Retroarchaeography: A Comprehensive Guide for the Field and the Laboratory

Thesis

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By

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Abstract

This thesis covers the science of retroarchaeography, explaining its relevance in the world as well as its development and current practice. It serves as an explanation of how and why I make art, and a guide for anyone who wishes to pursue the same lines of reasoning that tie my work together. The techniques, processes, and principles laid out in this text represent the best system I have found to share my experience of the world with others.
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Retroarchaeography: A Comprehensive Guide for the Field and the Laboratory

“The researches of many eminent antiquarians have already thrown much darkness on the subject; and it is possible, if they continue their labors, that we shall soon know nothing at all.”
Charles Farrar Browne 1834-1867

A long time in coming, this text will serve as a definitive guide to the discipline of retroarchaeography, examining its history, techniques and applications. Although there have been many researchers who have worked within the field, they have gone by many other titles, and none has laid out a clear framework for how their research is to be carried on or how it may be applied to the ever growing sphere of knowledge that bridges the arts and sciences. But perhaps it would be more accurate to say that this sphere is in fact contracting, bringing the two closer together, linking subjects once thought to be disparate, and reversing the trend that partitions and categorizes information along arbitrary lines.

A main feature of retroarchaeography is the democratization of the interplay of doubt and certainty. It serves as the next step in a process that began in, and in fact was necessitated by, the medieval period. While the elite class had a monopoly on literary knowledge, both the creation of information and access to it, the lower class knew only the certainty of what they were told. Wild rumors telling of headless men with faces on their chests found their way into
scholarly writings, and they became as factual as the notion that the sun revolved around the Earth. With the Renaissance, a new luxury became available to those members of the upper class who could use it cautiously: doubt. It became possible to question what was previously certain, although breaching certain taboos was a dangerous endeavor. In modern times, doubt is no longer a luxury in most of the world, but like potable water, it is taken for granted in the places it is most readily available. It is a crucial tool for intellectuals and researchers, but too often it is not taught as such.

A retroarchaeographist uses the language and experience of certainty to invite the curiosity and exploration of doubt. He rejects the “take it or leave it” mentality, and instead invites anyone who will listen to take his words into consideration, but not to take him at his word.
Chapter 1 What is Retroarchaeography?

Retroarchaeography is the science of creating a new past by allowing the material remnants of an action to determine the action itself. Meaning literally “writing backwards of the past,” it can in fact refer to any expression of knowledge which explains or suggests an alternate history for a given artifact, be it in writing, song, sculpture, etc. In contrast to the many “ologies” of academia, retroarchaeography primarily involves the creation of information rather than the study of information.

While researchers in many other fields offer up alternative explanations for any variety of phenomena or discoveries, retroarchaeography stands nearly alone in its lack of insistence on hard evidence. Indeed, when the goal is an
alternative history, factual evidence pointing towards a real history is an obstacle to be avoided.

While the majority of this text will focus on sculptural retroarchaeography, it may be helpful to first consider an instance of retroarchaeographical writing relating to a song. The following is an anonymous writing that has been circulating extensively on the internet for several years.

Every child has happily joined hands with friends and recited the familiar nursery rhyme, "Ring around a rosie, a pocket full of posies. Ashes, ashes, we all fall down." Few people realize to what this seemingly happy little nursery rhyme actually refers. This nursery rhyme began about 1347 and derives from the not-so-delightful Black Plague, which killed over twenty-five million people in the fourteenth century. The "ring around a rosie" refers to the round, red rash that is the first symptom of the disease. The practice of carrying flowers and placing them around the infected person for protection is described in the phrase, "a pocket full of posies." "Ashes" is a corruption or imitation of the sneezing sounds made by the infected person. Finally, "we all fall down," describes the many dead resulting from the disease.

Several permutations exist and it is unclear which came first. The intentions of the original author of this explanation are unknown, but we can be nearly certain that the nursery rhyme in question, actually written at some point in the 18th century, is not about the Bubonic Plague. However, this explanation is so widely believed that we can reach one of two conclusions: first, that the author is a convincing, though perhaps unethical, (see chapter 7) retroarchaeographist, or second, that the author is an unsuccessful historian. Regardless, his or her
tendency or conscious decision to overanalyze or create a more interesting story can be an asset in the field of retroarchaeography.

Relative to many other fields, success in retroarchaeography can be particularly difficult to define, as it depends as much on people’s reaction to a project as on the results of the project itself. Simply convincing people of an alternate history cannot be considered success, because retroarchaeography is a discipline devoted first and foremost, to an increase in knowledge and understanding. If one is convinced of a falsehood and learns nothing in the process, the result is a net loss of knowledge. With this in mind, we can posit that a successful retroarchaeographical piece is one which has convincing aspects, but which also fosters a sense of doubt.

We will explore many methods devoted to this end in this text, but it is easy to see why the “Ring Around a Rosie” explanation falls short on this account. It is written as a factual piece of trivia, and disseminated as an e-mail. Devoid of context and obscure in its references, it offers the reader little reason to question its veracity. In comparison, simply existing in the context of an art gallery is enough to arouse suspicion for many of the sculptures we will examine that use a certain scientific aesthetic. Others use a contrast between modern imagery and ancient forms to achieve the same result.

Despite being predominantly misleading, our bubonic rhyme analysis may have a silver lining, as there is still a potential for an increase in knowledge. The reader may in fact learn something about the nature of nursery rhymes in general, or they may be intrigued enough to seek out information on their own
about hidden messages in children’s games. Ideally, if they are curious enough, they will discover through their own research that they had been fooled from the start.
Chapter 2  The Recent History of Retroarchaeography

Although the term “Retroarchaeography” was coined only recently by the author, it applies to a fairly broad spectrum of work that spans several centuries. We have seen how many forms of expression can fit within the field, but in this chapter, we will examine some innovators that paved the way in the more specific field of artistic retroarchaeography.
In 1989, David Wilson and his wife Diana opened a small museum in Los Angeles, California, called the Museum of Jurassic Technology. According to its mission statement, it is “an educational institution dedicated to the advancement of knowledge and the public appreciation of the Lower Jurassic.” While no such period or place as the “Lower Jurassic” exists, the visitor is immediately made to doubt his or her own knowledge before even stepping through the door, a trend that continues long after leaving the museum.

Inside are several small exhibits ranging from a collection of letters received by the Mt. Wilson Observatory to a fruit stone purportedly carved with a landscape and menagerie of animals on one side and a crucifixion scene on the other. Based in large part on the Cabinets of Curiosities popular in Renaissance Europe, the museum is filled with objects and stories that stretch the boundaries of what we are willing to believe. While most of the exhibits have at least some basis in fact, the details are often scrambled or falsified, leading to an overall sense of confusion. Wilson shows himself to be a true retroarchaeographist, stating, “Confusion can be a very creative state of mind; in
fact, confusion can act as a vehicle to open people's minds. The hard shell of certainty can be shattered…"

Fred Wilson, another proto-retroarchaeographist, also deals with the museum, but rather than creating his own, he has made a practice of recontextualizing objects that already exist within museums. He often seeks to completely change the meaning of an object simply by surrounding it with other objects. For example, a pair of iron shackles once worn by a slave take on a new connotation when displayed in the same case as a set of fine silver pitchers and goblets. While he does not manipulate the materials to the same extent that a more mainstream retroarchaeographist might, he establishes a story different from the one that a museum-goer would normally experience.

Working very much like a retroarchaeographist in the field but less so in the laboratory, Mark Dion commonly uses modern artifacts in his installations. Unearthing materials from urban sites among others, he presents them as-is with
no modification other than cleaning and displaying. Like Fred Wilson, Dion’s primary tool is the shift of context, placing ordinary objects in positions of value, and alluding to the fact that what we now see as priceless artifacts were once ordinary objects too.

Finally, Dario Robleto is perhaps one of the truest retroarchaeographists in the sense laid out in this text. Using primarily found objects and materials, he molds and manipulates them into new forms that often directly relate to the original sources. The narratives he creates, frequently through the use of pun-filled titles, often involve the previous owners of the materials, including love letters from soldiers, and his own vinyl record collection. His particular combination of materials, methods, and allegorical work has made him extremely influential in the field of retroarchaeography.
Case Study: Dario Robleto, She Can't Dream For Us All, 2005-06

This work exemplifies Robleto’s relationship to retroarchaeography in his attention to materials and their history. He lists the materials as follows:

Bone dust from every bone in the body cast and carved into the fossilized remnants of “Lucy” (Australopithecus afarensis), bone cores filled with melted vinyl and audio tape recordings of Sylvia Plath reciting her poems Daddy and Lady Lazarus, homemade paper (pulp made from mothers’, wives’ and daughters’ letters to soldiers in the field from various wars), ground iron, calcium, water extendable resin, pigments, lace, silk, walnut, glass.

He gives careful consideration to each resource material and its significance, both to the final work and to its original owner. This care and the elegant display help to tell a much more elaborate story than would be possible with everyday materials.
Chapter 3 Retroarchaeography in the Field

Although retroarchaeography is a relatively casual science, relying on chance and readily available materials, there are several principles, techniques and tools that will make most forays into the field more fruitful and that will help make the laboratory work easier. Often, the retroarchaeographist will encounter significant material remnants of human activities simply commuting to work or emptying the trash, but occasionally a more targeted approach is necessary. In
this chapter we will discuss ways to prepare for outings, including a standard tool kit, how to choose a site, and how to extract artifacts safely.

**Tools of the Trade**

While there is no hard and fast rule for what to take on a field excursion there are a few small and inexpensive items that allow the retroarchaeographist to collect specimens safely and efficiently. One item that proves itself useful on nearly every outing is a good multifunction tool that includes a sharp knife, a screwdriver, a prying implement (the can opener on many models works well for this), and a pair of pliers. All of these will be help to remove artifacts of interest from their place of discovery, especially if they are mechanically attached in some way. Two types of gloves are commonly used and should be kept on hand for any work that requires the handling of questionable substances or unknown dangers. For minor jobs involving mud, grease, oil or unknown plants, disposable nitrile or latex gloves are usually sufficient. For work that may involve sharp, rusty, or mildly caustic materials, a pair of thick, elbow-length, rubber-coated gloves will offer more protection.

Depending on the intended results of an excursion, several other more specialized tools may be necessary. If the researcher intends to bring back a large number of smaller artifacts, it is wise to bring a strong bucket with a handle. Tweezers, a flashlight, rubber boots, hand tools, and even a mesh mask to protect from stinging insects may be part of the retroarchaeographist's tool kit. The key is knowing the collection site and being prepared.
Selecting a Site

More often than not, the retroarchaeographer simply stumbles upon articles of interest, but sometimes a specific project may call for items from a certain place, or associated with a particular action. There are any number of reasons that this could be the case. For example, a project about a specific person may be completed most successfully using only artifacts from his or her house, or work addressing the history of a community could be drawn from artifacts discovered in shared or common areas. As we will see in the case study for this chapter, the relationship between the subject matter and the source of the physical materials used for the final project is not always so direct.

A few types of collection sites prove to be fertile grounds for artifacts no matter what type of project is being conducted. Perhaps the most accessible and productive sites are dumpsters. Whether found at retail centers, residential complexes, factories, or elsewhere, dumpsters provide a wealth of material remnants, as well as giving a fairly localized context in most cases. That is to say that it is reasonable to guess that the objects found in the dumpster are most likely related to activities that took place in the associated store, neighborhood, etc. As an example, a bag of used toys, glasses, umbrellas and other personal effects recently discovered in the dumpster of a retail store, almost certainly represents the collected “lost and found” for that particular business. Having this context can give us tremendous insight into the people who used the objects, and the actions that resulted in their eventual discovery.
Although retroarchaeography deals almost exclusively with relatively modern artifacts, historical sites are another great place to collect raw materials for several reasons. First, modern events that take place at historical sites often have a direct connection to the historical event for which they are known. Take for example the Civil War reenactment grounds at Winchester, Virginia, which will be discussed in more detail in the next chapter. The lead bullets recovered there were in fact modern replicas, only a few years old, based on actual Civil War bullets, but they were to be found there only because of the site’s more distant, and arguably more significant history. Secondly, historical sites offer valuable materials for the retroarchaeographist because, like dumpsters, they provide at least a small insight into the type of people who used the items before they were lost or discarded. Finally, historical sites can present a starting point for the alternative history yet to be created, particularly if the researcher goes to collect without already having a specific project in mind.

The third type of collection site, and the most rewarding for many projects, is the scrap yard/dump. Analogous to the midden piles studied by archaeologists, dumps and scrap yards represent the accumulated waste of large populations. Two things make this type of collection site especially valuable to the retroarchaeographist. First, the variety of material remnants present is unsurpassed in any other environment. Second, the overwhelming majority of the items found there were discarded intentionally by their primary users, a fact that provides a better understanding of value systems. Automotive scrap yards are of particular interest because each vehicle represents a
microcosm where the material remnants left by a family or individual remain in their original context. A family’s size, eating habits, fashion choices, reading preferences, etc., are all represented by the objects deemed to be not worth removing from a wrecked or broken down vehicle.

**Collection of Artifacts**

Once an appropriate site is selected and a suitable tool kit is packed, it’s time to go out into the field. As with any other hands-on research, safety is of primary concern. If a site is on private property, it is essential to get permission from the owner, both to explore the property and to remove items of interest. At scrap yards, it is best to explain that only items that are of no use to others will be taken. In other settings, such as the Winchester reenactment grounds, announcing one’s presence and using extra caution is of vital importance. In most cases, the most pressing safety concerns will be broken glass, sharp pieces of metal, and unsure footing. Simply being aware of one’s surroundings is enough to avoid most accidents.

Depending on the amount of storage space available in the laboratory or elsewhere, the researcher must be fairly selective when deciding which artifacts to take from a site. This is the first step in the process of establishing an alternate history, so it is worth considering a few basic principles that will help determine which items have potential.

**Quantity:** Items that can be collected in large quantities can prove to be quite useful, either for the sake of experimentation in the laboratory, or for use in
repetitive or decorative patterning which is often employed on the historical forms used by retroarchaeographists. Unique items, while valuable in their own way, sometimes preclude the possibility of testing various techniques and procedures. Scrap yards and the dumpsters of specialty stores are great places to find large quantities of identical or similar artifacts.

**Workability**: Certain materials lend themselves particularly well to various bending, shaping, and forming techniques, and are worth collecting whenever they are encountered. Most papers and plastics are relatively easy to work with, and depending on the facilities available to the researcher, lead, steel, wood, and many other materials can be readily manipulated. Glass and ceramics can be difficult to alter, although there are ways of working with both. Of course any item can be used either as-is or changed in some way, but depending on the desired end result, some will simply be more efficient or more durable when completed.

**Weathered appearance**: Occasionally the researcher will come across an artifact that needs no alterations at all to be included in a retroarchaeographical work. Usually these are items that have been exposed to the elements to the point that an alternative and much longer history could already seem plausible. In this type of case, a simple change in context is all it takes to create an alternate history. Whether flattened, rusted, broken, or decayed, these objects make the retroarchaeographist’s job easier. The trade-off is that they are frequently more difficult to extract than their newer or cleaner counterparts. Extraction may involve digging, collecting several scattered shards, or removal
from larger objects such as buildings or vehicles. These artifacts can play a crucial role in creating the sense of doubt that is the retroarchaeographist’s goal.

**Unfamiliarity:** Even if an item does not immediately appear to be old, unrecognizable forms can often be interpreted as ancient ones. Changing the surface of an unfamiliar item by using a patina, stain, or flame can be just enough to change its perceived history. Again, specialty store dumpsters and scrap yards are excellent sources of these items.

**Relatedness:** The logical processes for establishing an alternate history are often much more fluid and direct if the source materials are in some way related. The retroarchaeographist will frequently seek out material remnants that are all associated with the same action or subject. We will discuss cohesive collections in more detail in the next chapter.

The methods of extracting artifacts vary widely from site to site, but they are rarely complicated. It is important to keep in mind that only modern artifacts are to be removed from any site. If an item is encountered that could potentially be of genuine traditional historical significance, the researcher must leave it as it is and contact the local historical society or a university anthropology department. More often than not, artifact extraction will simply involve selecting an object and placing it in a bucket, but on occasion, a more aggressive approach may be necessary. If an item must be removed from a building, vehicle, or other stationary object, care should be taken to avoid damaging either. Dumpsters and their surrounding area should always be left as clean or cleaner than they were found, and any potentially dangerous items such as boards with nails should be
placed so as to minimize their risks. For artifacts that already look aged, it is important not to scratch off their patina during extraction; a single line of shiny steel across a rusted object can ruin the aging effects of several years of weathering. In this case, metal tools should be avoided or wrapped with fabric before being used.

In order to facilitate the laboratory work and make it easier to draw conclusions, it is helpful to keep accurate documentation of when and where any given artifact was found. This is particularly true if the project deals with a specific action, person, or place. While such hard evidence is not necessary to support any conclusions, it can provide guidance for reaching those conclusions, and can help the viewer of the final project establish a connection with the piece.
Case Study: Small Wonders

The work entitled “Small Wonders” was completed in 2009 and consists of seven miniature representations of global landmarks, specifically those elected by an international online vote to be the new Seven Wonders of the World. Each is made out of a different material remnant collected from the Sherman Studio Art Center at the Ohio State University. In the order they were created, the landmark/material pairings are as follows: Petra, discarded kiln brick; Machu Picchu, discarded hydrocal; Christ Redeemer, discarded polyurethane foam; Chichen Itza, discarded cinder block; Roman Coliseum, sludge scraped from studio sinks; Taj Mahal, discarded melt-out wax; Great Wall of China, discarded kiln brick and sludge scraped from studio dumpster.

The site became a driving factor in this piece because it dealt with the compression of space, reducing these monuments spread across four contents to a single gallery space, and also the monuments themselves to souvenir sized objects. Drawing the raw materials from an isolated geographic space added to
this contraction and emphasized the contrast between local and global. As far as
the more specific extraction sites of each material, any discarded item on the
premises was fair game, so dumpsters, waste bins, and sinks were all explored.
Selection of the materials was based on the formal qualities of the original
monuments being made, and the material properties of the discarded items. For
example, the Taj Mahal, with its slender minarets and detailed facades, required
a material that could be molded rather than carved. Petra on the other hand,
being originally carved directly into the side of a cliff, was suitable for carving in
discarded kiln brick which resembles sandstone.

The final objects were placed on plinths made of compressed layers of soil
also from the premises of the Sherman Studio Art Center. This served to give
them a context as miniaturizations of the originals rather than as models, and
also to give them a sense of historical weight. They were then placed on
pedestals of varying heights, corresponding to their original relative altitudes, and
arranged throughout a gallery so as to be directly between the center of the
gallery and their actual geographical locations. This arrangement was chosen
after the retroarchaeographer studied the Ceque system used by the Inca to
align sacred sites on lines radiating out from their central temple.
Chapter 4 Creating Conclusions

Although it is largely up to the individual researcher, it is widely accepted among retroarchaeographists that conclusions should be drawn either before or during work in the laboratory. That is to say that the alternative history being created should be derived from the artifacts themselves, rather than from their manipulation. The retroarchaeographist should have a fairly solid idea of what the finished project will look like before altering any material remnants. This is perhaps the most substantial difference between retroarchaeography and other scientific fields that draw conclusions only after careful analysis of experiments.

Figure 4.1 Left: Oldest known depiction of a deity in South America on pyro-engraved gourd Right: "Bowl with The Count and Big Bird as a Double-headed Serpent Deity"
and tests. Retroarchaeography does involve extensive experimentation as we will see in the next chapter, but these experiments primarily serve to discover the most efficient means of representing the predetermined conclusion.

The process of forming conclusions from objects is one of the most difficult concepts in retroarchaeography, but there are five key consistencies that keep the convoluted logical pathways involved somewhat ordered and manageable.

**Consistency of Function:** What is it used for? This is one of the most common ways to start the search for a conclusion. When an artifact with a known use is discovered, the first thing the retroarchaeographist will do is to research other objects that have been used in the past to perform the same task. For example, if a broken cologne bottle is collected, the researcher might search for ancient vessels or more specifically, perfume vials. The consistency of function is the most direct logical link in many cases, and is well suited for utilitarian objects as there tends to be a long history of different objects devoted to any given use.

**Consistency of Material:** What is it made of? This line of reasoning obviously has its limitations, as certain materials such as plastics do not exist in ancient objects. However, it is quite useful for many other artifacts. Lead, iron, copper, glass, clay, bone, and even rubber have all been used for millennia in various forms. This consistency is rarely used as the only basis for a conclusion, but it is exceptionally useful to narrow the scope of a search when used in conjunction with another type of consistency.
Consistency of Form: What does it look like? When an item has no particularly interesting historical analogue in function and is made of modern materials, the retroarchaeographist will often draw conclusions based on its shape or form. Some perfect examples include sanding disks converted into pectoral collars and pyrometric cones used as teeth or claws in body ornaments. This is a more instinctual logic than the other consistencies, and can be difficult to research due to a vagueness of terms.

Consistency of Location: Where was it found? For items that are discovered at historic sites, the location almost always plays a leading role in the creation of conclusions. Where such a direct connection of past and present exists, the retroarchaeographist is wise to take advantage of it. A prime example comes from materials collected at Belle Isle in Richmond, Virginia. The island was the site of the pre-Civil War Tredegar Iron Works, and many areas are still covered with pieces of hardened slag from the iron smelting process. These pieces were crushed and formed into the shape of a wheel, the type found on the carts that would have transported ore around the island.

Consistency of Context: In what situation was it found? Sometimes the circumstances surrounding a discovery are more significant than its material, function, or form. This is often the case when an item is found outside of its usual context. For example, a railroad spike discovered on a riverbank became the raw material for a retroarchaeographical work based on the first pre-Inca tumi knife ever found in its original context by scientists. This piece addressed the importance of context when examining a discovery. In another instance, a candy
wrapper that had inadvertently fallen into a display case at the Mütter museum in Philadelphia, Pennsylvania, is featured in the work titled “Foreign Body Removed from the ‘Foreign Bodies Removed from the Food and Air Passages’ Exhibit.” The coincidence of its discovery in a display about a similar type of discovery was enough to bring the retroarchaeographist to an immediate conclusion, before the artifact was even extracted. This consistency is much more fluid than the other four because there can be any number of layers of context for any given item. The railroad spike for example, could have been compared to other artifacts found under water.

Once the retroarchaeographist has decided which consistency, or consistencies to pursue, it is time for research. This may involve several different means of gathering information ranging from internet searches to personal explorations of site or materials. Travel and cultural immersion often play a large role both in finding suitable forms and in learning techniques and processes.

The first step in research is almost always to determine what the object actually is and what use it had if any. This information is then entered into a search engine, along with any other data such as material, location, etc. If the search turns up primarily what the researcher already knows, simply adding the search term “history” will often bring up more pertinent information. This process is repeated with minor variations until a suitably solid connection is made.

Having that initial connection, the retroarchaeographist will move on to other comparisons of the ancient and modern forms, such as the relationship between the modern marketing of colognes and the religious iconography that
commonly adorned Greek and Roman perfume vials. This aspect of the research is of particular importance because it establishes the final subject of the piece, the comparison to which the researcher wishes to draw attention. Often it will involve a subject that the viewer will be familiar with, but may take for granted. Other times it may point out phenomena that have occurred throughout history that modern viewers may have assumed were peculiar to their own time. This compression of time is a powerful means of leading the viewer to question his or her own understanding of history or human nature.
Case Study: Ο νότος θα αυξηθεί πάλι (The South Will Rise Again)

This piece consists of a single lead object in the form of an ancient Greco-Roman sling bullet. On one side in low relief is a stylized serpent, and on the other, the words Ο νότος θα αυξηθεί πάλι, Greek for “the south will rise again.” The bullet is cast from lead bullets recovered from a hill that served as the backstop for the shooting range at the Winchester Civil War Reenactment grounds in Virginia. Many of the competitors who shoot there cast their own
bullets to replicate those used in the American Civil War, and the collection used in this retroarchaeographical work consisted entirely of such replicas.

The researcher started by looking into the history of ammunitions, specifically seeking the oldest known projectiles. In the course of research, after deciding to also investigate the use of lead in ammunitions, he discovered that the Greeks and Romans had used cast lead bullets for their slings, and had a practice of inscribing them with humorous phrases. With this information, the retroarchaeographist decided to recreate a sling bullet, but to substitute the original imagery and text with something more appropriate to the context of the modern replica bullets. The serpent was a commonly used symbol on Civil War flags, and “the south will rise again” is a mantra often repeated by many of the people one might encounter at the type of reenactment and competition that produced the cache of replicas.

This project exemplifies several of the consistencies outlined in this chapter, including those of function, material, and context. By beginning his research with the most basic of these, the retroarchaeographist began a sequence of logical steps. The result is a work that connects several different generations and cultures, and may tell us something about the nature of animosity and pride.
Case Study: *Piscimonachus magnadentis, Scopaenura insidaeous, Silexenura remigiapoda, and Piscipennata rostrata*

These four tiny skeletons were created in 2009 to resemble those found in pre-Cambrian fossils. They are made from sea urchin parts from the Hawaiian Islands that are between three hundred and four hundred years old. The retroarchaeographist collected these parts while volunteering in a university archaeology lab sorting through midden samples and looking primarily for fish bones. This work is unusual because the material remnants are actually ancient, and also because someone other than the retroarchaeographist recovered them from their original excavation site. In this case the use of ancient materials was
endorsed by a professional archaeologist, so no ethical or legal concerns came into play.

For display in a gallery, three of the pieces were hung from the ceiling each on its own custom lighting fixture, designed so that the only lights in the room were focused very narrowly on the skeletons. The Latin titles, meaning respectively, large-toothed monkeyfish, ambushing broomtail, oar-footed spinetail, and beaked wingfish, echo the scientific nature of the work that went into the discovery of the materials and creation of the pieces.

In this case where the “field” was another scientist’s laboratory, it was especially necessary to acquire permission to collect specimens, as well as to treat the other scientists and the laboratory itself with respect and deference.

Figure 4.4  Installation view of *Piscimonachus magnadentis*
Chapter 5 Retroarchaeography in the Laboratory

Having conducted the appropriate research and determined the final form a project will take, the retroarchaeographist must start to work directly with the artifacts. It is important to note that there is no one way to work in the laboratory, and experimentation and innovation are the researcher’s most valuable tools. This chapter will address some more common techniques that prove to be useful repeatedly, but each artifact will require its own procedures and tools.

To an observer outside the field, a well-stocked retroarchaeography lab may appear cluttered or chaotic, but working with such a breadth of materials requires quite an array of tools. Many tools will only be used once or twice in the researcher’s career, but a few are used very frequently. Containers are perhaps
the most important category of tools to have around. Laboratory work often begins with separation and categorization of materials into groups that can be more readily researched and used. Having a variety of containers, particularly transparent ones, makes this task much easier. Also useful in this regard are tweezers, screens for sifting particulate materials, strong magnets for isolating metallic specimens, and gloves for working with unknown or unpleasant substances.

Various cutting implements are used almost daily ranging from razor blades and scissors to reciprocating saws and bolt cutters. With the right tools, almost any material can be cut or perforated effectively. The most valuable ones to keep on hand are a snap-off utility blade and a pair of tin snips. When the researcher is not busy cutting things apart, he or she is usually putting things together. Many different adhesives are available and each has its merits and downfalls. Super glue gel and spray adhesives are excellent for lightweight materials, while silicone, wood glue, and two-part epoxies can hold a bit more weight. No serious retroarchaeographist ever considers using hot glue for a finished project, although it has its purpose when a model or armature is necessary.

Sometimes cutting forms down, or attaching them to one another is not the right solution for a project, and a more aggressive approach is needed. Certain materials can be entirely transformed either through casting, or crushing. For example, lead is quite easy to cast; it can be heated with a propane torch and poured into a negative mold made of an oil-based modeling clay. Ceramic,
glass, or other brittle materials can be crushed into a powder with a hammer or mortar and pestle and mixed with glue. The resulting paste can then be spread over an armature and torched until hardened. Occasionally, simply burning an artifact with a propane torch is enough to make it seem ancient.

Often the historic forms referenced in retroarchaeography have known techniques associated with them such as carving, etching, molding, hammering, etc. This information can be used as another consistency in addition to any of the ones previously mentioned, the consistency of process. Closely related to the consistency of material, this rationale gives the researcher a starting point for work in the lab. It also requires its own set of tools that mirror those used in ancient times. Primitive instruments such as a pressure flaking tool can be used if the technique is central to the project as it often is, or modern tools such as engravers and steel gouges will save time if only the visual result is important.

If a particular material is abundant, and the retroarchaeographist has more than the conclusion will call for, there is some freedom to experiment with various means of constructing a form. If the artifact to be used for the final project is unique or uncommon, it is usually possible to find objects of a similar material to test how that material will function with different adhesives or processes.

There are a few key things to keep in mind while working in the laboratory. The first is that not all artifacts need to be manipulated beyond recognition. The more an item is changed, the more difficult it is to establish a sense of doubt. A good mix of altered and unaltered objects strikes a balance that keeps the viewer guessing. Second, obscure historical references are excellent, but clues must be
left for the viewer so that he or she is guided towards the conclusion, rather than simply forced there. In the next chapter we will discuss various ways of guiding the viewer that are external to the retroarchaeographical work itself.

<table>
<thead>
<tr>
<th>Material</th>
<th>Techniques</th>
<th>Joining</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone</td>
<td>Burning, Carving, Crushing, Engraving</td>
<td>Super glue</td>
<td>Rotary engraver, Files, Torch</td>
</tr>
<tr>
<td>Cement</td>
<td>Carving, Crushing, Cutting, Drilling</td>
<td>Super glue, Epoxy, Cement</td>
<td>Rotary tool with diamond bits, Tile saw, Chisels</td>
</tr>
<tr>
<td>Copper</td>
<td>Hammering, Patina</td>
<td>Super glue, Epoxy</td>
<td>Hammer, Torch, Brush</td>
</tr>
<tr>
<td>Glass</td>
<td>Crushing, Drilling, Engraving</td>
<td>Super Glue, Silicone</td>
<td>Mortar &amp; Pestle, Rotary tool with diamond bits</td>
</tr>
<tr>
<td>Lead</td>
<td>Casting, Hammering</td>
<td>Super glue</td>
<td>Torch, Mold material, Hammer</td>
</tr>
<tr>
<td>Organic</td>
<td>Crushing, Forming</td>
<td>Mix with wood glue</td>
<td>Containers, Torch</td>
</tr>
<tr>
<td>Paper</td>
<td>Cutting, Folding, Burning</td>
<td>Super glue, Spray adhesive</td>
<td>Scissors, Razor blade, Torch</td>
</tr>
<tr>
<td>Plastic</td>
<td>Carving, Casting, Cutting, Engraving, Melting</td>
<td>Super glue, Silicone, Epoxy, Melting</td>
<td>Torch, Rotary tool, Tin snips</td>
</tr>
<tr>
<td>Rubber</td>
<td>Burning, Cutting</td>
<td>Super glue, Silicone, Contact cement</td>
<td>Scissors, Torch</td>
</tr>
<tr>
<td>Steel (sheet)</td>
<td>Cutting, Bending, Drilling</td>
<td>Welding, Epoxy, Rivets</td>
<td>Welder, Tin snips, Plasma cutter, Hammer</td>
</tr>
<tr>
<td>Steel (solid)</td>
<td>Cutting, Forging</td>
<td>Welding, Epoxy</td>
<td>Welder, Plasma cutter, Hammer, Forge</td>
</tr>
<tr>
<td>Stone</td>
<td>Carving, Crushing</td>
<td>Epoxy</td>
<td>Rotary tool with diamond bits, Tile saw, Chisels</td>
</tr>
<tr>
<td>Wax</td>
<td>Carving, Casting</td>
<td>Melting</td>
<td>Torch, Dental picks</td>
</tr>
<tr>
<td>Wood</td>
<td>Burning, Carving</td>
<td>Wood glue, Fasteners</td>
<td>Wood burner, Torch, Saws, Chisels</td>
</tr>
</tbody>
</table>

Table 5.1 Common Retroarchaeographical Materials and Techniques
Case Study: Collars of the Creator, Messenger, and Provider Deities

These collars, based on ones worn by ancient Peruvians and Egyptians among others, were designed to be worn by certain key players in the modern capitalist supply chain. The collar at the top, to be worn by a factory worker, is composed of various barcodes salvaged from cardboard boxes and other packages. The center collar would be worn by a postal worker, and the design is made of junkmail rolled into beads and sewn on to form the US Postal Service logo.

The last collar is made entirely from the contents of a pizza delivery box, and would naturally be worn by a pizza delivery person.

The processes involved in creating these pieces, while quite simple, provide an example of how materials can be transformed without completely obliterating the original. While the combined barcodes form a pattern that reads as a decorative element, they are essentially unchanged individually. The component parts of the pizza delivery box are all present and fairly obvious, but their colors and textures become the dominant features in the collar.
Case Study: Burial Goods from the *Urocyon Rex* Excavation

This work, exhibited in 2010, showcases a wide variety of retroarchaeographical techniques employed to create fairly convincing artifacts. Consisting of an actual gray fox skeleton, over fifty associated items, a museum style display case, and a cell phone audio tour, the piece represents one of the most elaborate retroarchaeographical works created to date. Several of the items were left entirely unaltered, such as a Chrysler hubcap, and a fragment of woven steel exhaust insulation, while others have been completely changed from...
their original state. An example of the latter is the faux-jade cicada, created by melting plastic packaging straps and then engraving details.

The display references royal burials that were common throughout the ancient world. Many objects are based on specific types of artifacts or burial goods, while others serve as generic ancient items. For those that have real historical counterparts, an effort was made to use somewhat analogous techniques. Many of them are carved or engraved, some are cast, still others are hammered or forged. A set of faux-obsidian projectile points and a scraper are even pressure flaked out of frozen, natural tar, using exactly the same method that would have been used on obsidian or flint.
Chapter 6 Preservation and Presentation

Sometimes the retroarchaeographist’s choices of how to display an object are as critical as the object itself. Every aspect of a piece should reinforce the overall theme of the work, and this includes how the viewer interacts with it. Since we are dealing with archaeology as a subject matter, it makes sense to reference that field when it comes to showcasing retroarchaeographical works. At museums and collections the world over, we come across a few relatively standard types of presentation that can serve as models.

Figure 6.1 From left to right: Recovered and reconstructed cologne bottle; wax model for “Old Spice Greek Perfume Vial” project; “Old Spice Greek Perfume Vial” on display
For pieces that are relatively straightforward, individual artifacts, small groupings of recognizable objects, etc., a simple mounting method as one might see in a private collection is usually suitable. Wall pieces should be hung with discreet wire pins, and freestanding objects do well either on pedestals or shelves. Recessed display cases work very well when available. Other simple devices, such as a bell jar, can indicate that the item is fragile or rare, and thus in need of protection from the elements. All of these options serve the piece because they are traditional ways to display objects of value. By making this comparison, the researcher completes the process of elevating the discarded modern artifact to an item of cultural or historical significance.

For works that are more complicated such as larger collections of related objects or items that would not normally be part of a private collection, a more institutional aesthetic may be employed. This may involve acrylic cases, custom hanging fixtures, or dramatic lighting. There are a few important considerations while designing such a display. The first is from what angle the viewer should be able to see the work. Often a piece is altered only on one side and is overly recognizable on the other and it may need to be displayed inside a case and/or against a wall. On the other hand, many pieces have been meticulously worked on all sides, and the researcher may choose to suspend them in space, display them in vitrines, or even place them on rotating bases.

As a part of leaving clues for the viewer to follow, the researcher will often display a piece with an accompanying label. Depending on how straightforward the piece itself is, the label may be very specific or somewhat vague. If the
display of the work is institutional in nature, a corresponding title is appropriate, something along the lines of “Tumi Knife, Pre-Inca.” In a more casual display, titles can be less academic, or may be omitted completely. Frequently, the list of materials on a label can be more telling than the title of the work, especially if they exhibit one or more of the consistencies covered in chapter 4. Any pertinent information can be included with the materials, such as where they were discovered or what purpose they originally served if this helps the viewer to better understand the work.

For appropriate venues and displays, such as the *Urocyon Rex* exhibit discussed in chapter 5, automated audio tours may serve as substitutes or additions to written labels. Since relatively few viewers will go out of their way to listen to the audio tour, it presents an excellent opportunity to reward curiosity. By providing two sets of information, one through text and one through audio, the retroarchaeographist can blur the boundary between doubt and certainty.

On rare occasions, there may not be a perfect venue available for a retroarchaeographical work, and the researcher must create his or her own. Since it is a core principle of retroarchaeography that all knowledge is valuable and should be shared, it is perfectly natural that researchers in the field should create one or more museums to house their discoveries and creations. Usually these museums take the form of small shadowbox frames hung on the wall with rotating exhibits displayed within. The Sherman Museum of Modern Archaeology for example, is five inches wide, nine inches high, four inches deep, and has
upper and lower galleries. Pre-existing public venues are also an option, and may range from gaps in concrete walls to disused mailboxes.
Case Study: The Sherman Museums of Wax, Natural History, and Modern Archaeology

Officially opened in 2009, each three of these three museums houses a collection of related works which are shown in rotating exhibitions. On display in the wax museum are unique wax formations created as the byproducts of traditional sculptural processes such as lost wax casting and mold making. The natural history museum shows primarily natural objects that have been modified or altered by humans. Its inaugural exhibit included four black walnut pits which had been sanded down to reveal the internal structure, as well as two Ecuadorian mosquitoes who, on their own accord, found themselves encapsulated in candle wax. Finally, the modern archaeology museum exhibits unaltered modern artifacts straight from local excavation sites, such as an uncoiled automobile cigarette lighter. All of these items, not truly at home in any other display, are given context and importance by their inclusion in such prestigious collections and venues.
Chapter 7 Ethical Concerns

Any time one deals with the manipulation of facts and knowledge, it is with the responsibility to do so conscientiously. Retroarchaeography occupies a space between science and art, and maintaining a sense of balance is essential to the field. If the work moves too far away from science, it loses the credibility it needs to be seen as a legitimate source of knowledge. On the other hand, if it appears too rigorously scientific in all its visual details, it risks becoming nothing more than a deception or hoax.

In sculptural retroarchaeography this is a problem that is easily avoided simply by providing a detailed materials list. Since it is never the goal to convince the viewer that an object is actually ancient, providing the real source of
the material remnants used does not conflict with the purpose of the work. The only exception to this rule is when imagery within the work is blatantly taken from recognizable modern sources, but even then, a materials list is still almost always present.

Retroarchaeography seeks to explain a truth by employing a creative fiction. With that in mind, the main ethical question becomes the separation of allegory from deception. As in literary allegory, the retroarchaeographist creates a false situation to draw attention to a real situation or phenomenon, not to replace or reduce the significance of the original truth.

As an example of what responsible retroarchaeography is not, we can study the infamous case of the “Piltdown Man.” In 1912 Charles Dawson and Arthur Smith Woodward presented fragments of a skull and jawbone to the Geological Society of London. With the skull shape of a relatively modern man and the lower jaw more like an ape’s, the find was thought to be a missing link in the evolutionary chain. Eleven years later the anatomist Franz Weidenreich easily concluded that the cranium was that of a modern human, and the jaw came from an orangutan. However, the scientific community had already bought into the idea of the Piltdown Man to the extent that the hoax was not officially recognized until 1953. That year evidence was published detailing the chemical treatments that were used to give the skull an aged appearance, and showing that fossilized chimpanzee teeth were also part of the forgery.

It is still unclear who the unethical retroarchaeographist was, or whether several people were involved, but much evidence points towards Dawson,
including several other forgeries discovered in his personal collection. Whoever perpetrated the act, their actions caused a huge setback in evolutionary science, and were clearly not in line with the principles of retroarchaeography. If they had simply included a list of materials, the skull could have served as a critique of nationalist pride in British archaeology, or any number of other subjects, but instead it was presented fraudulently, and served only to confuse existing knowledge rather than add to it.

While the sciences have come a long way since 1912 and scrutiny of claims is the order of the day, it is still irresponsible to present a retroarchaeographical work as scientific fact, especially when the intended audience consists of non-scientists. As retroarchaeographists, we believe that everyone can be an educator simply by pointing out something that others may not have noticed. This ability is both a privilege and a responsibility that should be used generously, but with care.
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