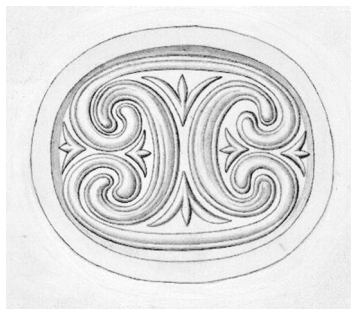


1.51 – steatite lentoid
(I 42/LH IIIA2-LH IIIB)

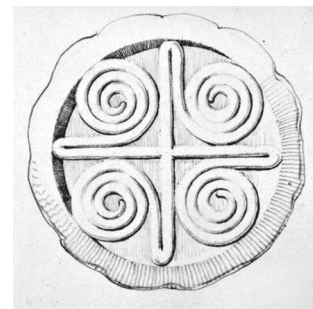
Iconographic Analysis, the *Icon* and the Phaistos Sealings



1.52 – radiation, rosette
(II.5 110/MM II)



1.53 – C spiral, triple bud
(II.5 194/MM II)



1.54 – division 4, coil spiral
(II.5 104/MM II)



1.55 – boar
(II.5 287/MM II)



1.56 – hound head
(II.5 300/MM II)



1.57 – griffin
(II.5 318/MM II)

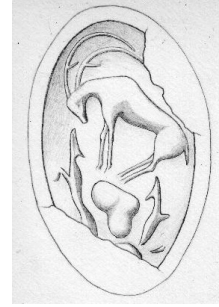
Iconographic Analysis, the *Icon* and the Phaistos Sealings



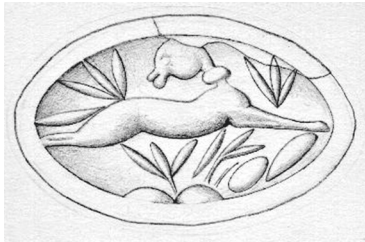
1.58 – lions rampant
(II.5 282/MM II)



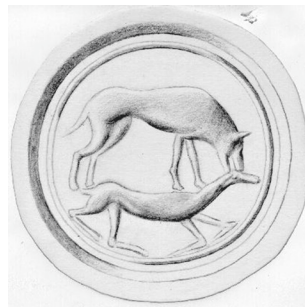
1.59 – human couple
(II.5 324/MM II)



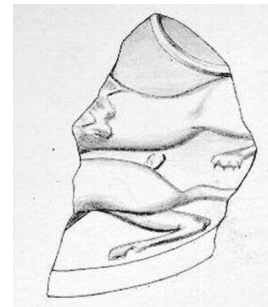
1.60 – holding at bay
(II.5 258/MM II)



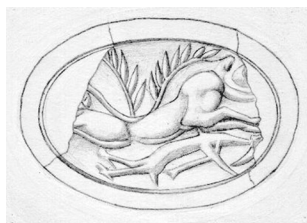
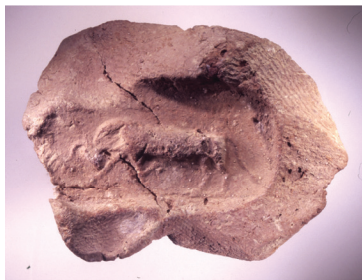
1.61 – hound, flying gallop
(II.5 276/MM II)



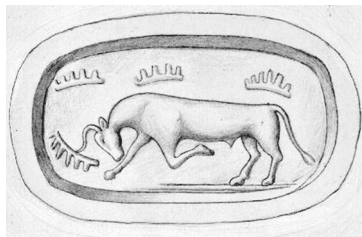
1.62 – hound crunching
(II.5 284/MM II)



1.63 – lion crunching
(II.5 286/MM II)



1.64 – animal attack, flying gallop
(II.5 285/MM II)



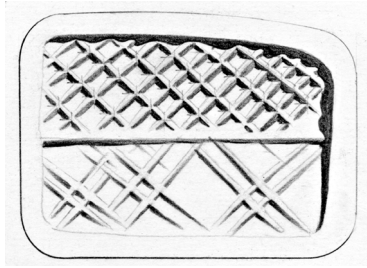
1.65 – bull standing
(II.5 268/MM II)



1.66 – lion, landscape
(II.5 270/MM II)

The Iconographic Sequence across Fifteen Centuries

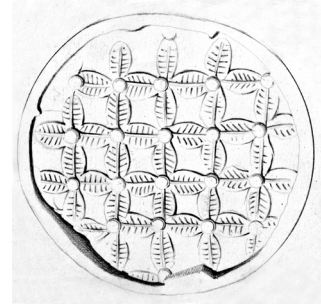
Early Seal Period c.2700 to c.1700



1.67 – wickerwork
(II.1 316/EM II-EM III)



1.68 – petaloid, spiral
(II.1 251b/EM III-MM IA)



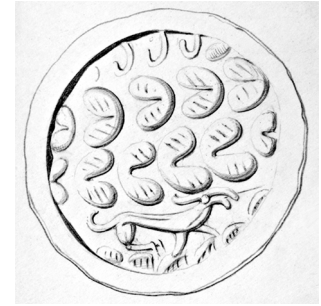
1.69 – quatrefoil pattern
(II.1 241/EM III-MM IA)



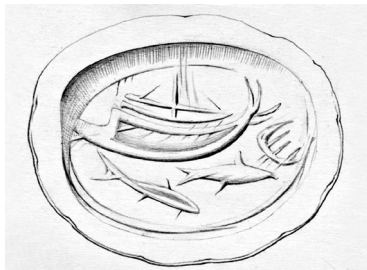
1.70 – scorpion
(II.1 248b/EM II-MM IA)



1.71 – agrimi
(II.1 268a/EM III-MM IA)



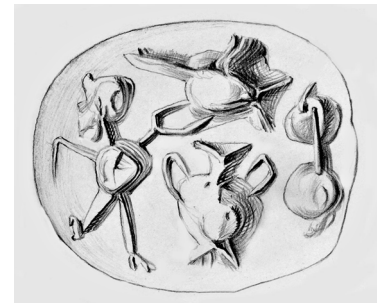
1.72 – dragon
(II.1 295a/EM III-MM IA)



1.73 – ship, dolphin
(II.1 287b/EM III-MM IA)



1.74 – man with weapon
(II.2 164c/MM II)



1.75 – man with vessel
(VI 60c/MM II)

Experimentation Period c.1700 to c.1600



1.76 – animal attack, animal seizing
(II.8 353/MM III-LM I)



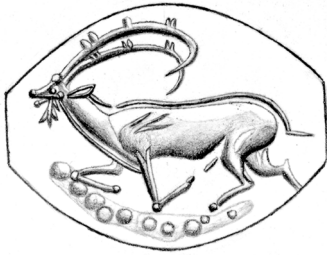
1.77 – dolphin leaping
(VI 182/MM III-LM I)



1.78 – human head profile
(II.3 13a/MM III-LM I)

The Iconographic Sequence across Fifteen Centuries

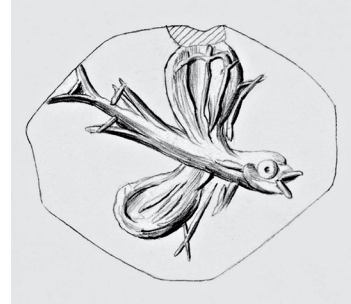
Minoan High Art c.1600 to c.1440



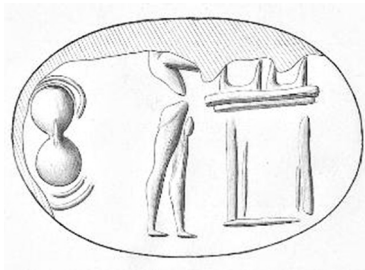
1.79 – animal distressed
(IS 82/LM I)



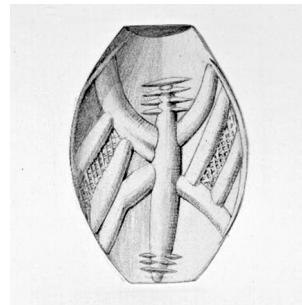
1.80 – animal seizing
(VI 367/LM I-LM II)



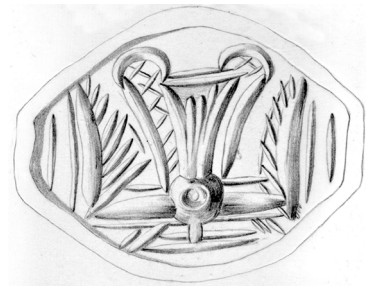
1.81 – flying fish
(VI 462/LM I)



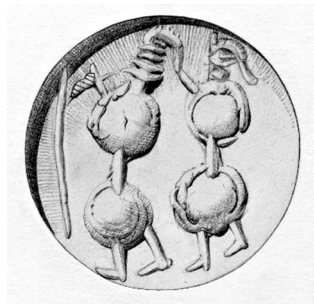
1.82 – eight shield, altar, double horns
(II.8 272/LM I-LM II?)



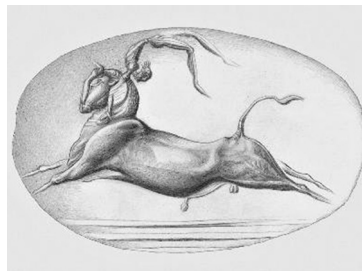
1.83 – double axe
(II.3 235/LM I)



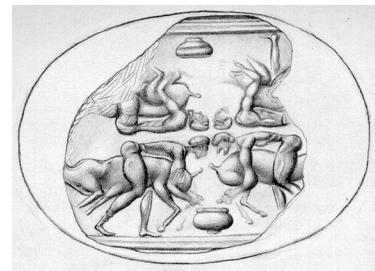
1.84 – vase, double horns
(IV 201/LM I)



1.85 – warrior armed
(II.3 32/LM I)



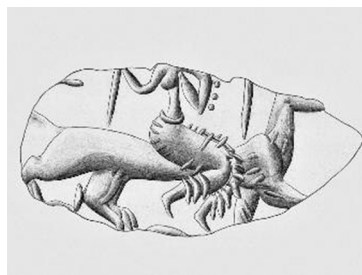
1.86 – leaper somersaulting
(II.6 44/LM I)



1.87 – herders milking
(VS 1A 137/LM I)



1.88 – cultscape
(XI 29/LM I)



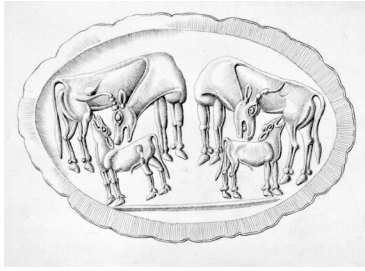
1.89 – Dragon Lady
(II.6 33/LM I)



1.90 – birdwoman
(II.3 4/LM I)

The Iconographic Sequence across Fifteen Centuries

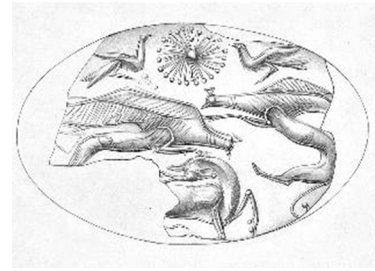
Legacy Period c.1440 to c.1300



1.91 – cows suckling
(I 20/LB II)



1.92 – lion crunching
(I 185/LB II-LB IIIA1)



1.93 – animal attack
(II.8 192/LM IIIA1-LM IIIA2)



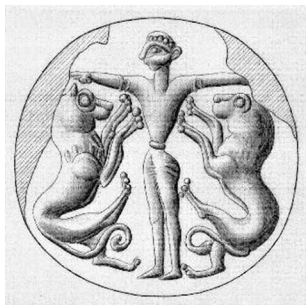
1.94 – serving at the shrine
(I 127/LB II-LB IIIA1)



1.95 – Staff Lord
(V 608/LM IIIA1-LM IIIA2)



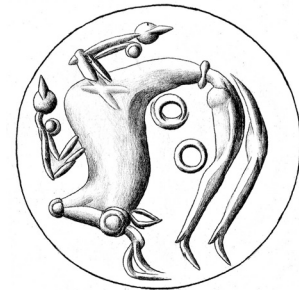
1.96 – Agrimi Lady
(VS 1B 261/LM IIIA1-LM IIIA2)



1.97 – Lion Master (II.8 250/LM IIIA1)



1.98 – griffins
(I 98/LB II-LB IIIA1)



1.99 – bullman
(VS 3 150/LM II-LM IIIA1)

Late Period c.1300 to c.1200



1.100 – quadruped
(V 383/LH IIIA1-LH IIIB)



1.101 – bull, branch
(VS 3 180/LH IIIA2-LH IIIB)



1.102 – man
(I 195/LH IIIA2-LH IIIB)