

CHAPTER TWO

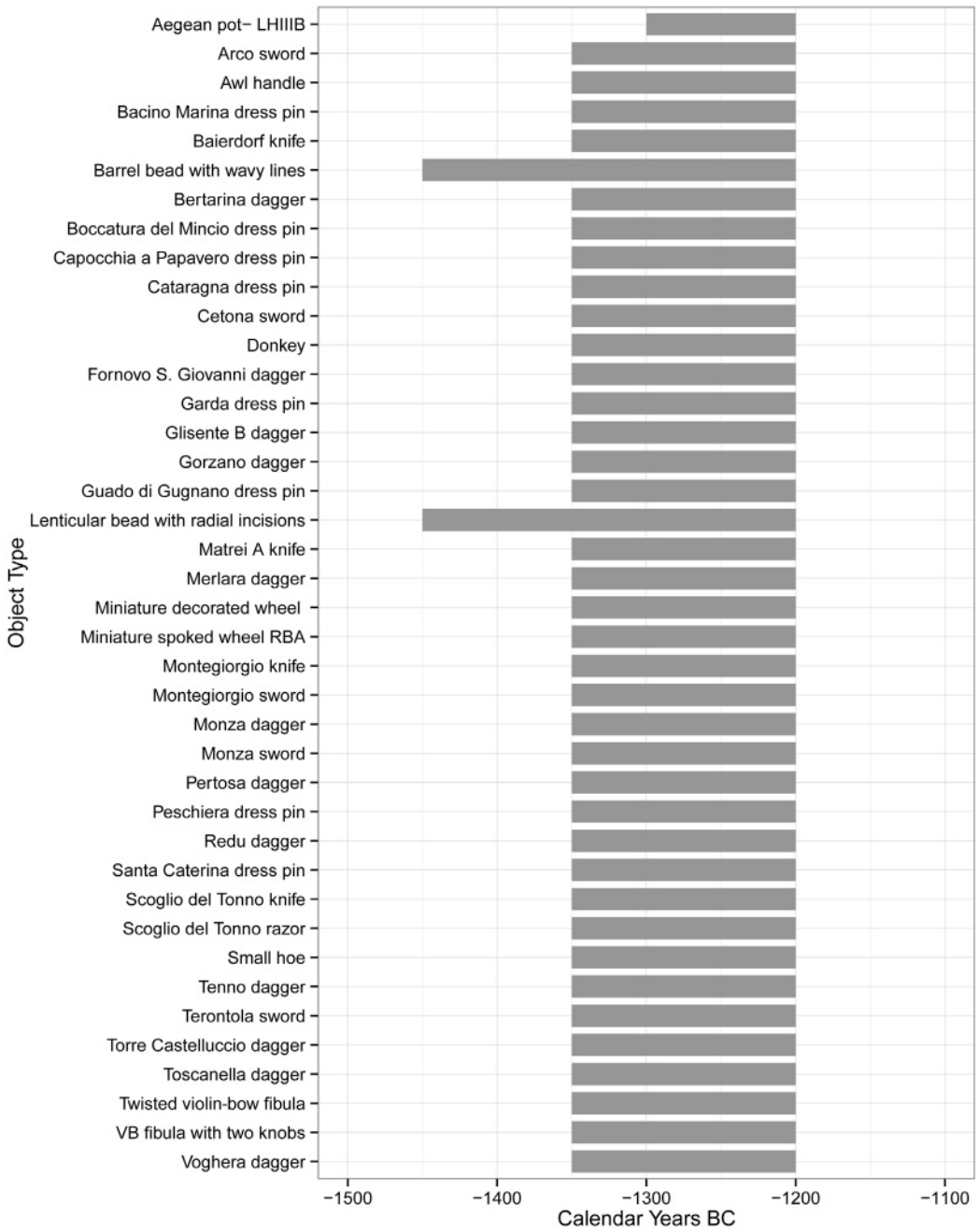
IMPORTS AND SPECIALIZED PRODUCTS IN ITALY IN THE RECENT AND FINAL BRONZE AGES

The traditional approach to exotica in Bronze Age Italy is to see them, sensibly enough, as evidence of foreign contacts. Scholars have extrapolated from the material evidence the nature and extent of the influence of these contacts, the parties involved, and developments in those interactions over time – all conclusions subject to intense debate. In this chapter I try a different approach. The material evidence for foreign contacts that I introduce here is what I will be using in subsequent chapters to construct *local* networks of exchange and interaction in Italy. From the broad range of craft materials that circulated I have selected those object types that are sufficiently represented (coming from three or more find spots) and discreetly dated (to either the RBA or FBA 1–2, but not both). The result is forty RBA object types and twenty-six FBA object types (Figures 2.1 and 2.2).

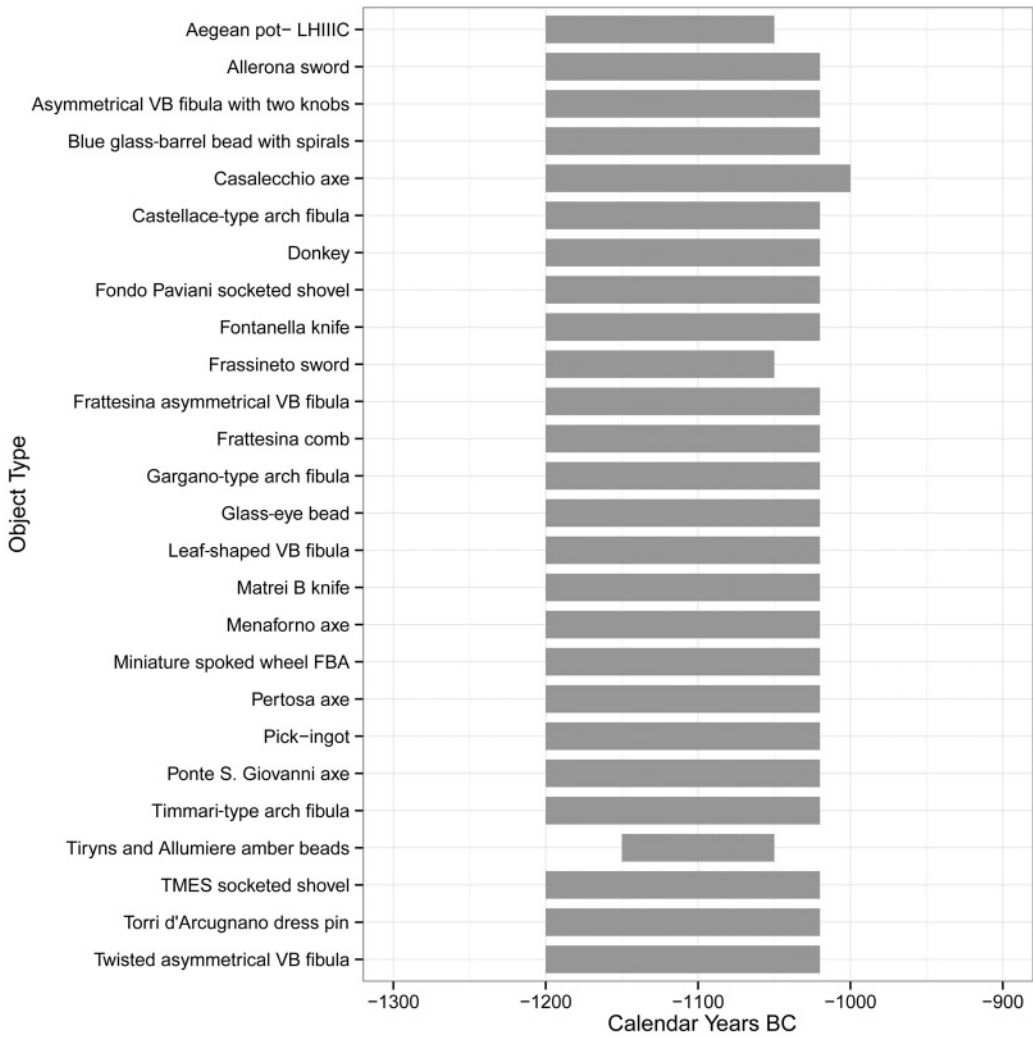
My research rests on some premises about how these exotica reached Italy and circulated there, and the significance of those visits. I explain them here.

Long-Distance Exchanges in the RBA and FBA: The Bigger Picture

This study covers the RBA and the first parts of the FBA because it is in these two periods that a significant increase in the distinctive goods discussed in this chapter occurs. This phenomenon of the proliferation of imported goods and local specialized craft production occurs to



2.1. Timeline of Recent Bronze Age object types included in the study



2.2. Timeline of Final Bronze Age 1-2 object types included in the study

varying degrees throughout the Mediterranean. By the FBA, this intensive circulation leads to a convergence of metal types across a broad area of Italy, Greece, and east and central Europe that Harding has described as a veritable “koinè.”¹ Harding sees Europe as the motor, with most of the object types originating there. These objects include tools, weapons, and dress ornaments. Common object types are swords, dress pins, fibulae, knives, daggers, razors, and axes. Although some of the objects may have been solely decorative, the new tools and weapons go

¹ Harding 1984: 11.

beyond aesthetics to involve real technological innovations. The flange-hilted swords, for example – long and sturdy and designed for cutting and thrusting – must have transformed warfare in the regions that adopted them, and increased the need for body armor to protect against slashes.² The European metal forms had numerous local variants, and although the origins of many object types remain unknown, it is clear from the rapid copying that regionalism and the localized absorption of styles prevailed over a demand for foreign exotica. In this way the forms were “naturalized,” as Sherratt has put it, rather than being imitated with the aim of passing them off as foreign objects.³ The process is quite different from the Italian copies of Mycenaean pots, which so closely emulated the originals that a semblance of foreignness must have been a goal of their makers.

Whereas in the RBA a north-south polarization is evident along the peninsula – with metals clustered primarily in the Po Valley and the Aegean-style pots in the south – in the FBA, circulation patterns change: the northern Adriatic takes on an expanded role in trade, following the collapse of the Terramare culture, and central Italy becomes an important place for the production and circulation of bronze objects. In south-east Italy, Late Helladic IIIC (c. 1200–1050 BC, hereafter LH IIIC) pots from Achaea have been found at Punta Meliso and Roca Vecchia, suggesting a continuation of long-distance trade with the Aegean, although locally made versions by this period are more common than imports.⁴

Of further interest are the means by which these goods and technologies spread across such long distances in the first place. Belardelli and Bettelli note a correlation between the distribution of the pottery known as Handmade Burnished Ware (HBW) and finds of certain bronze objects that are of probable Italian origin, such as violin-bow fibulae, in Greece.⁵ HBW is an intriguing class of pottery whose intrusive presence at Mycenaean palatial sites in levels just before and just after collapse has led some scholars to see it as the material signature of the migrating peoples who may have been implicated in the destructions.⁶ Although Belardelli

² Harding 1984: 155–65.

³ Sherratt 2000: 85.

⁴ Cultraro sees the importation of these pots to Italy coinciding with the circulation of bronze, glass, and amber – all part of this FBA metallurgical *koinè*. Cultraro 2006: 1549.

⁵ Bellardelli and Bettelli 2007.

⁶ Bankoff 1996.

and Bettelli's aim is to demonstrate the probable Italian origins of some of the HBWs, and thus the movement of Italian settlers to Greece, the association between the two categories of artifacts – that is, the bronzes and the ceramics – complicates the picture of the migrations rather than simplifying it. The HBW is typically described as a low-value ceramic repertoire for domestic consumption, the product of a marginalized group. The presence of relatively valuable bronze imports – if brought, as suggested, by the same immigrants who made the pottery – requires a reconsideration of the social status of the newcomers. Second, the hypothesized association requires that south Italian migrants settling in Greece made a conscious point of preserving their own pottery traditions in lieu of adopting the potter's wheel that by then prevailed in Mycenaean Greece, and to which they had already been exposed back home in Italy. If true, this scenario would only serve to highlight how limited the absorption of Mycenaean material culture had been in Italy, a conclusion that runs counter to the argument for close association.

In an alternative theory, Sherratt suggests that itinerant metallurgists were responsible for the spread of these bronze objects, and makes no mention of actual migrations of people permanently resettling in the east.⁷ Certainly the local variations of the object types suggest a groundedness and regionalism despite the obvious evidence of interactions, and do not require movements of peoples. As the hypothesized FBA *koinè* is contemporary with the increase in the spread of Cypriot goods to the west, Sherratt suggests Cypriot traders may have been partly responsible for the dissemination of these forms. She notes that the finds in the Aegean and eastern Mediterranean are largely from coastal sites, implying seaborne movements. She sees in LH IIIB the appearance of small Cypriot-manned boats such as the Cape Gelidonya wreck carrying mixed cargoes to the west, operating independently of the palaces.⁸ From the LH IIIB on, Sherratt argues for “increasingly direct Cypriot exploitation of long distance routes from the east to the Central Mediterranean and the Adriatic.”⁹ She argues that the fact that amber and European bronzes are circulating in the twelfth and eleventh centuries BC, at exactly the

⁷ Sherratt 2000: 85.

⁸ Sherratt 2001: 234.

⁹ Sherratt 2001: 235.

same time as the distribution of Cypriot bronzes, is not a coincidence, but rather they are all traces of the same phenomenon of FBA Cypriot ventures to the west. Her argument is that in this period, Cypriot traders opened up metals to sub-elite groups in a system of distribution that ran counter to the Bronze Age palaces, effectively undermining palatial hegemony over the metals trade. She suggests that early ironworking on Cyprus was part of the same phenomenon, with iron serving as an alternative metal that reached sub-elite markets.¹⁰ Sherratt puts the driving force behind these changes in the hands of people from the east, but what of the new materials on offer from the Europeans? While the Cypriots may have been responsible for the eastern leg of the movements, there is no evidence they were involved in any of the transalpine transmissions that must have taken place, and the rich body of material originating in central and eastern Europe that does make its way to the Aegean or the East can have had little to do with the Cypriots. Further, the Italian peninsula is in fact somewhat bypassed by the Cypriots, having yielded scant Cypriot objects and no oxhide ingots, thought by many to be made on Cyprus.¹¹ The Cypriot overthrow of the old structures of metal exchanges may have been one of the by-products of this *koinè*, but it cannot be taken as its cause.

Giardino interprets the evidence differently from Harding and Sherratt, giving the Aegean credit for jump-starting this “intensive circulation” of metal objects in the RBA and FBA.¹² Despite the fact that this circulation of metal objects and types occurs just as that of Mycenaean imports to Italy declines and then ceases, Giardino argues that this *koinè* was established by the Mycenaeans, “to provide the powerful states of the Near East with a regular supply of metals from the west.”¹³ Giardino merges the two events by proposing two metal *koinès*,

¹⁰ Sherratt 2000: 87–8.

¹¹ Lo Schiavo 2006. Cypriot tripod fragments have been found in hoards from Contigliano (Rieti) and Piediluco (Holloway 1981: 78). The tripod fragments are dated to the twelfth or eleventh century BC, but the Contigliano hoard is dated to the late tenth or ninth century BC. If the pieces were two centuries old, their origin was probably long forgotten, and one cannot posit direct contact with Cypriots to explain their presence. On the mainland, a Cypriot Rude Style sherd has been identified at Eboli, in Campania (Vagnetti and Lo Schiavo 1989: 219).

¹² Giardino 2000: 99.

¹³ Giardino 2000: 97.



with the earlier one of the RBA going into decline with the collapse in the east, affecting mainland Italy and Sicily in the process. His evidence consists of some newly fortified sites in Calabria, a destruction level in the Lipari acropolis, and a “weak echo” of troubled times in the later, classical texts such as Diodorus Siculus.¹⁴ Giardino attributes the widely distributed metal forms of the RBA to a second *koinè* emerging in the tenth century BC, after a lull, centered on the western Mediterranean and away from the Aegean. Giardino describes a major increase in metal exchanges in the western Mediterranean starting around 1000 BC, linking Sicily, Sardinia, Italy, and the Iberian Peninsula.¹⁵ He includes the western spread of iron technology as a by-product of this second *koinè*.¹⁶ The break he posits between the first and second episodes of interaction is not easily observable archaeologically (it is the period when the cosmopolitan site of Frattesina, discussed in Chapter 5, reaches its apex, after all), and it seems more likely that the shift in emphasis he notes, with the Aegean and the east dropping out of the interactions and Iberia and the west entering into them, occurs in the second phase of the same long period of interaction between the central Mediterranean and other areas. On the Aegean side of things, scholars have argued that in the tenth century BC, copper and tin were in very short supply, with iron being the primary metal.¹⁷ However, chemical analyses of Late Bronze Age (LBA) and Dark Age copper alloys in Greece show no significant drop in tin content over this period, which would be expected in the case of a bronze shortage; there is no deterioration in the quality of bronze products.¹⁸ Morris has argued that while there may have been less bronze available, it was not gone completely, and that changing preferences were partially responsible for the growing popularity of iron.¹⁹

Any explanation must draw on the evidence of the site of Frattesina, in the Veneto. Frattesina flourished from the twelfth to early ninth century BC and demonstrates that the goods circulating over long distances were

¹⁴ Giardino 2000: 102.

¹⁵ Giardino 1995: 339–41.

¹⁶ Giardino 2000: 103–4.

¹⁷ Snodgrass 1980.

¹⁸ Kayafa 2006.

¹⁹ Morris 2000: 208–16.

not just metals. Excavations there have yielded evidence of other crafts, with workshops for glass, antler, bone, and ivory. Imported materials found at the site include elephant ivory, amber, ostrich eggs, and Mycenaean pottery. Frattesina peaks in the eleventh and tenth centuries BC. It is thought to have succeeded “in part thanks to outside – Aegean – influence, and the most accredited scenario links the Aegean presence to metal prospection and the amber trade.”²⁰ The actual number of Mycenaean pottery sherds at Frattesina amounts to two, both from LH IIIC.²¹ For northern Italy as a whole, Mycenaean sherds have been found at ten sites, amounting to a handful of sherds in total.²² This is not much on which to base an Aegean presence. Borgna suggests instead that the Cypriots were responsible, echoing Sherratt’s theory that the entire metals *koinè* could be in large part attributable to them.²³ Pearce rightly suggests that the success of Frattesina need not be explained in terms of the east Mediterranean at all, although clearly some of the imports indicate connections with that region.²⁴ Perhaps more interesting in the FBA are the growing links between northeast Italy and Tuscany, which take the form of shared, finished metal types and a new preference for Tuscan copper sources over those from the previously favored south Alpine Trentino district. Pearce attributes this shift in preference, which is remarkable given that the Alpine sources were in fact closer to the Veneto, to the opportunity of getting Tuscan tin at the same time, which was not available in the Alpine region.²⁵

Beside the question of supply we may also consider the reception of these foreign objects and how the handling of the pottery differs from that of the other materials. In Adriatic Apulia, Radina and Recchia observed that Mycenaean pots are found in settlements while amber and glass beads are found in graves. As Radina and Recchia acknowledge, the absence of beads from domestic contexts is to be expected, as they easily retain their value whereas a broken pot may not, so the beads are far less likely to be lost or discarded in settlements. On the other hand,

²⁰ Pearce 2000: 110.

²¹ Vianello 2005: 125; Pearce 2000: 110.

²² Salzani *et al.* 2006.

²³ Borgna 1992; Sherratt 2000.

²⁴ Pearce 2000: 113.

²⁵ Pearce 2000: 111.



the absence of Mycenaean pots from the Apulian graves is noteworthy. Radina and Recchia suggest that whereas the beads could be fitted into local ritual practice, the Mycenaean and Italo-Mycenaean pots could not.²⁶ The more one examines this phenomenon of the intensification in the production and circulation of craft products, the more it seems too complex to be attributed to a single set of actors, and in any case, it played out differently in different regions. For the purposes of this study, what is significant is that it occurred and that the objects used in my construction of the regional networks fit into a much broader phenomenon. Let us look at each category of material and the object types included in this study in turn.

Aegean Style Pottery, Imported and Local

Finds of Aegean pottery in Italy span some 500 years, and their character and distribution change over time.²⁷ Scholars have increasingly highlighted the multivariate nature of the phenomenon of Aegean contact with Italy and its long time depth, charting the shifting distributions of imports and their variety.²⁸ We do not know for sure if the Mycenaeans brought all their material to Italy themselves, as Cypriot traders could just as easily have done so, but the fairly convincing evidence that some Mycenaean potters, at least, settled on Italian soil and made pots for some sustained period is strong indirect support for the traders being often or mostly Mycenaean.²⁹

Aegean-Italic contacts are generally organized into three phases, based on the dating of the Aegean ceramics found in Italy.³⁰ There are

²⁶ Radina and Recchia 2006: 1558–60.

²⁷ The Aegean chronology, organized conventionally into stages of the Middle and Late Helladic periods (MH and LH), is based on Manning and Wenginger (1992).

²⁸ Although Mycenaean material constitutes the overwhelming majority of the visible imports, there is a very small number of possible Minoan imports (Pálsson Hallager 1985).

²⁹ See Gillis 1988 for a useful discussion of diverse trade forms and traders in the LBA Mediterranean. See Sherratt, 2001: 222 note 17, for the point that Cypriot traders were trading Mycenaean pots in the eastern Mediterranean. For the case for Mycenaean potters in southern Italy, see Buxeda i Garrigós *et al.*, 2003.

³⁰ Vagnetti 1993. The imprecision in dating the often small Mycenaean sherds has led Vianello (2005: 43) to recommend a broader division into two phases, LHI-LH IIIA1 and LH IIIA2–LH IIIC.

apparently a few Middle Helladic (MH) III (seventeenth century BC) Aegean sherds from the indigenous site of Monte Grande in southern Sicily, but these were found in a later (LH I) context and the dating of those sherds is not universally accepted.³¹ By 1600 to 1445 BC or so (LH I-II), Mycenaean imports are securely present at a handful of sites, notably the aforementioned Monte Grande, the Aeolian Islands, the island of Vivara off the Tyrrhenian coast of southern Italy, and Capo Piccolo in Calabria.³²

In the next phase, the numbers of imports to Italy increase enormously. The period from the second half of the fifteenth through the thirteenth century BC (LH IIIA-III B) marks the peak of Mycenaean imports in Italy, contemporary with the apex of the Mycenaean civilization in the Aegean. During this time the overall numbers of Mycenaean potsherds in Italy increase, and they are found in new sites as well. It is to this period that some of the sites yielding the most numbers of sherds – notably Scoglio del Tonno, the necropoleis of southeast Sicily, and the Milazzese period villages on the Aeolian Islands – belong.³³ A few sherds are known from west-central Italy in this period, and the north.³⁴ In LH III B, production of local copies of Mycenaean pottery begins. Three main sites for the so-called Italo-Mycenaean wares are along the Ionian coast of southern Italy – Termito (in Basilicata),³⁵ Broglio di Trebisacce (Calabria),³⁶ and Scoglio del Tonno (Apulia)³⁷ – but Italo-Mycenaean wares are found in smaller numbers at many sites in southern Italy.

In LH III C1, at the end of the thirteenth century BC and in the early twelfth century BC following the collapse of the palatial centers in the east, Mycenaean-style ceramics are still widely distributed in southern Italy, but the actual imports have been largely replaced by locally made copies. Whether this was to fill the demand because the imports had dried up, or because exiled Mycenaean potters were on hand to produce them,

³¹ For the early dates for the material from Monte Grande, see Castellana 2000; Leighton (2005: 277) is not convinced.

³² Lattanzi *et al.* 1987.

³³ Vagnetti 1993: 146–7.

³⁴ Bietti Sestieri 1988: 27–8. In the north, LH III B pottery has turned up at two places (Bianchin Citton 2003).

³⁵ De Siena 1986.

³⁶ Peroni and Vanzetti 1998.

³⁷ Taylour 1958.

or for other reasons, remains unresolved.³⁸ In addition, six sites in the Veneto and Po regions of Northern Italy have yielded some Mycenaean sherds from this late phase.³⁹ Marazzi sees these northern finds as evidence of a route along which Baltic amber would travel through central Europe, down the Adriatic to the Aegean, with some Aegean goods following the reverse route in exchange.⁴⁰ However, only three of the ten sherds in the north that were tested archaeometrically were shown to be from Greece, the rest originating in southern Italy.⁴¹ By LH IIIC2, late in the twelfth century BC, a severe contraction in Mycenaean imports is evident: Mycenaean ceramic finds are limited to sites in Apulia, Broglio di Trebisacce in Calabria, and Nuraghe Antigori on Sardinia.⁴² Based on the metal finds, there is a case to be made for continued contact between Greece and Italy through the eleventh and tenth centuries.⁴³ As these metal forms are of European origin and there are very few finished objects actually exchanged, they are not proof of continued interactions between Italy and the Aegean. In any case, there are no further incontrovertibly Aegean ceramic materials found in the west for several centuries, until the eighth century BC.

In this study I use the Aegean-style ceramics from two periods in my RBA and FBA datasets: LH IIIB and LH IIIC, respectively. There are nineteen secure find spots of Aegean pottery in the RBA and thirty-four in the FBA. Many of the Aegean-style sherds found in Italy are too fragmentary and nondescript to be securely dated to one or the other of these periods, so those examples have been excluded from my dataset. I do not group according to any other criteria than chronology; that is to say, I do not distinguish according to vessel form or decoration or origin. In practical terms, with a relatively scant dataset, subdivisions would obscure any broader patterning. On theoretical grounds, furthermore, there is little reason for that degree of detail. The mixed assemblages at sites and the variegated nature of the cargos of Bronze Age trading vessels

³⁸ Differentiating between LH IIIB and LH IIIC sherds is difficult, so the exact numbers of sherds attributed to this phase must be treated with caution (Vagnetti 1993: 151).

³⁹ Bianchin Citton 2003. Unfortunately, these were all surface finds with the exception of one of the two sherds from Frattesina (Rahmstorf 2005: 669).

⁴⁰ Marazzi 2003: 109.

⁴¹ Jones *et al.* 2002: 221–61.

⁴² Mederos Martín 1999: 240–1.

⁴³ Eder and Jung 2005.

together suggest that on the supply side, the ceramics that circulated were not restricted by any of these criteria.⁴⁴ Having an Aegean-style pot of any form, variety, or origin would have been significant in its own right.

Amber

Amber reaches Italy starting in the EBA and is found throughout the peninsula. The two zones with the highest concentrations are Sardinia and northeast Italy.⁴⁵ Scholars assume amber was an exotic item and a status symbol to Bronze Age peoples, although some amber comes from local Italian contexts and its value is not clearly determined.⁴⁶ In later periods, amber was thought to have healing properties and to be sacred, but we do not know if it was similarly perceived in the Bronze Age. Apart from some exceptional figurative pieces and cylinder seals, most amber in RBA and FBA Italy takes the form of beads, pendants, and “buttons.”⁴⁷ More than sixty amber beads have been found in FBA graves in Italy.⁴⁸ Amber beads have turned up on many sites in Italy, and there is no apparent significant correlation between sites with Mycenaean pottery and those with amber beads, with only a few sites containing both.⁴⁹ Negroni Catacchio and others suggest from the evidence that prior to the Iron Age, amber circulated as finished objects rather than as unworked material to be processed at many sites.⁵⁰

Negroni Catacchio has, in a series of publications, developed a typology of the amber beads.⁵¹ Most shapes, such as discoidal beads, are too generic to be of any chronological use as they span the entire Bronze Age.⁵² The so-called Tiryns and Allumiere beads, on the other hand, with their relatively tight chronology, are particularly useful and so have received the most scholarly attention. The Tiryns and Allumiere beads are recorded at eleven and five of the find spots used in this study,

⁴⁴ Blake 2008: 16–22.

⁴⁵ Negroni Catacchio *et al.* 2006: 1465.

⁴⁶ Cultraro 2007.

⁴⁷ Negroni Catacchio *et al.* 2006.

⁴⁸ Toti 1987: 81.

⁴⁹ Vianello 2005: 90.

⁵⁰ Negroni Catacchio *et al.* 2006: 1461.

⁵¹ See Negroni Catacchio *et al.* 2006 for a recent summary of these forms.

⁵² Negroni Catacchio *et al.* 2006: 1453.

respectively. The Tiryns beads are subcylindrical with a ridge around the central part. The Allumiere beads are cylindrical with grooves encircling them. Their shapes can range from squat to narrow, and this lack of formal standardization may be the result of localized workshop production. The two types are often found together.⁵³ The find contexts for the Tiryns and Allumiere beads in Greece strongly point to a date of LH IIIC, with the earliest examples belonging to the early part of this period and the latest to Final LH IIIC, with their production and circulation ceasing in the Submycenaean period.⁵⁴

It is still debated where the beads were produced. As no Tiryns and Allumiere beads are found near the Baltic, it seems unlikely that they were worked and distributed from there. With Greece at the center of the distribution map of these objects, it is probable that they were made there and then fanned out to the west and east.⁵⁵ This raises the debate over the Mycenaean role in the circulation of amber in the western Mediterranean. The history of Baltic amber in Sicily is illuminating here. Baltic amber was introduced to Sicily in the MBA, and Cultraro for one attributes its arrival to Mycenaean traders.⁵⁶ He notes that “the distribution patterns of manufactured items of amber exactly coincide with those of glass paste ornaments,” assuming apparently that the latter objects are Mycenaean as well.⁵⁷ If Mycenaeans brought the amber, it is surprising that southern Italy, with its imported Mycenaean pottery, should yield so few amber objects. The same pattern, as we shall see, holds true for glass items. Instead, the other area of Italy that has produced quantities of both is northern Italy, but without many Mycenaean ceramics. Likewise, southern France has both amber and glass beads, but has yet to yield a single sherd of Mycenaean pottery.⁵⁸ Sardinia, the other major find spot of amber, does have Mycenaean sherds, but not in the numbers of southern Italy. It is difficult to avoid the conclusion that the Mycenaeans had little to do with the movements of amber in Italy.

⁵³ Negroni Catacchio *et al.* 2006: 1459–60. In the west, Sardinia has among the highest concentrations of the Tiryns and Allumiere beads.

⁵⁴ Cultraro 2006: 1543–4.

⁵⁵ Negroni Catacchio *et al.* 2006: 1461–3.

⁵⁶ In earlier periods, local Sicilian amber sources had been exploited (Cultraro 2007: 387).

⁵⁷ Cultraro 2007: 387.

⁵⁸ Harding 1984: figs. 17 and 24.

Renfrew suggests we avoid speaking of an amber “trade” as if that were the goal, and instead see amber’s distribution as a by-product of travel.⁵⁹ In this case, we may ask who were the travelers, if not the Mycenaean? There is much work to be done on this thorny question, but for the purposes of this study, the focus is on the distributions of the Tiryns and Allumiere beads within peninsular Italy, regardless of their place of origin.

Ivory and Antler

The first imports of ivory to Italy are recorded in the MBA, in the sixteenth–fourteenth centuries BC, as finished products. One such imported piece is a small carved duck head from Roca Vecchia in Apulia, which may have been the knob on a pyxis lid. It was made of hippopotamus tooth, and the excavator is not certain if it was carved in the Aegean or further east, but in any case it was certainly imported as a finished piece.⁶⁰ Two carved pieces of elephant ivory, one with a horned protome and one a boar-shaped “belt hook,” come from an MBA tomb at Trinitapoli, also in Apulia.⁶¹ Aside from a few objects from Sicily and some knife handles, there are virtually no attestations of ivory in Italy in the RBA.⁶² By the FBA, there is some evidence for ivory working on Italian soil, but the trade in ivory seems to have been unsystematic, with a range of raw materials (hippopotamus tooth, both Asian and African elephant tusk) arriving in both finished and unworked forms. Frattesina and Torre Mordillo show clear evidence of ivory working on site from the waste pieces found there.⁶³

Almost all of the ivory objects found in Italy are unica, with the exception of some of the combs. In addition to ivory, the combs were also made of antler, bone, and bronze. Based on their form, it seems likely that their function was to tighten the weft while weaving, although many of the fancier combs were probably not ever meant to be used.⁶⁴ The combs

⁵⁹ Renfrew 1993: 12.

⁶⁰ Guglielmino 2005: 40–1.

⁶¹ Tunzi Sisto 2005. The excavator thinks these were, in fact, locally made.

⁶² Bettelli *et al.* 2006: 907–8.

⁶³ Arancio *et al.* 1995.

⁶⁴ Provenzano 1997: 534.



were decorated with incised geometric patterns or circles, and varied widely in form, making them difficult to organize into a classification scheme. Bignozzi's typology of seventy-six MBA antler/bone examples yielded nineteen types.⁶⁵ By the FBA, most combs are found in funerary contexts, but presumably the ones that were for daily use were made of a more perishable material, namely wood, and have not survived. Instead, what have come down to us in the archaeological record are pieces with a probable symbolic rather than functional significance.⁶⁶ Among the FBA examples, the combs known as the Frattesina type are a coherent group and constitute one of the classes of objects used in my study, turning up at five of the find spots.⁶⁷ The Frattesina-type combs have a flat handle of semicircular shape with a pierced extension at the top, and are decorated with small incised circles, either with or without concentric circles inside each. There is considerable variation in the exact shapes, in the number and placement of the circles, and in the length of the teeth. The examples from Frattesina itself, as well as the one from Torre Mordillo, are made of elephant ivory, whereas those from other sites are as yet untested but may be made of other materials. Formally the Frattesina-type comb is coherent despite this variability in material.

In the FBA, as the combs suggest, ivory working becomes closely tied to that of bone and antler: the materials seem to have been used interchangeably for the same objects, and it is probable that the same craftspeople were working with both materials.⁶⁸ Nonetheless, there are certain objects that were almost always made with antler. The northeastern portion of the Italian peninsula seems to have been home to a vibrant antler-working industry. Frattesina in particular has yielded plentiful evidence of deer antler working at the site; in addition to finished products, there were also thousands of raw and partly finished pieces and discards on the site.⁶⁹ I selected four distinctive antler object types on which there is enough information to group them

⁶⁵ Bignozzi 1988.

⁶⁶ Bettelli and Damiani 2005: 17–26.

⁶⁷ Bettelli *et al.* 2006. Whereas most examples of this type fall securely into the FBA, the one from the Terramara of Santa Rosa di Poviglio is from an RBA context and has been left out of my dataset.

⁶⁸ Bettelli *et al.* 2006: 908.

⁶⁹ Bellato and Bellintani 1975.

chronologically into either the RBA or the FBA. The awl handles with shaped heads (*manici di lesina con testa sagomata*),⁷⁰ the miniature decorated wheels,⁷¹ and *zappette* (small hoes) date to the RBA.⁷² The miniature spoked wheels span the RBA and FBA,⁷³ and I have dated them according to their find context. The wheels may have been the heads of bronze dress pins; they are extremely common on Terramare settlements, as are dress pins, discussed later.⁷⁴ The awl handles have a narrower chronological range than the wheels, although the two objects are found together at many sites. The handles' distribution is clustered largely in the "Terramare" region, but with a sizeable grouping along the northern Adriatic coast. The hoes and the small spoked wheels cluster in northeast Italy, with none found along the Tyrrhenian coast and a light scattering in the south.⁷⁵ These objects clearly constitute a local industry rather than an exotic import, but the standardized forms suggest a fairly limited number of production centers. The Terramare settlements excelled at worked antler and the decorated awl handles almost certainly originated there.⁷⁶ Regardless of their exact origin, the patterns of their circulation make these objects useful markers of regional interaction.

Glassy Materials

Glassy materials in Bronze Age Italy include glass itself, glassy faience, and faience. The term "faience" in the ancient world refers to a material made of ground quartz with a silica glaze creating a surface vitrification that does not penetrate to the interior, which retains its gritty crystalline structure. Glassy faience is the term used for material in which glass is present in equivalent amounts to crystalline inclusions, and there is no sharp distinction between surface vitrification and interior matrix; the color penetrates to the core and the whole is an undifferentiated

⁷⁰ Thirty-four find spots. Pasquini 2005: 987.

⁷¹ Five find spots. Raposso and Ruggiero 1995.

⁷² Twelve find spots. Pasquini 2005: 986. Provenzano 1997: fig. 296.5–7; fig. 295.12 and 13.

⁷³ Twenty-three RBA find spots, six FBA find spots. Pasquini 2005: 989–90.

⁷⁴ The miniature wheels are also known to exist in bronze, but without a complete catalog of them, I have left the bronze examples out of this study.

⁷⁵ Pasquini 2005: fig. 1.

⁷⁶ Provenzano 1997.

vitreous mass.⁷⁷ Faience beads are first known in northern Italy from the EBA, produced locally but using technology probably originating in the Danube region. The composition of these early beads resembles Slovakian production.⁷⁸ Glassy faience appears in Italy in the early part of the MBA, when it is found in both central Italy and the north, limited to a conical button form and with a composition of LMHK (Low Magnesium High Potassium) type, which is not known in the Aegean and is considered “European.”⁷⁹ Even though the distribution range now includes central Italy, the total number of the buttons remains small, just a couple dozen.⁸⁰ This low number leads Bellintani and others to suggest that glass working was a craft that existed only as an offshoot of metallurgy, probably involving the same people.⁸¹

True glass beads make their first appearance in Italy in MBA 1–2, almost exclusively in the south, where their composition and associations with Aegean ceramic imports suggest an Aegean origin.⁸² Thus, in MBA 1–2, there is a distinction between the central and northern portions of the peninsula, with its local production of glassy faience beads, and the south, where imported glass beads are prevalent. In MBA 3, in the south and on the islands, there is an expansion in number, variety, and distribution range of both glass and faience beads, with a slight dropping off in the subsequent RBA. In central and northern Italy, the numbers are smaller, but there is still an increase from the preceding periods. In the north, the beads are found in small groups at individual sites. The bulk of all the faience and glassy faience beads from the RBA period are Aegean in typology and composition, and were either imports – or in some cases, local imitations using the High Magnesium Glass composition, brown or blue (HMBG) in the Terramare and southern Veneto.⁸³ For example, two faience openwork beads from northern Italy are of a type found in large numbers in Greece and the eastern Mediterranean from the thirteenth century BC.⁸⁴ Beads of LMHK composition, which had prevailed in the MBA, were not produced in this period. The social

⁷⁷ Noble 1969: 435.

⁷⁸ Bellintani *et al.* 2006: 1496–8.

⁷⁹ Bellintani and Residori 2003: 492.

⁸⁰ Bellintani and Residori 2003: 486.

⁸¹ Bellintani *et al.* 2006: 1501.

⁸² Bellintani *et al.* 2006: 1501–3.

⁸³ Bellintani *et al.* 2006: 1518.

⁸⁴ Rahmstorf 2005.

value of these beads seems to vary regionally in Italy. In Sicily and Apulia, large assemblages of dozens or even hundreds of beads are known from domestic and funerary contexts. In the north, the numbers are much smaller, and in at least one case seem to have been shared within a group: at the necropolis of Franzine Nuovo, nineteen beads were spread across various graves, with no grave containing more than four beads.⁸⁵ Bellintani and others see the arrival of imported glass beads in Apulia as linked to the market for Baltic amber, with the coastal groups in Apulia acting as intermediaries.⁸⁶ Two types of RBA glass beads are included in the current study: glass barrel beads with wavy lines and faience or glassy faience lenticular beads with radial incisions. In Italy, they come from five and four find spots respectively, all from northern Italy. There are comparanda of both types from the Aegean, but specific production centers are not known.⁸⁷

The picture changes in the transition to the FBA in the north, where all the faience and glassy faience beads disappear, and the quantity of glass beads in Italy grows exponentially. Some 2,500 beads are known from Italy, the majority from the site of Frattesina, which was a production center.⁸⁸ Indeed, it is the only known production center of true glass in Europe in the Bronze Age.⁸⁹ These are high-quality glass beads of blue color primarily, of LMHK composition again. The two distinct types of glass beads to emerge in the FBA are the blue-barrel beads with white spirals and the glass-eye beads, both of which are included in this study. There are seven find spots of the former and four find spots of the latter. Besides being found in Italy, they are prominent north of the Alps, in Switzerland.⁹⁰ We would seem to be observing a shift from Aegean sources in the RBA to local production in the FBA.

Bronzes

The metal industry in Italy in the RBA and FBA shows ties to the rest of Europe and to the Aegean. The key objects of the bronze industry

⁸⁵ Bellintani *et al.* 2006: 1506.

⁸⁶ Bellintani *et al.* 2006: 1511–12.

⁸⁷ Bellintani and Residori 2003: 488.

⁸⁸ Bellintani and Residori 2003: 490.

⁸⁹ Angelini *et al.* 2004.

⁹⁰ Bellintani *et al.* 2006: 1513.

are swords, daggers, razors, axes, fibulae, dress pins, and knives. Several of these evolve stylistically in an unbroken fashion from the RBA to the FBA. Bronze objects show a radically different distribution pattern from the Mycenaean pottery. Few bronze pieces are found in the south, where the bulk of the Mycenaean ceramic material lies. Bronze objects are generally found inland whereas the Mycenaean ceramics are discovered in coastal areas. That they are not present at the same sites (the bronzes are found at cult sites, hoards, and cemeteries more frequently than at habitations, while for the pots, habitations and cemeteries are the most common find contexts) may be understandable because of very different use and discard practices, but one would expect some geographic overlap at least. These differences in distribution patterns are surprising given the presence of some of these bronzes in Aegean contexts. If the Aegean pots and Italian bronzes were two sides of the same exchange systems, then we might expect to find the remnants of both concentrated – or at least present – at the major sites, but this is hardly the case. This is further evidence that the exchange system was not a simple bilateral one. Typologies for the bronze object types have been developed over many decades, using dated parallels in Greece and Europe to date objects from hoards and grave assemblages in Italy. The main Italian FBA hoards include the Surbo group, Gualdo Tadino, Piano di Tallone, Mottola, and Coste del Marano hoards. Most of these hoards are thought to belong to founders because they are composed of broken pieces, bars, and ingots.⁹¹

In the RBA and FBA, northern Italy stands out for the quantity and diversity of the bronze objects found there, first in the Terramare and pile dwelling sites, and then, in the FBA, in the Veneto. South of the Po River, bronze finds are fairly limited before the Iron Age, although the numbers observed in the RBA and FBA represent a marked increase from the MBA. From each category of bronze object, there are several types whose distributions in the peninsula may usefully be treated as data for this study, based on quantity of find spots and secure dating. The work of Bianco Peroni and others in the relevant volumes of the *Prähistorische Bronzefunde* has been essential in the construction of the dataset.⁹² The object types I have selected do not constitute a comprehensive list of all the objects

⁹¹ Bietti Sestieri 1973: 385.

⁹² E.g., Bianco Peroni 1976; 1979; 1994; von Eles Masi 1986; Lo Schiavo 2010.

circulating or even all the find spots of each type, but rather, these particular types benefit from both well-published find spots and sufficient numbers to be of use. The metal industry's character changes between the RBA and the FBA. In the RBA, also known as the Peschiera horizon after the northern site of Peschiera del Garda with its extensive bronze finds, production is centered in the north. Bronze objects cluster in the north and there are virtually no hoards in the south.⁹³ In the FBA, the Protovillanovan period, with the fall of the Terramare culture, production shifts more toward west-central Italy and the south. Bietti Sestieri sees "regional spheres of bronze production" in the FBA in Italy,⁹⁴ but the broadly similar forms across the peninsula point to interregional ties as well.

Knife

Six closely related knife types are included in this study, of which four are dated to the RBA, and the rest to the FBA 1–2. Based on their find contexts, knives seem to have been used at times as tools and at other times, as weapons.⁹⁵ The early ones may have been used for thrusting, such as a dagger, as much as for cutting, given the sharpened tip. Some are found as votive offerings on mountains or in rivers, which is typical of the handling of weapons. But large numbers also come from settlements, so they probably had a practical function as a tool, not just a weapon. Further, the knives turn up on some occasions, particularly in the south and a bit later but also in the RBA, in female graves and male graves without weapons, which further indicates a different function than weaponry. In the north the links with male graves containing other weapons are more consistent, but they nonetheless seem to have had multiple functions.⁹⁶

Most knives are found in northern Italy in this period. Of the RBA types, the Baierdorf variety is known from four find spots,⁹⁷ Matrei A from seven,⁹⁸ and Montegiorgio from four.⁹⁹ The only RBA knife

⁹³ Bietti Sestieri 1973: 385.

⁹⁴ Bietti Sestieri 1973: 410.

⁹⁵ Bianco Peroni 1976: 97.

⁹⁶ Bianco Peroni 1976: 97–101.

⁹⁷ Bianco Peroni 1976: 13–14.

⁹⁸ Bianco Peroni 1976: 16–19.

⁹⁹ Bianco Peroni 1976: 12–13.



thought to originate in southern Italy is the Scoglio del Tonno type, found at four secure sites, three of which (including the type site) have also yielded Aegean pottery.¹⁰⁰ The FBA types are Fontanella (seven find spots)¹⁰¹ and Matrei B (five find spots).¹⁰² All the knives are flange-hilted, with holes of varying size and number along the center of the tang. The hilts end in open rings (Baierdorf; Matrei B, usually; Montegiorgio) or prongs (Scoglio del Tonno, Matrei A). The Montegiorgio type has a blade with an almost straight-cutting edge and a convex back. The other knife types are all carp's-tongue varieties, with the blade narrowing into a thin point.¹⁰³

Daggers

Twelve dagger types are included in this study, all dating to the RBA. Some, such as the Bertarina dagger, may be dated more precisely to RBA 1 whereas the Torre Castelluccia dagger seems to belong to RBA 2.¹⁰⁴ However, for the most part, these chronological subdivisions are difficult to establish; therefore, throughout this study I use RBA more generally. The blades are all leaf-shaped with the exception of the Merlara dagger, whose blade is slightly concave below the hilt. They are distinguishable from each other by the treatment of the handle, either flange-hilted (Bertarina,¹⁰⁵ Gorzano,¹⁰⁶ Merlara,¹⁰⁷ Pertosa,¹⁰⁸ Tenno,¹⁰⁹ Toscanella¹¹⁰), with an ogival tang (Fornovo S. Giovanni,¹¹¹ Glisente Type B,¹¹² Monza,¹¹³ Torre Castelluccia¹¹⁴), or a triangular

¹⁰⁰ Bianco Peroni 1976: 14–15.

¹⁰¹ Bianco Peroni 1976: 19–20; De Marinis 1999: 532.

¹⁰² Bianco Peroni 1976: 16–19.

¹⁰³ Bianco Peroni 1976: 14–15.

¹⁰⁴ Damiani 2010: 395–6.

¹⁰⁵ Twenty-three find spots. Bianco Peroni 1994: 157–61.

¹⁰⁶ Five find spots. Bianco Peroni 1994: 152–3.

¹⁰⁷ Fifteen find spots. Bianco Peroni 1994: 154–6.

¹⁰⁸ Fifteen find spots. Bianco Peroni 1994: 149–52.

¹⁰⁹ Five find spots. Bianco Peroni 1994: 156–7.

¹¹⁰ Twenty find spots. Bianco Peroni 1994: 164–6.

¹¹¹ Bianco Peroni 1994: 120–1. Six find spots.

¹¹² Six find spots. Bianco Peroni 1994: 138–40.

¹¹³ Four find spots. Bianco Peroni 1994: 132.

¹¹⁴ Forty-three find spots. Bianco Peroni 1994: 122–30; Percossi *et al.* 2005: fig. 3.13; Sabbatini and Silvestrini 2005: fig. 4.3.

tang (Redu¹¹⁵). Exceptional in this group is the Voghera dagger, with an openwork handle ending in a ring.¹¹⁶ The flange-hilted varieties belong to the broader group commonly known as “Peschiera daggers.” The most prevalent of the dagger types is the Torre Castelluccia dagger, found at forty sites. It is characterized by an ogival tang with a single hole through it and a lanceolate-shaped blade. This type’s dense clustering in the north suggests a production center in that region, even if several examples made their way further south down the peninsula.¹¹⁷ The fifteen known find spots of the Pertosa dagger span the Italian peninsula, and the fact that the majority come from the center and south of the peninsula has led Bianco Peroni to suggest a production center in that region.¹¹⁸

Razors

The only razor included in this study is the Scoglio del Tonno razor, characterized by a blade with a concave edge and a large aperture in the center.¹¹⁹ It has been found at ten secure find spots and dates to the RBA. Aside from the type site, it has been found exclusively in the north, as indeed are most of the razors of all varieties in this period.¹²⁰ They were presumably made in the north, therefore.

Fibulae

Nine types of fibula are included in the study, of which two are from the RBA and seven are from the FBA. The twisted violin-bow fibula of the RBA, found at fifteen find spots, is one of the earliest of the violin bow fibulae. This fibula takes the characteristic form of its class, with the bow running parallel to the pin in the manner of a safety pin, or

¹¹⁵ Seventeen find spots. Bianco Peroni 1994: 143–5.

¹¹⁶ Eight find spots. Bianco Peroni 1994: 170–1.

¹¹⁷ Bianco Peroni 1994: 122–4. This type is subdivided into three varieties: A, B, and C, but the differences are minor and not chronological, so I have grouped them together here. Variety A has a more marked shoulder than B and C, and is the one with find contexts outside the Po Valley.

¹¹⁸ Bianco Peroni 1994: 152.

¹¹⁹ The more famous Pertosa-type razor was excluded because it spans the RBA and early FBA (Bianco Peroni 1979: 12–14).

¹²⁰ Bianco Peroni 1979: 9–11.

more precisely, resembling the object that gives it its name. On the twisted violin-bow variety, the bow wire is twisted to varying degrees of tightness. It has a flattened pin rest and a spring composed of one revolution of the wire to provide the tension. It is found primarily in northern Italy at Terramare sites, but a few are located further south. In addition to the examples from Italy, several are known from sites in Greece, including Mycenae, Korakou, and Sparta.¹²¹ Also from the RBA is the violin bow fibula with two knobs, found at four sites in central and southern Italy, in addition to examples from Lipari.¹²² Of the varieties of violin bow fibulae dating to the FBA, their appearance can be gathered from their names: the asymmetrical violin-bow fibula with two knobs,¹²³ the Frattesina-type asymmetrical violin-bow fibula,¹²⁴ the leaf-shaped violin-bow fibula,¹²⁵ and the twisted asymmetrical violin-bow fibula.¹²⁶ In the case of the fibulae with knobs, the bow wire thickens to form a knob at each end, one just before the pin rest and one just before the spring. On the leaf-shaped fibulae, the bow wire is flattened and widened into a leaf shape, and the flattened surface is decorated either with bosses or geometric incisions. Three of the fibulae in the study are arch fibulae, in which the bow forms a semicircle above the pin. The Castellace arch fibula, from seven find spots, has a bow that is slightly squashed in the central part, sometimes oval or square in section, and decorated with incised lines as the arch descends toward the spring and the pin rest.¹²⁷ The Gargano- and Timmari-type arch fibulae are very large, with the Timmari type in particular ranging from 13–23 cm in length. The types are very similar and Bietti Sestieri combines them into a single category of arch fibulae.¹²⁸ Both types are decorated with incised lines such as

¹²¹ Von Eles Masi 1986: 2–4; Lo Schiavo 2010: 85–6.

¹²² Lo Schiavo 2010: 87.

¹²³ Six find spots. These can be with or without incised decoration on the bow. Von Eles Masi 1986: 11–12; Lo Schiavo 2010: 89–90.

¹²⁴ Five find spots, primarily in the northeast. Von Eles Masi 1986: 5.

¹²⁵ Five find spots, all in central and southern Italy; incised and impressed decoration on the flattened bow. Lo Schiavo 2010: 91.

¹²⁶ Seven find spots. This type combines von Eles Masi's two types: the fibula ad arco di violino asimmetrico ritorto tipo Boccatura del Mincio and the fibula ad arco di violino asimmetrico alto ritorto tipo Frattesina, as the two differ very little. On the Frattesina variety, the arch is slightly higher than that of the Boccatura del Mincio type. Von Eles Masi 1986: 5–7.

¹²⁷ Lo Schiavo 2010: 99–101.

¹²⁸ Bietti Sestieri 1998: 24.

zigzags or herringbone patterns, with the Timmari type, in particular, fully covered in such designs. On both types, in the place where knobs are located on some varieties of violin-bow fibulae, there are groups of two or three raised rings, usually closely spaced. The find spots of the three arch types are all in the southern part of the peninsula.¹²⁹

Swords

Seven sword types are in this study, five from the RBA and two from the FBA.¹³⁰ Of the RBA types, the Cetona and Montegiorgio types are variants of the Naue II flange-hilted sword, a cutting sword widely distributed through Europe and the Mediterranean. The Cetona type has four holes in the hilt and two or three on each shoulder of the blade. The eight peninsular find spots include deposits in water, in a mortuary assemblage in a cave, and on a mountain peak. These swords are distributed inland down the Apennines as far as Abruzzo.¹³¹ The Montegiorgio sword blade is much narrower than its semicircular shoulders, and the hilt has either one or no hole, except along the shoulders themselves, where several holes are found. The nine examples from secure contexts have been found in ritual contexts, including two securely in watery deposits, one in a funerary context, and one on a mountain. Bianco Peroni suspects that others from the Veneto region whose provenance is not known were probably found in watery contexts as well, although their find information has been lost. The type spread throughout peninsular Italy.¹³²

Another class of RBA swords is the tanged swords. Of these, the Arco,¹³³ Monza,¹³⁴ and Terontola¹³⁵ types are included in this study. The Monza sword's blade is long and thin with narrow shoulders. The tang flares out briefly above the shoulders and then narrows, ending in a point. These are found exclusively in the subalpine northwest zone. The Arco and Terontola swords' tangs both thicken at their terminals, and

¹²⁹ Gargano: four find spots. Timmari: five find spots. Lo Schiavo 2010: 101–3.

¹³⁰ The well-known Pertosa sword is not included here as it covers too broad a chronological range, spanning the end of the MBA and the RBA (Bianco Peroni 1970: 23–7).

¹³¹ Bianco Peroni 1970: 63–5.

¹³² Bianco Peroni 1970: 57–61.

¹³³ Five find spots. Bianco Peroni 1970: 33–4; Pellegrini 1993: 79.

¹³⁴ Five find spots. Bianco Peroni 1970: 30–3.

¹³⁵ Seven find spots. Bianco Peroni 1970: 35–7.



the blades are short and wide. The main difference between the two types is that the Arco sword's shoulders have two holes and the Terontola type does not. Both types are mostly found in the north.

The two FBA sword types in this study, Allerona¹³⁶ and Frassineto,¹³⁷ are both flange hilted. The Allerona sword is an Italian variant of the Letten type from central Europe.¹³⁸ Its distinctive feature is a rectangular extension at the end of the hilt, between the two prongs. There are one or two holes on each shoulder and one or two more on the main part of the hilt. Like the Cetona sword, the four known examples come from the central Apennines. The Frassineto type's blade is relatively short, and the prongs at the hilt terminal are generally well defined. The shoulders have two or three holes, as does the hilt itself. This smaller and more lightweight sword must have been much easier to wield in combat, and constitutes an innovation. Three of its four find contexts are watery deposits.¹³⁹

These swords in their distribution do not conform to the regional clusters of the other artifacts considered here. Rather, they are scattered, separated by considerable distances. This, together with the often apparently ritual nature of their deposition, suggests a very different disposal pattern than observed with the other objects. To put this in concrete terms, more than 35 percent of sword find spots are secure ritual deposits, while ritual deposits make up less than 10 percent of all the find spots in the study. Rarely do the swords turn up in graves, and never on settlements. This variability suggests a counterpoint to the regionalism of many of the other objects' distributions. The swords seem to have been transported long distances and then deposited in what may have been pan-regional cult sites. Such cult sites may have aided communication between disparate groups.

Dress Pins

Bronze dress pins, consisting of one long (c. 7–20 cm) rod with no pin rest and a distinctive head, are among the most common personal ornaments found in Italy from the RBA and FBA. They are thought to have been

¹³⁶ Five find spots. Bianco Peroni 1970: 67–71; de Marinis 1999: 532.

¹³⁷ Bianco Peroni 1970: 64–7.

¹³⁸ Bianco Peroni 1970: 71.

¹³⁹ Bianco Peroni 1970: 64–7.

affixed to clothing in various ways or, less commonly, used as hair pins. As a class of object they do not seem to have been reserved exclusively for either men's or women's clothing, although some cemeteries show apparent gender differentiation in their distribution.¹⁴⁰ Nine dress-pin types are included in this study, eight from the RBA and one dating to the FBA. Of the RBA types, the Bacino Marina,¹⁴¹ Garda,¹⁴² Peschiera¹⁴³ and Santa Caterina¹⁴⁴ types all present variations on a decorative theme of folding the wire in the upper part of the rod and spiraling it to form the terminal, and belong to a class that Carancini in his typology has labeled *spilloni a spirale*. These types are most common in the north, very often from settlements, but some examples do find their way to central and southern Italy. The Guado di Gugnano¹⁴⁵ and Boccatura del Mincio¹⁴⁶ types both have enlarged biconical heads, but differ in that the Boccatura del Mincio rod is perforated just below the head, and the Guado di Gugnano type is perforated farther down the rod at a point where the rod thickens, with incised decorations in that zone. The Guado di Gugnano type is also much bigger. The Cataragna type resembles the Boccatura del Mincio closely in its small size and perforation just below the head, but the head is globular instead of biconical. It is found almost exclusively in the north, with twenty-six examples from Peschiera del Garda alone.¹⁴⁷ The Capocchia a Papavero dress pins are small, with a straight plain rod and a head in the shape of a poppy, with some incised decoration on it. They are also only found in the north, from five find spots.¹⁴⁸ The only FBA type included in this study, the Torri d'Arcugnano type, is found in the northern and central parts of the peninsula. It has a biconical head of varying size and sometimes some incised lines encircling the upper part of the rod, but is otherwise quite plain.¹⁴⁹

¹⁴⁰ Carancini 1975: 379–81.

¹⁴¹ Nine find spots. Carancini 1975: 126–8.

¹⁴² Five find spots. Carancini 1975: 129–30.

¹⁴³ Eight find spots. Carancini 1975: 130–33.

¹⁴⁴ Nine find spots. Carancini 1975: 122–6.

¹⁴⁵ Eleven find spots. Carancini 1975: 172–3.

¹⁴⁶ Five find spots. Carancini 1975: 176–8.

¹⁴⁷ Eight find spots. Carancini 1975: 179–80. Moscosi di Cingoli is the only find spot outside of the far north (Sabbatini and Silvestrini 2005: fig. 4:9 and 13).

¹⁴⁸ Carancini 1975: 236–7.

¹⁴⁹ Fifteen find spots. Carancini 1975: 226–7.

Axes

The absence of a comprehensive catalog of the Bronze Age Italian axes has prevented the inclusion of many of these objects in this study.¹⁵⁰ Nonetheless, we will work with what we have. Four axe types are included in the study, all from the FBA. The Pertosa,¹⁵¹ Ponte San Giovanni,¹⁵² and Casalecchio¹⁵³ types are all winged axes, differing in the shape of the wings and the concavity of the blade. The Menaforno axe is a shaft-hole type found at five sites, all in the central Apennines.¹⁵⁴ The Pertosa type is found all over the peninsula, but with a predominance in the central zone, and the Ponte San Giovanni and Casalecchio types are similarly dispersed. The function of axes is determined by their orientation on the handle. Those attached parallel to the handle may have been weapons, whereas those attached perpendicularly to the handle could have been weapons also, but may have been for chopping wood instead.¹⁵⁵ In the absence of preserved wooden handles, the shape of the axe head and the location of its shaft hole, if present, can allow inferences about its original position. Finds' contexts of axes provide further information: those found in graves, often in male graves with objects that are clearly weapons, were probably weapons. Thus, one of the find spots of the Menaforno type is a grave containing two knives and an Allerona sword, which by association suggests the axe was used as a weapon. All the other examples were found in hoards, rendering their function indeterminate.

Socketed Shovels

Socketed shovels are a feature of Italian hoards of the FBA. The shovels group into two main types, the Fondo Paviani type¹⁵⁶ and the "Tra Manciano e Samprugnano" (TMES) type,¹⁵⁷ both of which are included

¹⁵⁰ The second volume of Carancini's catalog of axes in Italy is eagerly awaited. The first volume, although entitled *Le asce nell'Italia continentale II* because it covers the later axes, appeared in 1984 and Volume I has not appeared yet.

¹⁵¹ Sixteen find spots. Bietti Sestieri 1973: 399.

¹⁵² Seven find spots. Bietti Sestieri 1973: 399.

¹⁵³ Five find spots. Bietti Sestieri 1973: 399.

¹⁵⁴ Carancini 1984: 199–200.

¹⁵⁵ Carancini 1984: 236.

¹⁵⁶ Four find spots; Bellintani and Stefan 2008: 11.

¹⁵⁷ Nine find spots; Bellintani and Stefan 2008: 11–12.

in this study. The former is thought to be slightly earlier than the latter, although they are found at some of the same sites. The two types differ in the relative width of the shoulders: the Fondo Paviani type is narrow shouldered and the TMES type is wide shouldered. Both may have been produced at Frattesina. The TMES type is often found in hoards with pick ingots, discussed later in this chapter. The function of these socketed shovels is uncertain. The wear on the blade strongly suggests they were not simply ingots, but did have a purpose as a tool. Some have suggested they were used as chisels, or scrapers, or some generic cutting tool, or as agricultural implements. Because they are often found in hoards with metallurgical tools, one theory is they are somehow used in metallurgy.¹⁵⁸

Pick Ingots

One bronze object type included in this study, the pick ingot, falls outside the standard group of finished objects. This ingot (*pane a piccone* in Italian) is present in a number of hoards dating to the FBA, and has been found in seven secure find spots. The pick ingots are in the shape of pick-axe heads, but differ from the actual tools by the rough surface on one side because they were made in an open mold, and a rough percussive edge not sharpened for working. Sometimes the central shaft hole is missing. When a hole was present, if it was not intended for a handle – as would be the case for an actual pick – it may have helped in the extraction of the ingot from the mold. The pick ingots span the entire FBA, according to Pellegrini.¹⁵⁹ They are found in France, Switzerland, and the Balkans, and the variations in mineral make up, with the percentages of tin deviating widely, point to multiple production centers.¹⁶⁰ Pellegrini thinks the form originated in the Alpine region and then spread out, probably by means of trade routes down the Adriatic and eventually on to Greece.¹⁶¹ The Italian examples' find spots are in the northern and central parts of the peninsula.

¹⁵⁸ Bellintani and Stefan 2008: 5.

¹⁵⁹ Pellegrini 1989: 590–1.

¹⁶⁰ Pearce 2000: 113.

¹⁶¹ Pellegrini 1989: 593.



Donkeys

Finally, the early introduction of the donkey may be understood as a technological innovation of sorts whose distribution can be mapped in the manner of any other object. Donkey bones are known from one site in the RBA and eight sites in the peninsula in the FBA. Donkeys are excellent pack animals, and as such would have facilitated overland exchanges between regions of Italy; indeed, Brodie has argued for the Aegean that donkeys made possible long-distance overland bulk transport for the first time.¹⁶² Although the extent of the donkey's early exploitation in Italy is unknown, it certainly had the potential to make a major impact.

The wild ass had probably first been domesticated by the fourth millennium BC in Egypt and western Asia, spreading to the Aegean by the third millennium BC.¹⁶³ The earliest context for domesticated donkey in Italy is in RBA strata at Coppa Nevigata, in Apulia, where molars were retrieved.¹⁶⁴ Subsequently, several FBA sites including Luni sul Mignone in central Italy and Frattesina in the north have yielded donkey remains.¹⁶⁵ De Grossi Mazzorin attributes the donkey's introduction to contacts with the eastern Mediterranean, noting the absence of early donkey remains from northern Italy – with the exception of Frattesina, famous for its eastern Mediterranean contacts. As Renfrew has noted, the introduction of a new technology or product can happen long before it is actually adopted, and it is the latter moment, rather than the introduction itself, that is of greater significance.¹⁶⁶ With scant traces of the donkey in the RBA and FBA in Italy, the donkey's impact had yet to be felt in these periods, so is better treated as an exotic artifact than a change in practices. This distribution of early donkey remains is limited, but does suggest a pattern of south-to-north spread, with the earliest reaching southern Italy before spreading north. This contrasts with the arrival of the horse, which spread from north to south.¹⁶⁷ In fact, the largest cluster of sites yielding donkey remains is in west-central Italy,

¹⁶² Brodie 2008.

¹⁶³ Sherratt 1983: 96; Clutton Brock 1992: 65.

¹⁶⁴ Bokonyi and Siracusa 1987: 207.

¹⁶⁵ De Grossi Mazzorin 1998: 174. Cf. Tagliacozzo 1994: 620–1.

¹⁶⁶ Renfrew 1978: 90.

¹⁶⁷ De Grossi Mazzorin 1998: 174.

an area with relatively little evidence of East Mediterranean contacts in this period. More studies of faunal remains from Italian sites of the RBA and FBA will hopefully clarify the picture, but in the meantime, the donkey find spots may be incorporated into the peninsular networks here.

Reconstructing Patterns of Interaction from Traceable Objects

Interactions between sites involve some combination of the movements of goods, peoples, and ideas. Of these three, the movement of goods receives the most attention from archaeologists, but on occasion, communication may have been the perceived goal, more so than profit derived from commerce.¹⁶⁸ Luckily for archaeologists, at least some exchange of material objects is the norm in interactions between groups that lack the shared structure offered by say, monetary systems.¹⁶⁹ Therefore, it is not unreasonable to expect a material residue of interactions between regions, and this is what archaeologists count on. As Upham notes, “The appearance of nonlocal commodities and their incorporation into local material assemblages is probably only the most visible (and maybe least important!) aspect of [the linkage of groups].”¹⁷⁰ An absence of a single recognizable import from Region A to Region B and vice versa does not preclude the possibility of interaction between A and B altogether, but it makes it extremely difficult to argue for such contacts. Of course, the presence of an import is not *sufficient* to prove direct interaction between Regions A and B, but such an import is virtually necessary.

In regions where, as mentioned earlier, interactions are to be expected, the mere presence and absence of imported objects is of limited interest. Instead, scholars wish to characterize those interactions, whether in terms of their nature, their scale (that is, degree of intensity), and their impact or significance. In prehistoric contexts there is no way to determine the particular combination of the material and immaterial bundled into each interaction. These bundles may fall anywhere between the two extremes Renfrew describes – “exchange of goods without a

¹⁶⁸ Renfrew 1993.

¹⁶⁹ Renfrew 1975: 6–7.

¹⁷⁰ Upham 1992: 150.



wide range of accompanying information, and exchange of information without goods”¹⁷¹ – although as mentioned earlier, we can usually expect some materials to change hands in ancient societies. Further, the myriad problems in archaeological recovery mean that what is found cannot be treated with confidence as a direct measure of what was originally imported.¹⁷² Therefore, the quantity of material objects that were retrieved signals one unknown portion of the total interaction, and as prehistoric archaeologists can only get at the interactions that leave behind material traces, we may underestimate the extent of other, more ephemeral encounters – or miss them altogether.

Given the problems inherent in relying solely on identifiable imports, is it possible to use other evidence for interactions instead? Attempts have been made to quantify interaction intensity in other ways besides imports. Plog’s study of the frequencies of shared design elements in neighboring Olmec communities’ pottery is one such example;¹⁷³ Kristiansen and Larsson’s study of Bronze Age Europe is another example, with immediate relevance to the current study. In it, the authors attempt to move beyond the limitations of the material evidence to argue that in the Bronze Age, ideas, technologies, and raw materials flowed between northern Europe and the Aegean and the East Mediterranean rather than finished goods.¹⁷⁴ Therefore, the evidence for Kristiansen and Larsson’s deeply connected Bronze Age world is not the expected imports, of which there are very few. They emphasize ideas and raw materials changing hands rather than a high volume of finished products being moved. Indeed, they critique Harding’s downplaying of the Mycenaean influence on Europe,¹⁷⁵ saying he gives too much attention to finding identifiable imports when loose local imitations inspired by the foreign objects are more indicative of profound influences.¹⁷⁶ Similarly, Cazzella has used resemblances in design elements on various objects in the Aegean and central Mediterranean to argue for contacts between those areas from the third millennium BC, in spite of an absence

¹⁷¹ Renfrew 1975: 6.

¹⁷² Renfrew 1975: 40–1.

¹⁷³ Plog 1976.

¹⁷⁴ Kristiansen and Larsson 2005.

¹⁷⁵ Harding 1984.

¹⁷⁶ Kristiansen and Larsson 2005: 16–9.

of identifiable imports in that period.¹⁷⁷ Although the purposeful copying of foreign objects and their appropriation into a local culture are undeniably important, it seems improbable that this could happen in the absence of actual imports as models. Kristiansen and Larsson employ the sequence “transmission, transformation, and institutionalization” to model the mechanisms of diffusion, but without evidence of direct transmissions, the model remains contentious.¹⁷⁸ The shared symbols that Kristiansen and Larsson identify are those of the elites, as they themselves observe,¹⁷⁹ so there is no way to know to what extent these symbols resonated with the majority of the population. We must therefore continue to rely on the imports themselves to gauge the nature, intensity, and impact of interactions, bearing in mind all the while the limitations of the empirical evidence. What is different in my study is that, based on the premise that Bronze Age trade – even when involving goods from long distances – was inherently local in its structure; the interactions being revealed are primarily at the regional level, not the interregional one. The theoretical position underpinning this approach will be examined in Chapter 3.

¹⁷⁷ Cazzella 1999.

¹⁷⁸ Kristiansen and Larsson 2005: 27; see Nordquist and Whittaker 2007 and Kristiansen and Larsson 2007.

¹⁷⁹ Kristiansen and Larsson 2005: 126.