

ARCHAEOLOGY — DESIGN



This post is in a series of commentaries on a class running at Stanford, Winter Quarter 2010 – “Transformative Design” ENGR 231 – [\[Link\]](#)



Everyday detritus – Roman – the indeterminate quotidian

Today I ran a session about archaeology and design. (A tighter focus than my recent case for pragmatology and pragmatogony – [\[Link\]](#))

I think I took on too much, tried to say too much. There's so much ground work that needs to be laid before we can communicate across the spaces that separate the likes of industrial design and archaeology. I decided to pull together some rather abstract points.

Here they are, with something of a case study (an ancient Corinthian perfume jar).

1. Archaeology is as much a design process itself as it is the study of the history of design – archaeologists work with what is left of the past to make knowledges, experiences, narratives This is not a superficial observation; it involves the pragmatic methodologies and disposition of archaeology, captured in the concept of abductive reasoning.

2. Archaeology best understands things through a pragmatic methodology, both analytic and interpretive, of immersion *in medias res*. Like design thinking.

3. The key concept of assemblage. The thing as a gathering. The primacy of dispersal and distribution. You have to do a lot of work to understand needs and functions.

4. The ubiquitous character of human innovation and creativity. Rooted in the duality of structure, that society is both the medium and outcome of human practice. Every action reproduces society, and simultaneously holds the potential of change.

5. Innovation and creativity cannot be understood without relation to the *active processes* of tradition. Given the creativity of human practice, tradition is the active management and suppression of change.

6. Fallacies of expression and context. Things are active and don't just express something else like society or culture of the intentions of their maker. Making things makes people. Focus on processes – not objects with attributes. [Link]

7. Indeterminacy and underdetermination. Making is underdetermined by the designer's intentions and knowledge of the world and of people. Our human lifeworlds are not reducible to causal and determinate systems.

Much of what I have to say can be found summarized in a piece I wrote called "Nine archaeological theses on design" – [Link] Included are two detailed case studies.

Here is one. I know I am off the central point of our class- to share the process of design thinking directed at changing behavior. But our mission is also to cross borders and pull together diverse approaches to our world of things. There's a lot of ground work to be laid. We have to take diversions to get to our goal. I hope this one is worthwhile. It describes research I did in the 1990s. It is kind of a reverse-engineering of an ancient perfume jar.

It is about the work that things can perform in changing the world. Things connect; and the task of a designer is to manage these articulations.



The Macmillan aryballos – a perfume jar

Art and material culture have long been seen as direct evidence of the cultural miracle of ancient Greece. Corinth, on the isthmus of Greece, in the eighth and seventh centuries BCE, was one notable place in this time of urbanization, as city states crystallized across the Mediterranean, and within only a few decades. Conventional accounts place the Corinthians at the heart of this process of innovation. This has been seen as finding expression in material culture: the potters of Corinth produced high quality goods for an export market (even if we question the existence then of a fully functioning international market, the fine wares do certainly travel far and wide). Corinthians have also been seen to be at the forefront of the developments in political economy, with their early centralized tyranny. And a vanguard in the fine arts: since the late eighteenth century ancient Greek ceramics has been treated as fine art. The Corinthians led the way with a resurgence of figurative design, drawing on Near Eastern forms and schemata.

This research project of mine aimed to understand the design of ceramics at what has been taken as a pivotal historical juncture—the beginnings of classical Greek art.

By 750 BCE the walls of a typical wine cup made in Corinth were eggshell thin, pale buff and covered with ruled black lines, reserved spaces for triangles, outlined lozenges, schematic water birds lined in soldier files. It was a tight and terse visual vocabulary. The firing process, to effect dark on light surface, required careful manipulation of kiln atmosphere. With regulated techniques, expert kiln management and using multiple brushes and a turntable, the potters had the making of ceramics well worked out—risk and experiment minimized in producing the finest wares of their time.

And then, within a generation, the potters did something radically new. First, they made miniatures a specialty, particularly the famous perfume jars (aryballoi) that were sent all over the Mediterranean to be dedicated as gifts to gods in temple sanctuaries, and to be laid down with the dead in so many colonial and provincial cemeteries. Second, they began painting polychrome figures free hand and with details incised through the paint. At risk of messing up the design with the slip of the super-fine brush dipped in clay slip, the potters made daring displays of

technical facility in tiny scenes of animals, monsters, men fighting, stylized flowers. In the terms of David Pye, they shifted from a workmanship of certainty to one of risk.



2a. H. 1000.

Fig. H. 1000.



2c.



2d.



2b.

The changes

This is conventionally termed Protocorinthian pottery. The ubiquity of the Protocorinthian perfume jar, the aryballos, makes it a type fossil and chronological index for much of the Mediterranean in the mid first millennium BCE. Find an aryballos and its distinctive style will give you the date of the find spot.

Previous study has been almost entirely within an art historical tradition, with Protocorinthian positioned in the developmental sequence of Greek art as a new inception of figurative design. Most of this work has aimed to identify chronological sequence through the comparison of stylistic traits. Protocorinthian is thus phased as early, middle and late, and takes special position in the traditional ancient Greek design sequence of geometric, orientalizing, archaic, and classical, as geometric receives external inspiration on the way to classical florescence. The figurative scenes have attracted iconographic interpretation—attempts to identify characters and narratives, especially from

Greek myth, through comparative examples. This has assumed a separation of iconography and decoration, certain scenes bearing meaning, others, especially the floral patterns, treated as devoid of meaning—"decorative". Following paradigms of nineteenth century connoisseurship, attempts have also been made to relate the stylistic sequence to individual artists; the orthodox art historical narrative here is one of the genius of Greek artists reconfiguring the stylistic vocabularies of the stagnant and despotic Near East.

I started my research with the stylistic sequence. Unfortunately I found the fine chronologies suspect due to a lack of independent stratigraphical substantiation (a problem of context), and because the phasing was dependent upon a presupposition of stylistic development (early, mature, late) handed down from the kind of eighteenth century art history popularized by Winckelmann and others. Understanding design in orthodox archaeological treatment of classical ceramics is dependent upon iconology and a model of art workshops commonly associated with post renaissance art history, as well as Beazley's Classical archaeological connoisseurship in the tradition of Morelli. I proposed that the conventional categorization of Protocorinthian be abandoned and the iconology be recognized as useful but narrow. Another argument against classical art history concerned the inadequacy of the distinction between meaningful iconography and meaningless decoration—was meaning only to be found in attribution of narrative and character?

Archaeological approaches to understanding style and design, in the project of what has come to be called social archaeology, have long stressed the importance of context and quantification. This was the next major component of my research. I studied a sample of 2000 aryballoi found in over 90 locations. The project was a contextual treatment in that it addressed processes of origination, manufacture, distribution, consumption and discard in these times of the development of the city state. I tracked the lifecycle of these pots, from manufacture to discard, connecting particularly with political economy, the consolidation of a citizen body of yeoman farmers.

Were the great changes in Greek society responsible for the changes in the production of pottery? If so, how? What were the motivations of the potters? What incentives lay behind the changes? Were the means of distribution a relevant factor in the design of the ceramics? How attuned to patterns of consumption were the potters? And yes—was it down to the genius of the Greeks, both to invent the city

state and also the wonders of figurative Greek art? Are we encountering a manifestation of an archaic Greek *kunstwollen*?

So I presented the context for the design and production of these pots in the way of a narrative of the development of a particular polity form, the Corinthian polis. This was a systemic model of design in such an early state form, with the motivations of producers and consumers related to class culture, and with ceramics produced in a reshaping of class definitions, ideologies and identities. I connected the miniature jars with their use in new kinds of sanctuaries and for the dead, showing scenes from the ideological world of the new state.

But the typical categories, in this argument, of rank, wealth and resources, trade, state formation, urbanization, market and manufacture I found too connected with long standing tendencies to emplot archaeological material in standardized metanarratives (here of the expansion of certain kinds of polity associated with the city state and as a component of an ancient Mediterranean ecology). These interpretive and analytical categories for understanding the context of production of items such as these aryballoi are just too broad and too blunt (on this see my book "Social Theory and Archaeology"). This connected with an old tendency to subsume histories of material culture beneath those established by textual sources, features of the context of production being defined by textual sources. Archaeology has often been seen as "the handmaiden of history" and this period of history is dominated by narratives developed by that nineteenth century historiography normally labelled *altertumswissenschaft*.

So I adopted another methodology. I started again with simply one vessel and followed lines of investigation arising from its particular life cycle. Instead of treating the aryballos as a discrete artifact, I focused on practice and process, opening, as it were, the black box that is an artifact to see what work is being performing, that is, what connections are established by its attributes and contexts of origination, manufacture, distribution and consumption. I attempted to let the pot lead me into its world, following networks of empirical, statistical, metaphorical, narrative, conceptual, causal, systemic association; it was a project of re-articulation.

It would go like this: a scene of monsters of combined animal, bird and human parts, lion and soldier citizen (hoplite) raised themes figure of the partible

body, and, through an opposed figure of a hoplite, a contrast with the armored body, that is one encased in metal. Animal metaphors of experience are also a topic— the hero seen as lion, for example. The probability that this was a jar of perfumed oil (somewhat substantiated by trace element analysis of other aryballois), and the deposition of aryballois in graves, led to further questions of the material body in the early city state, its grooming, trauma and decay, in relation to the citizen male and the experience of fighting as individual, or as a member of the citizen body in phalanx formation. Floral decoration, stylized designs from the east, brought in themes of cultural affiliation with other states and class groups
... .

So, in addition to a model of household production and changing definitions of class identity, the material led me into a quite different, but clearly complementary story of animals, corporeality, faces, potters' wheels and brushes, physical and imagined mobility, flowers, food and consumption, sanctuary dining rooms, sovereignty, gender, ships, clothing.

Let me give a flavor of this.

Dining and the sanctuary. To be a sovereign member of the community of the city state of Corinth, a citizen, was to take the boat across the gulf to the sanctuary of the goddess Hera at Perachora for the annual festival. There to eat in style—dining was a principle cult activity; and, perhaps, to leave as gift for the divinity a perfume jar painted with eastern designs and images of the soldier citizen.

The soldier citizen and the hoplite body. To be a member of the community was to bear arms—80 pounds of bronze, iron and leather. A cuirass was often molded as torso; it accompanied shield, stabbing spear, helmet. Beaten from a single sheet of bronze, the Corinthian helmet is a remarkable achievement of the metalworkers' craft. All have attachments for crests of display. Encasing the head, the helmet gives protection at the expense of hearing and visibility. The face becomes a system of holes and slits. Cheek pieces frame the nose guard between eyes cut out from the sheet metal. Illustrations of this new form of fighting first appear on these pots. Hoplites, anonymous in helmets, apart from shield devices, sometimes lined up in phalanx formation, fight each other, as well as monsters and animals; there are also birds and flowers, robed figures. There are virtually no women

painted on the pots.

The importance of the eyes: a late eighth century grave in Argos excavated in 1971 contained a bronze helmet with two extra eyes embossed upon the forehead. Faces are modeled on some aryballois, and are painted on shields.

Lined up fellow citizen hoplites in the standardized equipment all look alike on the summer field chosen for battle. They stare at each other over the rims of shields: the experience of fighting is focused upon this gaze—the only mark of the individual, apart from shield devices and things done that mark out the doer as special. There is pushing and jostling; the spears come over or below the shields. Typical wounds are to the neck, face and groin. And afterwards, the bodies lay hours or even days in the sun before they are recovered. Disfigured by the wounds to the face and with bloated bodies cooked in the cuirass, there were always problems of identification.

Proxemics and the body. The miniature jar—suitable for transport, containing oil for dressing the body, a suitable gift for divinity or for the dead, displaying figures in tiny scenes, a fraction of an inch high, of grand events, to be held and scrutinized in the palm of your hand.

Sites of innovation: standing close in the phalanx. The new shield is called Argive, the new helmet Corinthian. It has long been clear that the cities of Argos and Corinth in the north east Peloponnese were at the center of innovation in warfare in these times. But it is more than just warfare.

In a scene upon a perfume jar found at Perachora, soldiers fight to the accompaniment of a piper. The Spartan poet Alkman (Davies 41) describes it like this: “counterbalanced against the iron of the spear is sweet lyre-playing”. Archilochus, a traveling mercenary in the seventh century, connects his life with the way one should eat and drink: “By spear is kneaded the bread I eat, by spear my Ismaric wine is won, which I drink, leaning upon my spear” (West 2). The word he uses for leaning (upon his spear) is the same as that used for reclining (on a couch to eat). He says: “I would as soon fight with you as drink when I’m thirsty” (West 125). War is his lifestyle. For a man to bear arms is to claim civic representation, to have the right of participation in cult, to eat and drink in the way one should.

Wine cups carried such pictures too. And at about this time it became the style to recline on couches to eat, an eastern custom.

The deportment of the leisured citizen: to walk and stand in public. They showed it in the scenes upon the pots—in about 650 there is a change of fashion when the sword disappears as an item of civilian dress. A new type of cloak, the himation, appears, men carry spears, and swords are reserved for battle. The himation is not pinned and requires constant attention, hitching it up and holding it in place. It is an item that prevents much activity—except watching, listening, talking, and taking decisions. The cloak enforces and proclaims leisure—you are not a slave or artisan, but a landowning soldier citizen.

Perfumed, embalmed bodies. A few aryballoi, with heads modeled upon the top, are distinctively like canopic jars from New Kingdom Egypt and after that contained the intestines and inner organs of the deceased. The modeled hairstyles too are eastern, seen also on some of the paintings—a layered coiffure that German scholars called Etagenperücke. We know from contemporary poetry that there was something of a style war between those who flaunted their wealth with eastern flair and perfumed hair, and those who saw such habrosune (an aesthete's fondness for fine goods) as decadent and superficial.

The topology of design. The making and illustration harks backwards and forwards, folded into the life of forms and processes. Notoriously it prefigures, literally, the achievements of classical Greek figurative art. But the iconography has an ancient genealogy. Iconographic elements can be traced through the Near East back for centuries and even millennia (lions, geometrics. lotus and palmette). The slip and oxide paint combined with skilled manipulation of kiln atmosphere (alternating reducing and oxidizing) was also an ancient process. This is why I use the term topology—to emphasize the percolation of forms and techniques, rather than their linear development.

These are just indications of the kinds of association and translation running through the artifact and configured in this rhizomatic method. Connect them with the city of Corinth at its beginnings. Here are some components of a materialist narrative.

1. New urban and political spaces are built: monumental stone architecture, public and

figurative imagery, public areas, processional ways, spaces for gatherings and displays, places to watch and listen.

2. Formally designated and sacred places appear: springs, temple sanctuaries.
3. Reworkings of personal and public space create new ways to dress, walk, and talk: eating, scrutinizing tiny pictures upon a perfume jar held close, hitching up a cloak, bearing arms, wearing armor in the summer sun.
4. New axes are made through the community's territory: city walls, roads, views across the gulf, from the heights.
5. Goods and people are on the move: pots exported far from the city, new settlements in northern Greece and Sicily, conventionally called colonies.
6. New lifestyles: clothes, ornamentation (or not), hair style, the cultivation of skills of hunting, riding, athletics, music, poetry at a drinking party, speaking, drinking, eating, violence, sexuality, how to behave. And not everyone agreed on what was proper.
7. Myths and legends of personal and collective sovereignty, real and ideal, are retold, written and pictured. This involves an explicit reworking of relationships with the past.

My research was to track and rearticulate this distributed networking. Following the connections suggested to me that it is not enough to conceive of the design of an aryballos as representing something else, such as a change in economy, in ways of fighting, or of legends and myths. Nor can the design be simply understood as a relay carrying a message from potter to buyer, or between consumers. Such views treat the aryballos as a secondary representation or expression of something more primary, or real, or material. Instead we can treat the design of an aryballos as located within the work of potter, acts of exchange and consumption, rituals of death and dedication. The design is a material part of what it may be showing us. Archaic Corinthian society, its ideologies, aspirations of potters or citizens, are not experienced directly and in-themselves, for what would that reality be? They appear sphinx-like in the riddles of the object seen as a bundle of such processes. These are its design.