Impasto and Bucchero Pottery in the Nicholson Museum, University of Sydney

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Abstract

The following paper will present a study of 76 impasto and bucchero ceramic artefacts that form part of the collection of the Nicholson Museum at the University of Sydney. These artefacts have not been previously studied in any detail and while some have been published, publication was limited to a brief description. The paper is divided into three sections: impasto, Caeretan stamped ware and bucchero. A preliminary discussion of the ceramic type is followed by a catalogue. The catalogue provides a detailed description, any provenance and publication details, parallels and provides a date and possible geographical context of each vessel.
Preface

I would like to thank the Australian Foundation for Studies in Italy for the funds to travel around Italy to visit various regional museums and to study their collections. I would also like to thank the staff of the Nicholson Museum, Jo Atkinson, Michael Turner and Karin Sowada, my supervisor Ted Robinson and my family and friends for their support and assistance.
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Chapter 1

Introduction

Today, when one thinks of ancient Italy one immediately thinks of the Roman Empire, a civilisation that dominated the Mediterranean region and beyond for hundreds of years. Prior to the development of the Roman civilisation a number of ethnic groups with different cultures, languages, technologies, political and military organisations co-existed in the region. One such group was the Etruscans.

The Etruscans were a major power in Italy and in the Central and Western Mediterranean, particularly in the sixth and seventh centuries (Barker and Rasmussen 2000, 1). The last three Roman kings were said to have been Etruscan and the cultural development of early Rome shows strong Etruscan influence. When the Etruscan civilisation had been subsumed by the Romans, Etruscan influence continued in the ritualistic sphere with Etruscan *haruspices* practising divination and rituals for the Roman Republic.¹

Etruscan civilisation was a political confederation of a number of city states and their surrounding territories. City states varied in size and power between the 7th century and the end of the 3rd century when the last Etruscan cities fell to the Romans. The Etruscans had a common language and script but many of their cultural practices varied.

The Etruscan civilisation was preceded in Etruria by a group known as the Villanovans and before that by the Bronze Age, Proto-Villanovans. Originally the three were thought to have been separate ethnic groups, but scholars now generally believe that there was a continual cultural development throughout the Iron Age from the Villanovans to the Etruscans (Pallottino 1975, 80). The relationship between the Proto-Villanovan civilisation and the Villanovans is however, still a matter of scholarly debate.²

The majority of the evidence for the Etruscan and Villanovan civilisations comes from archaeological excavations. In Tuscany, Umbria and Northern Latium many Etruscan tombs have been excavated with fine ceramics, bronzes, jewellery and wall paintings. At the end of the fifth century BC there was a period of apparent recession and a hiatus in the archaeological record.

The most frequently encountered type of fine ceramic found in Etruscan tombs is bucchero ware. Bucchero has been called “the national pottery of the Etruscans” (Rasmussen 1979, 1). The Villanovans produced impasto pottery. The Nicholson

¹ The Lares, the household gods of the Romans, originated as Etruscan divinities (De Grummond 2006, 1).
² For a full discussion of the arguments involved see Ridgway 1988, 623-633 for Bronze Age and Barker and Rasmussen 2000, 60-84 for Villanovan culture.
Museum at the University of Sydney has a large collection of impasto and bucchero pottery, much of which has not been previously published. There are three publications associated with the collection. These include the Reeve catalogue published in 1870, the Macdonald catalogue published in 1898 and the *Classical Collection* published in 1979. In each of these publications only a brief description of the artefacts was presented.

**Nicholson Museum and Sir Charles Nicholson**

The Nicholson Museum was founded in 1860, following the bequest to the university, by Sir Charles Nicholson, of his private collection of antiquities. Many of the Etruscan pieces belonged to this original bequest or were donated by other individuals to the museum at that time. In 1856 Sir Charles undertook a three year trip to Egypt and Europe at which time he purchased the majority of his collection. The provenance of the pieces in the collection is, in most cases, unknown.\(^3\) It would appear that Sir Charles obtained his artefacts from a variety of sources that included dealers, random individuals that sold to tourists and in some cases items obtained directly from excavations.\(^4\)

From the few papers that remain in the University of Sydney archives, it would appear that Sir Charles was a meticulous man, who retained all his records and papers. Unfortunately, the majority of his papers were destroyed in a house fire and any records associated with the acquisition of the pieces in the collection were lost. He did write a paper with reminiscences of Italy, but makes no mention of any of the artefacts in the collection or where he might have obtained them.\(^5\) In 1897 Sir Charles wrote:

> “The whole of the classical antiquities were obtained in Italy and were acquired by me during successive excursions made in the valley of the Arno, of the Tiber, at Rome and at Naples” (Macdonald 1898, 10).

His few remaining papers show that, although Sir Charles never returned to Australia, he continued to work for the interests of the University of Sydney. He was an educated man who believed in the new colony of NSW and his lasting legacy is his collection of antiquities and artworks that form part of the collections of the University of Sydney Museums and Art Galleries.

**The collection**

The Reeve catalogue was an inventory of all the artefacts in the museum in 1870. The majority were donated by Sir Charles Nicholson. All inventory

\(^3\) During the nineteenth century the main purpose of archaeological excavations was to find artefacts. The context of the finds was of secondary importance and records of excavations were often limited. Many artefacts at this time (and up to the present day) were excavated illegally and shipped out of Italy without any recourse to scientific investigation.

\(^4\) Dr. Karin Sowada pers. comm.

\(^5\) The few papers that survive demonstrate that Egyptian archaeology was a particular field of interest for Sir Charles and that he was a subscriber to the Egypt Exploration Fund.
numbers that include an R, were items that formed part of the Reeve catalogue. Numbers up to NM R1001 formed part of Sir Charles collection. Inventory numbers including a 98 at the beginning were catalogued in 1898. Many of these artefacts probably also came from the original collection but a secure association with the artefacts catalogued by Reeve could not be made. Once he had settled in England Sir Charles continued to ship artefacts to the university and it is possible that some of these 98 numbers may have arrived in Sydney between 1870 and 1890. At the time when the pieces were collected it was not uncommon for the pieces to be completely ‘restored’. A number of the pieces have residues of black paint and plaster and it is possible that some were reconstructed from two separate fragments to create a new vessel.

The aim of this paper is to provide a detailed catalogue of the impasto and bucchero ceramics in the collection of the Nicholson Museum. The paper will be divided into three sections, impasto pottery, Caeretan stamped ware and bucchero ware. An introductory discussion of each of the wares will be followed by a detailed catalogue of relevant artefacts in the museum collection. The catalogue will describe each item, present parallels, give each item a date and where possible put the artefact into a regional context. The introductory discussion will include references to relevant pieces in the collection. The catalogue number, in bold font, will be used to identify the various pieces.

**Methodology**

Initially each artefact in the collection was individually examined in detail and assigned a new catalogue number with the Nicholson Museum catalogue number also recorded. The condition of each piece was documented including any restoration or repairs that may have been made to the vessel. The size was measured in centimetres. Both the surface and core colours were determined using a Munsell soil colour chart, with both Munsell numbers and matching colours noted in the catalogue. The shape of the vessel, decoration and finishing were all recorded in detail.

Once the individual vessels had been examined, the artefacts were classified as either impasto or bucchero. Those artefacts made of well levigated clay with few inclusions that are black (or dark grey) coloured from the surface through to the

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6 Among the few of his remaining papers available there is a rare mention of the museum, when Sir Charles records that a few Etruscan fragments had been sent to the colony, but what they were is uncertain. There is also no date on the letter to indicate when the items may have been sent (Nicholson Papers, University of Sydney archives). Whether they were in fact Etruscan or Greek is also uncertain as at the time it was believed that all things excavated from Etruria were Etruscan and not imported from Greece.

7 It should be noted that while the study was limited to pieces that were produced before the end of the fifth century, the Nicholson Museum does have a number of pieces that date to later periods of the Etruscan culture. This collection of later Etruscan artefacts would also be worthy of a similar study to the present one.

8 Please see impasto and bucchero chapters for detailed discussion of the differences between impasto and bucchero artefacts.
core were classified as bucchero. Vessels of variable colour— from brown to grey to black—made of coarser clay that has more inclusions and a core colour varying from red to dark brown were classed as impasto. It should be noted that in some cases vessels classified as bucchero do not exactly fit these colour criteria, such as the chalice 23. Some vessels in the collection, such as 23 and 32, have signs of erosion of the surface fabric and, as a result, the surface has patches of brown colour. Other bucchero vessels may have a variable surface colour due to misfiring or incomplete reduction, where the surface colour will vary from red/brown to black. In these cases the nature of the clay, the number of inclusions and the core colour were used to identify the item as either impasto or bucchero. The catalogue also has a large section that includes artefacts from Central Etruria. This distinct group of ceramics does not always fire to a black core and the surface colour tends to be lighter than traditional bucchero. As the majority of the literature refers to the fabric of these vessels as bucchero, it has been classified as bucchero, but in a separate section to highlight the fact that the fabric is distinct from traditional bucchero.

Parallels for each of the vessels were then sought in published literature that included catalogues, journals, conference publications and the *Corpus Vasorum Antiquorum* series of museum publications. In order to obtain parallels for many of the vessels, the author travelled around Tuscany and Umbria in Italy, visiting regional archaeological museums. Many of the artefacts in the Nicholson Museum collection are simple utilitarian wares such as stemmed bowls. These types of artefacts are more likely to be displayed in local museums as opposed to the larger regional museums where the more ornate and special objects tend to be exhibited. It was particularly useful for regional production in Central and Northern Etruria where little has been published since the beginning of the 20th century. This visit was made possible by the award of a travel scholarship from the Australian Foundation for Studies in Italy.

Each artefact category was discussed in detail to enable the reader to obtain an understanding of the context of the production of each of the pieces. Once parallels had been determined, a discussion of each artefact was prepared and, where possible, the artefact was categorized into previously published classification systems such as those of Tom Rasmussen for the production of Southern Etruria and Pietro Tamburini for wares produced in Orvieto (Rasmussen 1979; Tamburini, 2004). Possible production centres were noted as was the date of the artefact.
Chapter 2

Impasto Ware

Introduction

Impasto is a term used to define a particular type of pottery that has a long history of production in Italy. During the Iron Age it was the predominant type of pottery produced in Central Italy until the arrival of imported wares stimulated the production of other ceramic types. Impasto was used to produce fine wares, storage vessels such as *pithoi* or *doli* and domestic cooking ware.

There is no single typology that covers impasto pottery. Instead, however, there are a number of publications that have been important milestones in the study of impasto ware and the cultures that produced it. The following section lists publications concentrating especially on those parts of Villanovan/Etruscan Italy from where the impasto pottery in the Nicholson Museum appears to be derived.

Some regions have been extensively published while others have had limited coverage. In the region of Southern Etruria the most widely published site is Tarquinia. Hugh Hencken produced a detailed typology and discussion of finds made during excavations at Tarquinia between 1904 and 1906 (Hencken 1968a). In the same year he also published a third volume looking at the origins of Villanovan culture and its relationship to the urnfield cultures of Europe (Hencken 1968b). These works continue to be important references for studies of Iron Age Tarquinia. Judith Toms has published a number of articles on aspects of the Villanovan culture based on finds at Tarquinia and is in the process of publishing a book on Tarquinia (e.g. Toms 1993 and 1998). An important necropolis from the early Iron Age is the cemetery at Quattro Fontanili at Veii. Joanna Close-Brooks initially published 330 tombs that also included a relative chronological sequence for the site (Close-Brooks 1967; Ward-Perkins et al. 1965). Toms followed with a more complete examination of the total 651 tombs excavated and presented a modified relative chronological sequence for artefacts from Veii that has been widely used for dating sequences at other sites (Toms 1986). In 1970 Ingrid Pohl published material from the Iron Age necropolis of Sorbo at Cerveteri. While some of her conclusions received hostile reviews, her detailed presentation of material from the site was positively received. Gilda Bartoloni produced a detailed catalogue and description of artefacts in the Museo Archeologico di Firenze from the site of Poggio Buco (Bartoloni 1972). A study of artefacts excavated at Saturnia and also held in the same museum was published by Luigi Donati (Donati 1989).

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1 For example Italo-Geometric pottery was produced from ca. 750 following the introduction of imported Geometric pottery and imported Corinthian pottery acted as the model for the Etrusco-Corinthian ware that was produced from the middle of the seventh century (Nijboer 1998, 80).
Pär Gierow published a series of volumes that covered the Iron Age cultures of Latium (Gierow 1964, Vols 1 & 2 and Gierow 1966, Vols. 1 & 2). Included in these volumes was a catalogue of finds from sites around Latium and a detailed typology of impasto found there. His chronological sequences have, however, been questioned by later scholars and his typology has been criticised as being too complicated. Birgitte Ginge published the finds from 1907 – 1910 excavations at Satricum (Ginge 1996). Anna Maria Bietti Sestieri has extensively published finds from the site of Osteria dell’Osa in Latium (Bietti Sestieri 1992a & b).

Northern Italy has had fewer major publications of impasto pottery. Silvana Tovoli presented a study of finds from early excavations at the cemeteries at Benacci near Bologna (Tovoli 1989). The finds from cemeteries known as Casa di Ricovero, Casa Muletti Prosdocimi e Casa Alfonsi at Este were presented by Anna Maria Chieco Bianchi and Loredana Calzavara Capuis followed by the presentation of La necropoli di Villa Benvenuti (Chieco Bianchi and Calzavara Capuis 1985 and 2006).

Other regions of Italy have also had impasto published. The impasto produced at Narce in the Faliscan region is distinctive and is well represented in the collection of the University Museum at the University of Pennsylvania, published by Elizabeth Hall Dohan and in Jean Davison’s study of seven tomb groups from Narce (Dohan 1942; Davison 1972). A general overview of the cultures and artefacts including impasto from the regions of Umbria, Liguria, Veneto, Picene regions, Campania and Latium is found in Italia omnium terrarium alumna edited by Giovanni Pugliese Carratelli (Pugliese Carratelli 1988).

Particular artefact classes have at times received special attention. Tobias Dohrn was the first scholar to publish a study of spiral amphorae (Dohrn 1965). Typologies of this class of vessels were then presented by Giovanni Colonna (Colonna 1970) and Arnold Beijer (Beijer 1978). M. Verzár studied the development of this form and its evolution into the Nikosthenic amphora (Verzár, 1973). Alessandro Guidi (1988) and Daniela De Angelis (2001) have presented typologies of decorative elements that appear on Villanovan biconical urns.

In 1980 an attempt was made to standardize the nomenclature used in the study of impasto pottery and metallic vessels by presenting a dictionary of terminology for the Bronze and Iron Ages edited by Gilda Bartoloni and a number of other scholars. A similar dictionary of terminology for the Orientalising Period was released in 2000 and edited by Franca Parisi Bodoni.  

Many synthetic treatments of the Villanovan culture have been written. Gilda Bartoloni’s La Cultura Villanoviana, first published in 1989 with a new edition published in 2002, is a good overall background text for study of the Villanovan culture.

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2 Dohan’s catalogue also contains material from Vulci.
3 This latter publication is presented in a slightly different format and is on the whole an easier volume to use.
Production and Fabric

The overall category of impasto ware is highly diverse.\(^4\) The clay used contained a variety of impurities which often, although not always, produced rough and pitted surfaces (De Puma 1986, 8).\(^5\) Impasto often has visible inclusions and a granule size ranging from 0.25mm to 4mm in size (Nijboer 1998, 70). A comparison between impasto from Veii and Monte Artemisio demonstrated that a wider range of inclusions was present in the Monte Artemisio samples (Saviano et al. 2005, 412). The finished product tended to be heavy and thick walled although at times, particularly in later periods, very fine pieces, with few inclusions, such as the kotylai \(^{12}\) and \(^{13}\) were made.

Impasto vessels were originally hand formed. They were made from either a single piece of clay with the sides formed by drawing up or were coil built. They were then finished by smoothing the surface. At this stage the vessel was then smoothed, possibly on a slow wheel, before being burnished (Nijboer 1998, 65).\(^6\) The fast wheel, which was operated by foot, allowing continuous rotation, was introduced into Italy in the eighth century (Cristofani 1999, 140).\(^7\) Clay with a large number of inclusions is not suitable for throwing on a fast wheel. The inclusions interfere with the water absorbing characteristics of the clay and therefore increase its rigidity. The large inclusions would also cut the hands of the potter on a fast wheel and drag through the clay body leaving gouges (Nijboer 1998, 70).

Clay for a fast wheel needs to be worked extensively to allow it to be modelled and to retain a high amount of water while being worked. In the Orientalising Period clay was better refined and there were smaller and fewer inclusions, thereby allowing modelling on the fast wheel (Nijboer 1998, 70). The fast wheel allowed for the production of very fine vessels such as \(^{12}\). It also allowed for the development of new shapes (De Puma 1986, 8).\(^8\)

The majority of impasto vessels were fired in a reducing atmosphere.\(^9\) The firing was often incomplete as can be seen on \(^{7}\) and \(^{8}\). The surface colour on the

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\(^4\) E.g. at Gravisca impasto finds have been catalogued into nine different basic categories based on fabric with further subdivision into colour and shape (Gori & Pierini 2001, 19).

\(^5\) At Tarquinia the clay used to produce impasto was non-calcareous and sandy with a high level of feldspars present (Bruni et al. 2001, 27).

\(^6\) See Nijboer 1998, 65 for description of techniques used to reproduce impasto.

\(^7\) Whether vases were handmade or made on a fast wheel can at times be difficult to determine. Burnishing can remove wheel marks and many vessels were partly handmade and partly made on the wheel (Dohan 1942, 3).

\(^8\) See Chapter 3 for a full discussion of bucchero.

\(^9\) An exception to this is the class of burnished impasto called red ware, which completed firing in an oxidising atmosphere. This fabric should not be confused with the impasto fabric used for Caeretan stamped ware. Red ware is a type of impasto fabric that was produced throughout Villanovan periods although it was more frequently found in later periods. It has a burnished
The majority of vessels is variable from shades of red (11) to brown (2, 5, 10, 17, 18) to grey (3, 5, 12, 14) and black (1, 4, 16). The core colour is variable and usually, though not always lighter coloured than the surface colour.

Impasto was fired in an open fire or a kiln where the pottery was in direct contact with the fuel (Bietti Sestieri 1992, 86). Reproduction experiments have been carried out. Pots were piled onto the ground and covered with straw and soil. Two small vent holes were made allowing sufficient air flow to keep fire alight. The mound was then set alight and allowed to burn down for 24 hours. The atmosphere tended to be a reducing atmosphere resulting in a darker variable colour (Nijboer 1998, 65). Archaeometric studies of impasto pottery have shown that the temperature at which impasto was fired was highly variable. One study demonstrated a firing temperature between 800 and 1000 degrees C (Bruni et al. 2001, 35, 37) while another demonstrated that the firing temperature was above 600° C but unlikely to have been above 800° C (Saviano et al. 2005, 415). In the reproduction experiment the temperature attained in the bonfire was 600°C.

Impasto pottery production is thought, especially in Villanovan times, to have been conducted at a household level, where techniques were not highly standardised, resulting in different firing temperatures (Nijboer 1998, 65).

The majority of the vessels were burnished and the degree of burnishing was highly variable as can be seen on the vessels in the collection. For example the finish on 6 is quite dull and rough as opposed to the fine smooth finish of 12.

New production techniques that included improved preparation of the clay, higher firing temperatures and the introduction of kilns developed over time and are particularly evident during the Orientalising Period (Turfa 2005, 7). However, traditional shapes, such as the shallow bowl with a single handle, that was made using long-established techniques, continued to be produced throughout the course of impasto production (Dohan 1942, 3). It is interesting that brown/black hand-made impasto vessels made using production techniques that could be traced back over generations have been found in a number of burials at Narce together with vessels that were constructed using improved ceramic techniques. Berggren has suggested that the continued deposition in tombs of such impasto pottery may demonstrate that it has a particular ritual or symbolic significance (Berggren 1986, 259).

The production of impasto did not cease once bucchero was produced in large quantities and both wares were produced concurrently throughout the period under discussion. At Cerveteri, for example, early bucchero was found in the reddish surface colour that deteriorated to a brownish red in the Orientalising Period and was occasionally covered in a white slip. Red Ware was found mainly in the form of small pots, although other shapes do occur (Hencken 1968b, 26–27).

See Chapter 4 for a full discussion of the technique of burnishing. An archaeometric study of impasto vessels found that all were burnished and in some cases a slip was also used. In the example found the slip had only been applied to the inner surface, probably to increase the impermeability to water (Saviano et al. 2005, 415). See chapter 4 for discussion of slip.
same strata as fine, wheel-made, brown impasto vessels (Nijboer 1998, 156). Kotylai 12 and 13 have a shape and decoration that are very similar to kotylai produced in metal and bucchero, but the fabric is a very fine impasto. In some regions such as Latium and the Faliscan territories, impasto continued to be the dominant ceramic type produced in the seventh and sixth centuries (Rasmussen 1979, 149).

**Decorative Techniques on Impasto Ware**

Incision was the most common form of decoration used on impasto vessels. Lines were incised or cut into the clay after burnishing using a sharp edged tool such as a stylus or knife edge. A comb or comb-like object with a number of projections was used to create multiple lines or vertical striations like those seen on 1 (Hencken 1968b, 28). Simple incision was used to create hatching on vessels, such as the simple short diagonal lines on 9 or alternately more complex designs were created using a roulette to produce fine consistent lines of marks, most frequently diagonal strokes (De Puma 1986, 8). The deep grooves seen around the neck of number 7 are commonly found. The grooves were probably formed as the bowl was rotated on a slow wheel.

An interesting decorative technique used on impasto vessels is the addition of metal laminates as on 4. The metal was attached to the vessel after it was fired, using some type of adhesive (Tovoli 1989, 296). Most vessels with metal laminate decoration demonstrate deterioration of the metal to a white residue. This is due to the direct intercrystalline oxidation of tin to a mix of stannous (SnO) and stannic oxide (SnO$_2$) (Tovoli 1980, 300). Tin also deteriorates at temperatures below 13.2°C by allotropic modification which results in the transformation of the solid metal to a loose grey powder (Hamilton 2000). The white residue serves as an indication of the original design, as can be seen on 4. The types of patterns found are generally geometric, such as linear designs and crosses, meanders and swastikas (all found on 4). The type of vessels found with this decoration, as well as biconical urns and the bowls that cover them, include chalices, cups, jars and amphorae (Tovoli 1989, 296). In Southern Etruria this method was used widely on amphorae at the site of Veii (de Angelis 2001, 289). In the first half of the seventh century this decoration is well documented in the region of Vulci and the Fiora River valley (Pagnini and Romualdi 2000, 21).

11 In late Villanovan contexts the line was often cut by pressing a straight edge into the clay while it was fairly plastic (Miller 1986, 268).
12 Finds of this decoration at Tarquinia, Cerveteri, Veio, Populonia and Vetulonia dating to late ninth century contexts, suggest the technique originated in these regions (Tovoli 1989, 297).
13 This is commonly referred to as ‘tin pest’, a well known form of deterioration of tin that is a particular problem for medieval organs that use tin pipes. The reaction is autocatalytic and once started will increase the speed of conversion over time. See also Plumbridge 2007.
14 De Angelis has proposed that the large number of amphorae of similar form with this type of decoration at Veii is suggestive of a single workshop there (de Angelis 2001, 290).
Stamped decoration took a number of forms. These included chevrons and the false cord impressions and simple dots seen on 1. Single dots were used to create simple designs, such as the wave pattern on 11 and also more complex patterns such as the small rosettes on 18 (Hencken 1968b, 28). Single stamps were used to decorate vessels such as the circles that run around the vessel below the neck of 7. Stamped motifs, such as the simple circular stamped motif (7) are common throughout the Villanovan period (Miller 1986, 267–68). While fairly uncommon, white paint was used to decorate ceramics (Hencken 1968b, 27) as was red ochre (Rasmussen 1979, 131). Other techniques used included relief decoration in the form of attached ribbing or notching, painting and ribbing with white clay (Hencken 1968b, 35).

The swastikas that appear frequently on biconical urns are not commonly found on other ceramic vessels, except on the shallow bowls found as cover bowls (Hencken 1968b, 30). The fluted impasto bowl with metal strip decoration in the collection (4) is an interesting exception. White residue from metal laminate decoration on the inner surface of the bowl outlines four swastikas sitting in the corners of a central cross. Similarly, single swastikas are outlined on the top of the shoulder section.

A diagrammatic representation of some of the decorative motifs used singly or in combination on impasto ware is reproduced in Figure 1.

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15 The wave pattern is reminiscent of decoration on large impasto doli (discussed in the next chapter).
16 For a detailed description on methods of stamping see Chapter 3.
17 When white paint is found it is generally in a poorly preserved state. It may have been more frequently used in this period but has not been preserved in the archaeological record.
Figure 1: Examples of decorative motifs on impasto ware (Hencken 1968a, 28–33)

The following discussion of impasto pottery will be divided into three sections: Villanovan impasto, later impasto and Caeretan stamped ware.
Villanovan Impasto

Introduction: The Villanovan Period

The Early Iron Age in Italy (called the Villanovan Period in some regions) is generally dated to the period between 900 and 720. The term Villanovan was first used in 1853 by G. Gozzadini, following the publication of the excavation report of a necropolis at Villanova, near Bologna (Cristofani 1999, 326). The features of this cemetery have been used to identify what is now called the Villanovan culture. Aspects of Villanovan culture have been in diverse regions across Italy, including Etruria, Latium, Campania, Ancona and Bologna (Bartoloni 1989, 94).

Originally Villanovans were thought to be a distinct ethnic group that was not related to the Etruscans but later scholars argued that Villanovan culture should be seen as a developmental phase of the Etruscan civilisation. Major Etruscan centres such as Cerveteri, Veii, Tarquinia, Vulci, Vetulonia and Populonia were all centres of Villanovan culture and there was a continuous development at these centres through to the Roman era (Pallottino 1975, 80). It has been argued that the term Villanovan describes a cultural practice involving a specific burial ritual; whether this cultural practice reflected an ethnic identity is still uncertain (Toms 1993, 140). Villanovan culture may have comprised a complex mix of ethnically diverse groups that only developed an ethnic identity during later periods with the development of urban communities (Pallottino 1975, 80).

Chronology

The Villanovan period is generally divided into Periods I and II, and further subdivided as noted in Figure 2 below. The relationship between the relative chronologies and the absolute dates assigned to the different chronological periods is an issue of much debate. When excavation reports were published, a series of regional chronologies developed, which were then correlated to developmental phases at other sites. For example Latial III equates approximately to Tarquinia II (Turfa 2006, 2).

The determination of absolute chronologies in Italy is a complicated issue that is beyond the scope of this paper and only a brief summary of some of the main

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19 While these are the generally accepted dates in scholarly literature, they are a matter of debate and this issue will be discussed further, later in this chapter.
20 For a more detailed discussion of distribution see Bartoloni 1989, 94–97.
21 See Pallottino 1975, 64–81 for a good, general overview of the fundamental arguments.
22 Toms has allocated a Villanovan III period in her chronology that extends into the early Orientalising Period roughly corresponding to the seventh century (Toms 1993, 139). For the purpose of this paper only Villanovan I and II and Orientalising Period will be used.
issues will be touched upon here.\textsuperscript{23} The relationship between stylistic sequences and absolute chronological dates has been based upon links between artefact typologies in Italy and from imported artefacts in eight century tombs, which could then be linked to king lists and chronologies of the Aegean and Near East (Turfa 2006, 2). Scientific studies such as radiocarbon and tree-ring dating in Europe and Italy have resulted in discrepancies in accepted absolute chronological dates.\textsuperscript{24} The following table gives an indication of the currently accepted historical dates, their relationship to the relative dating of different developmental phases in Italy and the new dates obtained from scientific studies for the developmental phases of Europe. As can be seen there is a resulting discrepancy between these dates and the historical dates. These inconsistencies and their possible flow-on implications have yet to be resolved (Turfa 2006). When dates for the Villanovan period are used in this paper, they are based on traditional chronology.

\textsuperscript{23} See Bartoloni & Delpino 2005 for a presentation of conference proceedings that aimed to discuss some of the latest issues surrounding absolute dating for Final Bronze Age and the Iron Age. Turfa 2006 presents a good summary of the issues that have arisen from scientific studies to date and also summarises the various scholarly views presented. To quote Turfa “the absolute chronology …is hotly contested”. See also Nijboer 1998, 24-26. Bartoloni 1989, 97–102 for a detailed summary of earlier positions and arguments. Nijboer et al. 2000, epilogue presents some of the possible flow-on implications for Italian chronology. See also Turfa 2007 for a list of articles in press on the subject of absolute dating.

\textsuperscript{24} A recent radiocarbon study of seeds and charcoal remains from huts at Fidene and Satricum and two tombs at Castiglione have noted a discrepancy between the dates obtained and those assigned to local impasto pottery. The study suggests that the absolute dates for the change from Latial II to Latial III should be raised by 50 to 75 years (Nijboer et.al, 2000).
Villanovan Burial Ritual

The majority of the archaeological evidence for the Villanovan period comes from funerary contexts. Burials provide evidence for ritual practice and may reveal some basic ideological beliefs and practices but may also result in a misrepresentation of the true nature of the society. Burial rituals express the society’s ideal view of itself and may not present an accurate representation of the deceased or the society in which the individual lived (Toms 1993, 141). The Villanovan burial ritual is characterised by very specific codified systems that may give some information about social systems in operation at that time (Iaia 1999, 141).

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25 The 'new archaeologists' such as Binford propose that aspects of social structure can be determined from burial remains but more recent work suggests that there is no direct representation of one by the other (Toms 1993, 141). This issue is not limited only to Villanovan culture but is a significant problem for archaeology as a whole. For some interesting discussions of this issue see Jensen and Nielsen, 1997.
The most widespread Villanovan burial ritual involved the cremation of the deceased. The cremated remains were placed in a burial urn that was subsequently interred. The most common type of Villanovan grave was a well-like cylindrical cutting (tomba a pozzo) with a narrower pit at the centre (sometimes referred to as the pozzetto) where the burial urn containing the cremated remains of the deceased was placed. The pozzetto was then often covered by a stone slab (Hencken 1968a, 20). Occasionally the pozzo had an additional smaller pit (a loculus) for deposition of artefacts such as small ceramic vases and razors (Turfa 2005, 7). As the pozzi did not have covering mounds and generally neither overlapped nor intersected, it has been suggested that there may have been some type of grave markers that have not survived in the archaeological record (Hencken 1968b, 29).

Once the individual was cremated the ashes and partially burnt bones were placed in a receptacle such as the impasto biconical urn 1. Sometimes a ceramic replica of a hut with a thatched roof (hut urn) acted as the receptacle for the ashes. The urn (at times enclosed in a dolio) was placed into the pozzo tomb. Each burial was of a single individual and the associated artefacts were deposited either inside the urn, surrounding it or in the loculus (Tovoli 1989, 27).

A lid was used to cover the urn. Most commonly this was a shallow impasto bowl such as 2. The bowl was either turned upside down (as is most frequently seen in museum exhibits and illustrations) or it may have been placed the correct way up. When found in the latter position it frequently contained burnt organic material and occasionally some offerings (Iaia 1999, 142). Occasionally impasto helmet-shaped covers and rarely bronze helmets were used as lids. During the

26 Other grave types included the custodia grave which was a roughly cylindrical receptacle of volcanic rock (nenfro), the fossa grave, which was a rectangular trench with a stone lining and the cassetta grave, a rectangular receptacle of volcanic rock. The cassetta and custodia types appear to be associated with those of a higher social standing than the pozzo type and appear to be more common in the Villanovan II period (Iaia 1999, 142).

27 At Veii the loculus often held a special deposit of banquet vases from the funeral feast (Turfa 2005, 7).

28 An overlapping pozzo grave has been reported from Castellina di Quinto where one grave was found above and partially overlapping another (Gregori 2007).

29 Occasionally other types of containers were used to hold the ashes. At Benacci for example a dolio was used in tombs 14 and 43 and an amphora in tomb 33 (Tovoli 1989, 27 note 166). At Bisenzio no burials containing biconical urns have been found and all cremated remains were buried in small jars, jugs and occasionally amphorae with 17 burials being found in small sized hut-urns possibly used for sub-adults of both sexes (Iaia 1999, 147).

30 For a discussion of the procedure involved in the cremation and storing of remains in hut urns see Bartoloni 1986, 238. The procedure described refers specifically to hut urns, but it is likely that the procedure was very similar for biconical urns.

31 Tuck has suggested that the cover for the burial urn, whether it is a helmet or a bowl, is a representation of the head of the deceased (Tuck 1994, 624). If one follows the argument presented it is also possible that the bowl could act as a representation of a head covering.

32 It has been argued that the ceramic helmets used as lids on burial urns were not copies of actual helmets used in warfare but rather acted as symbols of a warrior goddess. The helmets acted as symbols of transformation and the bronze helmets that have very occasionally been found were copies of the ceramic type rather than the other way around, as is usually assumed.
late Villanovan I and early Villanovan II, a jug or jar containing a cup could also be used as a lid (Iaia 1999, 142).

Over time the proportion of inhumation burials in fossa graves (rectangular trenches) and in tombe a camera (chamber tombs) gradually increased until inhumation became the predominant form of burial ritual. While the changeover was occurring biconical urns continued to be used for cremation burials. Toms has noted an increase in what she refers to as “non-classical” forms that used different design elements in later Villanovan II contexts (Toms 1993, 152). Urn 1 is an example of the earlier ‘classical’ urn. The changeover to inhumation did not happen at the same time in every centre. For example, inhumation burials appeared at Veii in late Villanovan 1 (Toms 1993, 140), while at Chiusi cremation continued to be the main form of burial well into the Archaic Period, at a time when inhumation was the predominant form of burial in other regions of Etruria (Tuck 1994, 623).34

Over the course of the eighth century the inclusion of food offerings within the funerary ritual developed (Tovoli 1989, 29). Occasionally food has been found partially burned inside a biconical urn. For example at Benacci remnants of egg shells and carbonised nuts were found in a biconical urn (Tovoli 1989, 29).

The number of burial urns that were accompanied by eating sets also increased over the course of Villanovan II period, possibly indicating that the feast had become a more important element of the ritual or alternately that the overall wealth of the buried individuals had increased (Turfa 2005, 7). The types of vessels found included drinking cups, libation bowls, small urns, askoi and plates and there was an overall uniformity in the types of vessels found across the

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33 While rare there, Gierow reported 2 burials where cremation burials had been interred in two fossa graves at Caracupa Necropolis in Latium (Gierow 1966, 72). Also at the Tolle necropolis near Chianciano Terme nine cremation burials have been found in chamber tombs and a single burial has been noted where both a female inhumation and a female cremation burial are present in the same tomb (Haynes 2006, 431). At Tarquinia two cremation urns appear to have been laid on their sides in the centre of the tombs of the type generally associated with inhumations, suggesting that the urns were conceptualised as human bodies (Toms 1993, 150).

34 At Veii Quattro Fontanili necropolis there appears to have been an association between males of high status and cremation burials. In period IIA at the site the number of males in cremation burials is higher than females and by the late Villanovan Period when inhumation was the main burial ritual, cremation appears to be limited to burials of high status males (Toms 1986, 60).

35 It is important to note that the burial ritual was not a uniform standardised ritual and there were significant differences between the burial rites of individuals (Olde Dubbelink 1992, 95).

36 The incised two seated figure design that appears on some biconical urns has been interpreted by some scholars as a reference to the funeral feast (Hencken 1968a, 29).
burials (Tuck 1994, 626).\textsuperscript{37} A funeral feast may have acted as a reminder of the banquets of the living (Turfa 2005, 7).

Determination of the individual sex of the deceased is not reliable from cremated remains.\textsuperscript{38} Associated artefacts found with the burial have been used to identify the sex of individuals. Male burials have been recognised by the presence of artefacts that inferred a warrior status and include arms and armour. Fibula types found associated with these warrior burials have been used to identify male burials that do not contain armour or weapons.\textsuperscript{39} Artefacts said to identify female graves include certain types of fibulae, ornaments and spinning and weaving tools.\textsuperscript{40} A study by Toms of distribution patterns of material from Veii and Tarquinia supported the previous gender associations of the various artefact types. While these associations are important for modern archaeological studies, Toms noted that gender may not necessarily have been a primary social distinction for the Villanovans and may not necessarily have been expressed in the burial ritual (Toms 1998, 174). Berggren has, however, proposed that the presence of weaving tools had a more symbolic role in the burial ritual. Rather than being gender specific, she has argued that spindle whorls and spinning equipment acted as symbols of transformation of life within death, just as fibre is transformed into cloth (Berggren 1993, 22).

Burial patterns suggest an increase in the complexity of social structure of Villanovan society between Villanovan I and II. During the Villanovan I period burials and the types of artefacts that accompanied them demonstrated a high degree of uniformity, which has been interpreted as suggesting a type of egalitarian society (Toms 1993, 141). The burials at the Le Rose cemetery at

\textsuperscript{37} Tuck has argued that if the biconical urn was a representation of the human form then surrounding it with eating sets would indicate that the individual would be feasting in the afterlife. This relates to later Etruscan banqueting practice where the deceased is often accompanied by sets of banqueting vessels (Tuck 1994, 627).

\textsuperscript{38} Work has begun on trying to identify the ancient DNA and therefore identifying the sex of individuals and determining gender roles. For a discussion of techniques to date see Brown 1998, 35–44. A recent study was successful in using amelogenin PCR to determine the sex of the individuals of an Etruscan tomb, possibly due to the well preserved state of the graves. Other studies using the same technique were less successful and the authors noted that further work was needed before the technique could be reliably used. Interestingly one of the skeletons had been identified as female using anthropological and archaeological methods when DNA analysis identified it as male. The authors noted mitochondrial DNA extraction was the most reliable technique to date on ancient DNA and while it couldn’t determine sex it could be used to identify kinship relations between groups (Capellini et al. 2004). For a discussion of other recent studies looking at gender see Toms 1998, 160.

\textsuperscript{39} The most common artefact found in male burials of the earlier Villanovan periods was the bronze razor. Many of the razors found show evidence of repair suggesting that they were used in daily life. The razors disappeared in later Villanovan periods (Turfa 2005, 7–8). While these artefacts have been generally called razors, their true function is a matter of scholarly debate. They may have been a type of knife or beard trimmer (Turfa 2005, 8)It has also been suggested that they acted as symbols of the divinity for protection and were of particular ritual significance. See Berggren 1998 for a full discussion and the possible relationship between the elmo pileato and the razor.

\textsuperscript{40} The association of fibula types with a specific gender varies depending upon the region.
Tarquinia for example, display deposition patterns that have led Buranelli to hypothesize that the community that buried its dead there was egalitarian without social distinctions (Buranelli 1983, 115; Iaia 1999, 145).41

Many Villanovan burials consisted solely of a burial urn and lid. During the earliest Villanovan periods there were very few associated burial goods at Vulci, with the graves being described as “poor” (Hus 1971, 27). During Villanovan I only 32% of burials in Tarquinia had any associated pottery beyond the urn and lid. Those with additional pottery had on average 1 to 3 vessels (Iaia 1999, 142). “Important” burials have been identified by the greater numbers of associated vessels (Iaia 1999, 143).

During later Villanovan period there appears to have been an increase in the wealth of some of the burials. The percentage of burials with associated burial goods increased and the overall numbers of associated burial goods found also increased (Toms 1993, 154). While early burials at Bisenzio demonstrated a high degree of uniformity, later burials demonstrated high variability with some burials containing luxury goods and bronze shields (Iaia 1999, 148).42 A number of so-called “princely burials”, such as those at Quattro Fontanili, Veii, both male and female, have been found dating to later Villanovan periods (Peroni, 1979, 28).43 One grave at Quattro Fontanili dated to between 760–730 included a bronze casket containing cremated remains. Bronze armour including a large bronze shield, horse bridle bit, sixteen pottery vessels, metal bracelets, rings, earrings, razor, glass beads and a faience seal (Barker, 2000, 77–9).44

Over time there appears to have been an increasing contrast between the wealthy and the ordinary burials, possibly suggesting an increase in stratification of society or an increase in the numbers of important members of the community (Peroni 1979, 24–25).45 The trend of increasingly wealthy burials continued and eventually led to the wealthy tombs of the Orientalising Period. Toms has

41 There have of course been highly stratified societies with “egalitarian” burial customs.
42 This coincided with the development of links with Vulci, and Bisenzio becoming the seat of a rich elite (Iaia 1999, 148).
43 For a discussion of princely tombs from the last quarter of the eight century onwards see Winther 1997.
44 Similar wealthy graves were also found in Latium at Osteria dell’Osa and Castel di Decima (Barker 2000, 79).
45 While this is a summary of accepted scholarly opinion it should be noted that the nature of this egalitarianism is still an issue of debate. See Toms 1993, 156 -57 for an in-depth discussion of the different scholarly positions. Also Iaia has noted that at Tarquinia, while Poggio Selciatello and Le Rose cemeteries do show a fairly egalitarian uniformity, there is a continued presentation of indicators of rank concentrated in the Arcatelle and Impiccato cemeteries throughout the Early Iron Age. This may suggest that those of political and economic importance were buried in different cemeteries to the overall population and therefore present a more complex picture of the period and possibly a pyramidal hierarchy for Tarquinia (Iaia 1999, 145). The necropolis at Castiglione is 1.8km from Osteria dell’Osa but there is a notable difference between the associated funerary goods at each of these cemeteries, pointing to a local variability in burial customs and possibly suggesting that there may have been a hierarchy between the two communities (Nijboer et al. 2000).
suggested that such changes over time may have reflected a major change in the symbolic system of the burial ritual, which possibly included conspicuous consumption (Toms 1993, 156).

Studies of the spatial distribution of burials, biconical urns, their motifs, motif combinations and production techniques have led to the identification of typological groups within cemeteries. Despite the overall uniformity of the burial ritual at the “Le Rose” cemetery at Tarquinia, for example, burials were found to be divided into two distinct groups. The deposition patterns of specific fibula, particular ceramic types and the presence or absence of ceramic helmets (elmi pileate), determined the location of the two groups within the cemetery (Buranelli 1983, 115).

The determining factor for the grouping of Villanovan burials is still unclear. Family, kinship groups or another determinant such as residential location of the deceased are all possible factors and these factors may also have varied between regions.

**Villanovan Pottery**

There is no single typology available for impasto pottery dated to Villanovan I and II. The nature of the proposed production process at a household level is probably the cause of the large degree of variability. Many excavation reports have presented typologies of ceramic vessels such as those from Sorbo and Quattro Fontanili. While the pottery is important for defining local sequences, its variability makes it less useful in establishing typological parallels between sites (Toms 1993, 144).

The most common impasto vessel deposited in Villanovan graves, apart from the biconical urn, was the shallow bowl that was most commonly used as a lid for the

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46 Cemeteries outside Etruria, such as those in Latium, also demonstrated spatial distribution patterns. At Osteria dell’Osca the early cremation graves were all of adult males, which had a highly uniform pattern of artefact deposition. The burials were found in dolii with either a hut urn or a pot with a hut shaped lid, which contained the remains of the deceased. Two rectilineate impasto jars, a jar with an incurving rim, cups and bowls, a jar on a stand, a razor, a fibula and miniature bronze throwing spear all accompanied the burial urn. The shapes of the associated artefacts could be subdivided into two groups. The two groups of artefacts were found to have specific distribution patterns resulting in the identification of two burial groups, north and south of the cemetery. The burials could be separated into two groups, north and south, based upon the shapes of the associated artefacts particularly the pottery, razors, fibulae and spears (Olde Dubbelink 1992, 93). For a detailed presentation of the finds and the distribution patterns see Bietti Sestieri 1992a.

47 It is interesting that during the later Trecento and into the Renaissance periods in Etruria the cities were divided into neighbourhoods that were associated with a particular family. Daily life including burial was carried out within the limitations of the neighbourhood/family and its control/connections. See for example Kent & Kent 1982, or Goldthwaite 1980 for discussions.

48 The developmental sequences of the bronze fibulae and razors provide a more useful chronological sequence as these artefacts have relatively short-lived typological sequences and occur across much of mainland Italy (Toms 1993, 144).
biconical urns. The shape is highly variable and difficult to separate into coherent types (Toms 1993, 147). These vessels may have been undecorated as 2 and 3 or decorated to match the burial urn. At Tarquinia decoration on bowls was more a feature of the Villanovan I, whereas Villanovan II examples tended to be undecorated (Toms 1993, 147). Generally the shape is that of a low bowl, without a foot, with a single handle that may or may not be angled slightly upward as on 2. Some bowls did not have any handles as 3.

One-handled bowls continued to be deposited throughout the Villanovan periods, even when inhumation tombs became the dominant burial ritual. Their continued presence may possibly denote a secondary symbolic function for this type of vessel (Toms 1993, 147). Nine shallow bowl types have been identified at the site of Le Rose cemetery at Tarquinia. Type 1 Variety A has similar dimensions to those of 2. Buranelli has suggested that the small size would preclude its use as a cover for a biconical urn and that it most likely formed part of the overall furnishings of the tomb (Buranelli 1983, 101-2). As the shallow bowl 3 is of a similar small size, the same argument may also apply.

A variety of other shapes of impasto vessels have been found in Villanovan contexts. These include ceramic copies of helmets, small and large jars, fluted bowls, cups, kyathoi (often referred to as attingitori in Italian literature), jugs, amphorae, askoi, vase carriers (calefattoio), small pots with multiple spouts, tripods and the “boat dish” (vaso a barchetta). After the shallow bowl, cups and jugs were the most commonly found shape at Tarquinia (Toms 1993, 147).

Biconical Urns

Biconical urns in their “classic” form have a tall convex neck leading to the body which has a defined shoulder and tapers to the base. There is usually a single handle at the top of the shoulder as can be seen on 1. It has been frequently suggested that the biconical urn symbolically represented the human body, as suggested by the proportions of its neck, shoulder and body. Occasional urns have been found with plastic decoration in the form of breasts (Toms 1993, 149; Tuck 1994, 263). The relationship to the body is reinforced by a number of finds that suggest that urns were sometimes dressed with cloth and jewellery. At Benacci and Verucchio fabric remnants have been found on the shoulders of some biconical urns (Tovoli 1989, 29). At Tarquinia and Vulci biconical urns have

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49 This vessel has been of scholarly interest and a number of suggestions have been made regarding its purpose. It may have been an indicator of social status; it may have represented the journey to the deceased’s afterlife, a symbolism also suggested for miniature chariots sometimes found; it may simply have been a type of lamp or have had a votive significance (Laia 1999, 143).

50 Some ceramic urns found in burial contexts are in the form of rectangular or oval huts, so-called hut urns.

51 At Chiusi anthropomorphism is a distinctive feature of the ‘canopic’ urns that contained the cremated remains of the deceased. They have arms with hands and the lid is fashioned into a head with hair, eyes, ears, nose and mouth. Some have been found in the tomb placed on a large bronze or terracotta chair or throne (Toms 1993, 150). See Gempeler 1974 for discussion of canopic urns.
been found draped with necklaces and with fibulae on the ground beside the urns, suggesting that they had once been attached (Iaia, 1999, 141; Berggren 1993, 22).

Biconical urns with two handles have been found in settlement excavations and may have been used as storage vessels for water (Toms 1993, 148). The majority of finds, however, have come from burials, where they were used as containers for the cremated remains of the deceased. They predominantly have one handle as 1 and appear to have been specifically made for burial, although some burial urns show evidence that they originally had two handles but that one had been removed, possibly implying that those used in life were modified in death (Turfa 2005, 7).

It is generally believed that biconical urns and the vessels that accompanied them were mainly produced at the household level (Toms 1993, 148). There were regional similarities in shape and design that would suggest that there was a well defined tradition in the production of the urns (Barker 1998, 74; Toms 1993, 148). Ingrid Pohl, however, has proposed that the homogeneity and continuous stylistic development of vessels from the Sorbo cemetery at Cerveteri suggest that a limited number of local workshops produced the biconical urns found there, possibly indicating a form of centralised production (Pohl 1970, 294).

Toms has recently completed a study of biconical urns at Tarquinia. While she has attributed urns to single potters or small groups of potters working together, she maintains that these potters were probably members of the same household, sharing the task of pottery production primarily for the immediate family (Toms 2007, pers. comm.).

The stylistic classification of the biconical urn has been difficult as there appears to be no clear and uniform stylistic sequence and there is a large diversity in the shape and decoration used (Toms 1993, 147). Individual site publications have produced classifications of burial urns at each site that have been based upon shape and decorative techniques.

**Decorative Schemes on Biconical Urns**

A number of techniques were used to decorate biconical urns, although many were undecorated. Decoration usually took the form of incised geometric designs that concentrated on three areas: the upper neck, the base of the neck

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52 Toms has alluded to the relationship between the water carrier vessel, the female form and its use as a funerary urn (Toms 1993, 150–51).
53 Judith Toms is currently preparing a book on Tarquinia that will have a chapter on the biconical urns and their production.
54 Tovoli 1989 has presented a regional classification of shapes from the Bologna region based on finds from cemeteries in that region. See Guidi 1980 for a classification of metope designs on biconical urns in Southern Etruria and de Angelis 2001 for a classification of the biconical urn for Southern Etruria based upon a combination of motifs, type of decoration and shape.
55 Of 67 urns at San Vitale 43 were decorated, at Benacci Caprara of 22 urns, 7 were decorated and Ca’dell’Orbo de Castenaso of 81 urns 43 were decorated (Tovoli 1989, 231).
(missing on some urns) and the body (Hencken 1968b, 32-33). Many urns had complex decorative schemes that combined a number of different techniques (Hencken 1968b, 28). The motifs used included simple hatching, complex deep lines almost like drawings, rouletted lines, metope designs and hole punch stamped design (De Puma, 1986, 8). On 1 incised lines were used to create a large part of the metope design and the meander on the neck.

There was considerable variability in the care with which the decoration was executed. Examples of both neat and haphazard decoration occurred concurrently throughout the Villanovan era (Hencken 1968a, 33).

Single or multiple lines were used to create a variety of motifs. These included step patterns and meanders, the two-seated-figure (or N) design, swastikas, squares, triangles and chevrons in bands. Large squares formed by incised lines are a particular feature of the Villanovan I period. The most common ornament found within the squares is the swastika. On 1, the swastika motif is surrounded by an incised square. The swastika motif was a motif that demonstrated large variability. The following figure 3 depicts examples of swastika variations that have been found at sites in Southern Etruria.

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56 The decorative schemes have been compared to designs that were woven into textiles. This again relates to the idea of the urn being dressed (Tuck 1994, 625).
57 For a full discussion of these patterns see Henckenb 1968, 27–33 and de Angelis 2001, 19–20.
58 The swastika is a cross with bent arms joined at right angles that face either right or left. At Tarquinia the swastika was often, though not always, depicted with the two-seated figure (or N) design on biconical urns (Hencken 1968a, 33).
59 For a full discussion and classification of metope designs see Guidi 1980. Also see de Angelis 2001 and Hencken 1968a for a discussion of swastikas.
The decorative schemes on the urns and associated ceramics may have had a ritual significance. Elements such as the swastika could be related to some type of clan/family or tribal identification such as those found in geometric elements of medieval heraldry. Elements common to both the Balkans and Central Europe, such as birds, “sun discs” and the horned animal/bird all appear in Villanovan decorative schemes. These design schemes may reflect religious beliefs held by cultures throughout the world and its symbolism is beyond the scope of this paper. It has been called a cosmic symbol and may have demarcated space in a symbolic quadripartite manner possibly linking it to later Etruscan ideas of cosmology (Leighton 2005, 374). In medieval heraldry a coat of arms on a funeral monument or a seal, would in principle identify both the individual and the associated family unambiguously. The arms passed to younger sons as well as the eldest, and were often changed in some way to indicate this, leading to an elaborate system of so-called marks of cadency indicating the arms of eldest and younger sons. In some cases geometric elements were added to an initial heraldic design allowing visual representation of individuals in a preliterate society (Phillips 2007). The added ends to the swastikas, in some cases quite complex, as well as the different numbers of incised lines that created the design, could possibly signify various siblings or offspring of a family or kinship group. My thanks to Pedro Telleria Texeira for the information on heraldry.
both the Urnfield peoples and the Villanovans (Hencken 1968b, 112; Berggren 1991, 64).\textsuperscript{61}

\textsuperscript{61} The Urnfield culture covered large regions of Central Europe in the late Bronze Age. The main feature of this culture was that the cremated remains of the dead were placed in urns and buried in fields. See Hencken a & b 1968, for a discussion of the relationships between Protovillanovan, Villanovan and Urnfield cultures.
Later Impasto

Manufacturing techniques of ceramics improved significantly during the Orientalising Period. Indigenous techniques were blended with those used on oriental imports. Very fine impasto ware appeared, demonstrating improved preparation of clay, quality of decoration and firing techniques. Hand built impasto continued to be produced but there was increased use of the fast wheel (Turfa 2005, 7). In general there was a trend toward improved quality of manufacture with the production of regular shapes of consistent type (Toms 1986, 71), although there was still a large degree of variation in the quality of the finished product (Turfa, 2005, 7). These technical improvements can all be seen on the two fine impasto kotylai in the collection, 12 and 13.

Decorative schemes and shapes developed along similar lines to bucchero. For example the amphora number 17, and kotylai numbers 12 and 13 are all examples of shapes found in bucchero. The various shapes, their developments and decorative schemes and the relationship between the development of impasto and bucchero are discussed in the later chapter on bucchero. The only shape that will be discussed in detail here is the class of vessels called spiral amphorae.

Spiral Amphorae

The spiral amphora (also called Bandhenkelamphora and anfora laziale) is a globular amphora with strap handles and incised decoration that first appeared during the last decades of the 8th century. The name is derived from the incised double spiral, which decorated the body of many but not all of these amphorae.

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62 The Orientalising Period is generally dated from the end of the eighth century to the beginning of the sixth century (Badoni 2000, 9).

63 Buccheroid impasto is the name given to a type of impasto (first appearing in the seventh century but continuing to the fifth century) that appears to be very similar to bucchero. It has the overall general look of bucchero but the fabric is coarser and it is not fired black at the core. The term is rather inconsistently used with one author describing a piece as buccheroid, another as bucchero and yet another as impasto. Gran Aymerich, while stating that this category is highly variable, has tried to resolve the uncertainty in the use of the term buccheroid by assigning three distinct applications of it. The first group is a pre-bucchero buccheroid phase relating to vessels that are intermediate between bucchero and impasto and are found mainly at Cerveteri. A second group of buccheroid relates to a reddish fired group of vessels with distinctive decorative patterns produced at Vetulonia, Populonia and some from Vulci that form a stylistic group that is distinct from late impasto but difficult to classify as bucchero. The final group relates to the production of black vases produced in the Po region that have parallels with bucchero (Gran Aymerich 1993, 27). The examples in the collection that could possibly be classed as buccheroid generally fit into the category of black coloured impasto. Therefore this paper will group pottery as either impasto or bucchero and the term buccheroid will not be used. See Pagnini and Romualdi 2000, 19–20 for a discussion of the issue of buccheroid impasto.

64 A study of a spiral amphora by Colonna with an inscription around the neck revealed that both the incised decoration and the inscription may have been made by the same hand using the
This type of amphora has been found made of metal (silver and bronze), impasto and bucchero. It is possible that the dark pottery was meant to mimic metal, particularly as some of the vessels have markings that resemble nails or studs (Dohrn 1965, 152).

It has been suggested that the shape of the spiral amphora developed from earlier amphorae that date to the Villanovan II period. The origins of this form are as early as ninth century in Latium and Campania (Gran Aymerich 1982, 21; Rasmussen 1979, 69; Dohrn 1965, 152). The initial shape is very squat and round with a short neck (Colonna type A) but during first half of the 7th century the body narrows to globular (Colonna type B) and continues to become narrower and elongated with the body and the neck becoming longer and thinner (Colonna type C). This latter form is usually found in bucchero (Rasmussen 1979, 68; Colonna 1970, 641 - 43).

The decorative scheme of these vessels includes an incised spiral (or other motif) on the face, a “W” below and around the handle and incised lines running down the handle (Gran Aymerich 1982, 28). The two seated figure and derivations of this design (or ‘N’ design) were often situated around the handle of biconical urns (Hencken 1968b, 29). Other motifs that are found instead of the spiral include a palmette, stylized branch, inverted multiple ‘V’, incised rosette, as 17, and rare late examples that have no decoration (Rasmussen 1979, 69). The central decoration is often surmounted by a central incised design such as a palmette or a bird as on 17.

Spiral amphorae have only been excavated in funerary contexts in either tombe a fossa or tombe a camera associated with bucchero sets of cups, kantharoi, kyathoi (Dohrn 1965, 146). They have been found at Cerveteri, Veii, Tarquinia, the Faliscan area and Latium with isolated examples also found at Pithecussai, Pontecagno, Vulci, Magliano, Chiusi and in Sabine regions (Colonna 1970, 643). They appear to have been particularly common at Narce and Veii and it has been suggested that this is where they may have originated (Rasmussen 1979, 69).

The earliest examples date to the end of the eighth century and production continued until around 625 – 620BC (Rasmussen 1979, 68). These vessels were first produced in bucchero around 675 (Gran Aymerich 1982, 23).

The incised bird that appears on the Nicholson Museum example and other spiral amphorae is an interesting motif that can be traced back to the Protovillanovan period and has relationships to the urnfield cultures of Central Europe (Hencken same tools (Colonna 1970, 644). See chapter 4 for a discussion of the role of the workshop and interactions of craftsmen.

65 For a full discussion of the relationship between metal and pottery see the chapter 4.
66 The origin of this earlier vessel and the date of its appearance in Etruria are a matter of scholarly debate. See Rasmussen 1979, 69 for a discussion of the various arguments put forward regarding both earliest dating and origin.
The exact type of bird is difficult to identify; they may have been representations of waterfowl, possibly swans, geese or ducks (Skalsky 1997, 25). As well as acting as an escort to the afterlife, Skalsky has proposed that the bird acted as a symbol of protection, renewal and fertility and therefore had symbolic roles in death and the idea of rebirth (Skalsky 1997, 76–77). The bird is a popular motif and appears not only as incised decoration on impasto and bucchero spiral amphoras, but is also found on Subgeometric pottery decorated ‘ad airone’ (heron), burnished red impasto ware from Cerveteri, Etrusco-Corinthian amphoras from Cerveteri, and on metal vessels such as bronze belts and vessels (Leach 1986, 306).

The painted bird that appears on Subgeometric pottery of the “heron” class is very similar to the incised bird that appears on the museum example 14. Subgeometric pottery has a distinctive regional distribution with the majority of finds coming from cemeteries at Cerveteri, Narce and Veii. Cerveteri was the main centre of production in Southern Etruria with smaller production centres at Veii and Narce (Leach 1987, 128).

67 It should be noted that while the design can be traced back to Protovillanovan period, the relationship between the Protovillanovan and the Villanovan cultures is uncertain. Their cemeteries are generally not in the same places and the type of continuity that exists between Villanovan and Etruscan is not present (Hencken 1968a, 87). For the origin of bird decoration see Hencken 1968b, 91–112. Also see Hencken 1968b for a full discussion of the relationship between the urnfield peoples and Villanovans. Also Hencken 1968a Vol 2, 475–91 for a discussion of Appenine and Protovillanovan elements in Villanovan.

68 For a full discussion of the symbolism of the bird in Etruscan art see Skalsky 1997.

69 For a discussion of this motif see Leach 1987, 116–119 and Leach 1986.